JOINT HEALTH SCRUTINY COMMITTEE – COLLABORATION OF HHCT & PSHFT

PETERBOROUGH CITY COUNCIL

Cambridgeshire County Council

Date:Monday, 17 October 2016

Democratic and Members' Services
Quentin Baker
LGSS Director: Lawand Governance

Shire Hall
Castle Hill
Cambridge
CB3 0AP

18:00hr

Bourges / Viersen Rooms, Town Hall, Peterborough [Venue Address]

AGENDA

Open to Public and Press

1	**Election of two Joint Chairmen/women**	
2	**Welcome, introductions and apologies**	
3	**Declarations of Interest** *Guidance for Councillors on declaring interests is available at http://tinyurl.com/ccc-dec-of-interests*	
4	**Terms of Reference**	**7 - 12**
5	**Co-option to the Joint Committee** *The Joint Committee is invited to co-opt Huntingdonshire District Councillor Angie Dickinson as a non-voting member of the Joint Committee*	

6 Scrutiny of the proposed merger of Hinchingbrooke Health Care NHS Trust and Peterborough and Stamford Hospitals NHS Foundation Trust

Presentation (powerpoint and report from:
- HHCT, Lance McCarthy, Chief Executive Officer (CEO)
- PSHFT, Steven Graves CEO

Also in attendance to answer questions and supply further evidence:
- Healthwatch Cambridgeshire, Val Moore, Chair and Sandie Smith CEO
- Cambridgeshire and Peterborough Clinical Commissioning Group (CCG), Jessica Bawden, Director of Corporate Affairs

Thursday 9th November 2016 at 6pm, Kreis Viersen Room, Shire Hall, Cambridge CB3 0AP

The Joint Health Scrutiny Committee – Collaboration of HHCT & PSHFT comprises the following members:

Councillor Sir Peter Brown Councillor Paul Clapp Councillor David Jenkins Councillor Tony Orgee and Councillor Paul Sales

Councillor Kim Aitken (Appointee) Councillor Marco Cereste (Appointee) Councillor Richard Ferris (Appointee) Councillor James Lillis (Appointee) Councillor Brian Rush (Appointee)

For more information about this meeting, including access arrangements and facilities for people with disabilities, please contact

Clerk Name: Ruth Yule

Clerk Telephone: 01223 699184

Clerk Email: ruth.yule@cambridgeshire.gov.uk

The County Council is committed to open government and members of the public are welcome to attend Committee meetings. It supports the principle of transparency and encourages filming, recording and taking photographs at meetings that are open to the public. It also welcomes the use of social networking and micro-blogging websites (such as Twitter and Facebook) to communicate with people about what is happening, as it happens. These arrangements operate in accordance with a protocol agreed by the Chairman of the Council and political Group Leaders which can be accessed via the following link or made available on request: http://tinyurl.com/ccc-film-record.

Public speaking on the agenda items above is encouraged. Speakers must register their intention to speak by contacting the Democratic Services Officer no later than 12.00 noon three working days before the meeting. Full details of arrangements for public speaking are set out in Part 4, Part 4.4 of the Council's Constitution http://tinyurl.com/cambs-constitution.

The Council does not guarantee the provision of car parking on the Shire Hall site and you will need to use nearby public car parks http://tinyurl.com/ccc-carpark or public transport

DRAFT TERMS OF REFERENCE

1.	**Legislative basis**
1.1	The National Health Service Act 2006, as amended by the Health and Social Care Act 2012 and the Localism Act 2011 sets out the regulation-making powers of the Secretary of State in relation to health scrutiny. The relevant regulations are the Local Authority (Public Health, Health and Wellbeing Boards and Health Scrutiny) Regulations 2013 which came into force on 1st April 2013.
1.2	Regulation 30 (1) states two or more local authorities may appoint a joint scrutiny committee and arrange for relevant health scrutiny functions in relation to any or all of those authorities to be exercisable by the joint committee, subject to such terms and conditions as the authorities may consider appropriate.
1.3	This joint committee has been established on a task and finish basis, by Cambridgeshire County Council and Peterborough City Council. Only this joint committee may: • make comments on the proposal to the NHS body; • require the provision of information about the proposal; • require an officer of the NHS body to attend before it to answer questions in connection with the proposal.
2.	**Purpose**
2.1	The purpose of the joint committee is:- a) to consider the Full Business Case for the proposal of Hinchingbrooke Health Care NHS Trust (HHCT) and Peterborough and Stamford NHS Foundation Trust for merger of the two trusts to support the future delivery of sustainable services for the benefit of patients and taxpayers and reduce duplication of corporate and back office costs in relation to: • the extent to which the proposals are in the interests of the health service in Cambridgeshire and Peterborough; • the impact of the proposals on patient and carer experience and outcomes and on their health and well-being; • the quality of the evidence underlying the proposals; • the extent to which the proposals are financially sustainable b) to make a response to the Trusts' public engagement exercise, taking into account the Trust Boards' intention to decide whether to proceed in the latter part of November 2016. NHS England's intention to ratify the proposals in mid-December 2013. c) to consider and comment on the extent to which patients and the public have been involved in the development of the proposals and the extent to which their views have been taken into account. The review will run from October 2016 to April 2017.

2.2	.
3.	**Membership/chairing**
3.1	The joint committee will consist of 5 members representing Cambridgeshire and 5 members representing Peterborough, as nominated by the respective health scrutiny committees.
3.2	Each authority may nominate up to 5 substitute members.
3.3	The proportionality requirement will apply to the joint committee
3.4	The joint committee will elect two Co-Chairmen/women, one from each authority at its first meeting. The Chair position will rotate between meetings.
3.5	The joint committee will be asked to agree its Terms of Reference at its first meeting.
3.6	Each member of the joint committee will have one vote.
4.	**Co-option**
4.1	The joint committee may co-opt representatives of organisations with an interest or expertise in the issue being scrutinised as non-voting members, but with all other member rights.
4.2	Any organisation with a co-opted member will be entitled to nominate a substitute member.
5.	**Supporting the Joint OSC**
5.1	The lead authority will be Cambridgeshire County Council as decided by negotiation with the participating authorities.
5.2	The lead authority will appoint a lead officer to advise and liaise with the Chairman and joint committee members, ensure attendance of witnesses, liaise with the consulting NHS body and other agencies, and produce reports for submission to the health bodies concerned; • providing administrative support; • organising and minuting meetings.
5.3	The lead authority with assistance from Peterborough City Council will provide administrative support and the responsibility for organisation and minuting of meetings will be shared by the two authorities.
5.4	The lead authority's Constitution will apply in any relevant matter not covered in these terms of reference.
5.5	Where the joint committee requires advice as to legal or financial matters, the participating authorities will agree how this advice is obtained and any significant

	expenditure will be apportioned between participating authorities. Such expenditure, and apportionment thereof, would be agreed between the participating authorities before it was incurred.
5.6	Each authority will bear the staffing costs associated with arranging and hosting the meetings of the joint committee held on their premises. Other costs will be apportioned between the authorities. If the joint committee agrees any action which involves significant additional costs, such as obtaining expert advice or legal action, the expenditure will be apportioned between participating authorities. Such expenditure, and the apportionment thereof, would be agreed with the participating authorities before it was incurred.
5.7	Peterborough City Council will appoint a link officer to liaise with the lead officer and provide support to the members of the joint committee.
5.8	Meetings shall be held at venues, dates and times agreed between the participating authorities
6.	**Powers**
6.1	In carrying out its function the joint committee may: • require officers of appropriate local NHS bodies to attend and answer questions; • require appropriate local NHS bodies to provide information about the proposals; • obtain and consider information and evidence from other sources, such as local Healthwatch organisations, patient groups, members of the public, expert advisers, local authorities and other agencies. This could include, for example, inviting witnesses to attend a joint committee meeting; inviting written evidence; site visits; delegating committee members to attend meetings, or meet with interested parties and report back. • make a report and recommendations to the appropriate NHS bodies and other bodies that it determines, including the local authorities which have appointed the joint committee. • consider the NHS bodies' response to its recommendations.
7.	**Public involvement**
7.1	The joint committee will meet in public, and papers will be available at least 5 working days in advance of meetings
7.2	The participating authorities will arrange for papers relating to the work of the joint committee to be published on their websites, or make links to the papers published on the lead authority's website as appropriate.
7.3	A press release will be circulated to local media at the start of the process.
7.4	Local media will be invited to all meetings.
7.5	Patient and voluntary organisations and individuals will be positively encouraged to submit evidence and to attend.

7.6	Members of the public attending meetings may be invited to speak at the discretion of the Chairman.
8.	**Press strategy**
8.1	The lead authority will be responsible for issuing press releases on behalf of the joint committee and dealing with press enquiries
8.2	Press releases made on behalf of the joint committee will be agreed by the Co-Chairmen/women of the joint committee.
8.3	Press releases will be circulated to the link officers.
8.4	These arrangements do not preclude participating local authorities from issuing individual statements to the media provided that it is made clear that these are not made on behalf of the joint committee.
9.	**Report and recommendations**
9.1	The lead authority will prepare a draft report on the deliberations of the joint committee, including comments and recommendations agreed by the committee. The report will include whether recommendations are based on a majority decision of the committee or are unanimous. The draft report will be submitted to the representatives of participating authorities for comment.
9.2	The final version of the report will be agreed by the joint committee Co-Chairmen.
9.3.	In reaching its conclusions and recommendations, the joint committee should aim to achieve consensus. If consensus cannot be achieved, minority reports may be attached as an appendix to the main report. The minority report/s shall be drafted in consultation with the appropriate member(s).
9.4	The report will include an explanation of the matter reviewed or scrutinised, a summary of the evidence considered, a list of the participants involved in the review or scrutiny; and an explanation of any recommendations on the matter reviewed or scrutinised.
9.5	If the joint committee makes recommendations to the NHS body and the NHS body disagrees with these recommendations, such steps will be taken as are "reasonably practicable" to try to reach agreement in relation to the subject of the recommendation.
9.6	If the joint committee does not comment on the proposals, or the comments it provides do not include recommendations, the joint committee must inform the NHS body of its decision not to comment or make recommendations
10.	**Quorum for meetings**
10.1	The quorum will be a minimum of three members, with at least one from each of the two participating authorities.

Proposed Time Table for the Joint Committee

All dates are subject to confirmation

Date	Venue	Purpose
Wednesday 28 September @ 5.30 pm start	Cambridgeshire County Council, Shire Hall, Cambridge	Preliminary Informal meeting To discuss evidence that will be required to be collated in preparation for the first formal meeting.
Monday 17 October @ pre-meet for 5.30pm for 6pm start	Peterborough City Council, Town Hall	First formal meeting To conduct formal scrutiny of proposals around the merger of HHCT with PSHFT. Chief Executives of both HHCT & PSHFT have reserved the 17th October to attend this session. Health Watch Cambridgeshire CEO will be in attendance. Representation from CCG has been secured.
Wednesday 9 November @ pre-meeting for 5.30pm start for 6pm start	Cambridgeshire County Council, Shire Hall, Cambridge	Second formal meeting To formalise a response from the Joint Committee to the public engagement exercise.

Paper to:

Joint Health Scrutiny Committee of Peterborough City Council and Cambridgeshire County Council of 17 October 2016

Merger of Hinchingbrooke Health Care NHS Trust and Peterborough and Stamford Hospitals NHS Foundation Trust

Introduction and Context

As members of the Committee will be aware, there is a current proposal for the merger of Hinchingbrooke Health Care NHS Trust and Peterborough and Stamford Hospitals NHS Foundation Trust.

We are grateful for the opportunity to discuss the merger with a joint scrutiny committee representing Peterborough and Cambridgeshire and would like to thank members and officers for enable this joint approach.

Full Business Case

The Full Business Case for the merger implementation on 1 April 2017 was approved by both Trusts' board of directors at the end of September subject to:

- the output of the independent East of England Clinical Senate review of the proposed way forward for the integration of clinical services;
- the output of further staff and public engagement in October and early November 2016.

The case available at: https://www.peterboroughandstamford.nhs.uk/about-us/working-with-hinchingbrooke/ has been submitted to NHS Improvement, the regulatory body for NHS Providers for review.

Public Engagement

The two Trusts are currently in the second stage of public engagement which comprises:

- Monday 3 October, 5.45pm – Hinchingbrooke Hospital, Partnership Suite, Education Centre
- Thursday 6 October, 5.45pm – Stamford Hospital, New Meeting Hall
- Monday 10 October, 7pm – Deepings Community Centre, Douglas Rd, Peterborough, PE6 8PA
- Tuesday 11 October, 5.45pm – Peterborough City Hospital, Denis Bracey Suite, Learning Centre
- Thursday 13 October, 2pm – St Ives Corn Exchange, The Pavement, The Old Riverport, St Ives, PE27 5AD
- Thursday 20 October, 2pm – Bourne Corn Exchange, 3 Abbey Rd, Bourne, PE10 9EF

These have been advertised in the traditional media and through using social media.

Attachments

Following the comments received from the Committee's earlier consideration we have provided two documents:

- a summary of the Full Business Case
- a slide presentation outlining the key areas of focus.

Recommendations

The Committee is asked to note the content of the summary of the Full Business Case (or the full version available online – see link above) and the attachments provided to discuss the proposals for the merger. The case will then be modified to take account of issues raised.

Jane Pigg
Company Secretary

Hinchingbrooke Health Care NHS
NHS Trust

Peterborough and Stamford Hospitals NHS
NHS Foundation Trust

Merger of
Hinchingbrooke Health Care NHS Trust
and **Peterborough and Stamford Hospitals NHS Foundation Trust**

Better Safer Local

Recap on merger plan

The Clinical Case

The Financial Case

Benefits and risks

What happens next

Your questions

Recap on merger plan – an overview

- Peterborough and Stamford Hospitals is clinically and operationally sustainable (with specific challenges) BUT not financially sustainable
- Hinchingbrooke is neither clinically nor financially sustainable in its current form
- Cambridgeshire and Peterborough is one of the most financially challenged health systems in the country
- As part of the System Transformation Programme led by Cambs and Peterborough CCG, our Trust and Hinchingbrooke looked at the benefits to be had by working collaboratively – four options were assessed

Merger milestones to date

- **May 2016:** Outline Business Case, which showed clear clinical and financial benefits for both Trusts working as one organisation, approved by both boards
- **Sept 2016:** Full Business Case, showing in detail the clinical and financial benefits of merging, approved by both boards subject to consideration of feedback from:
  - Independent East of England Clinical Senate on integration of clinical services
  - Staff and the public in additional events to be held in October/early November

Upcoming milestones

- **End November 2016:** The Full Business Case will be reviewed again by the boards of both Trusts at public meetings – taking all recent feedback into account
- Our regulators will also review the Full Business Case and make its recommendation to the Secretary of State for final approval in **March 2017**
- **Post end November:** If the Full Business Case is ratified, by both Trust boards detailed implementation/ integration plans will be shared with staff asap
- Merger date proposed: **1 April 2017**

Recap on merger plan

The Clinical Case

The Financial Case

Benefits and Risks

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The clinical case for change

- Some services in both organisations are clinically fragile now - further services at risk in medium-term
- Contributory factors:
  - Smaller teams, compared to teaching trusts and larger hospitals, can make recruitment difficult
  - Agency spending caps
  - 7-day working requirements
  - Junior Doctors contract/provision of rest

Service Changes and Opportunities at Hinchingbrooke

Emergency / Urgent Care

In line with many small district general hospitals, ambulances divert to other hospitals for emergency patients with:

- Trauma (level 2 & 3)
- Stroke
- Heart Attack

No substantive specialty consultants (inpatient cover provided by general medical physicians):

- Stroke rehabilitation
- Haematology

Limited consultant cover for:

- Cardiology
- Respiratory
- Neurology

Elective & Outpatients

The following services have are no longer available at Hinchingbrooke (last 12-months):

- **Pain***
- **Dermatology***
- **Spinal**** now closed to new referrals

The following services are not available at Hinchingbrooke currently, but are an opportunity post-merger.

Sub-speciality Cardiology, such as

- rapid access chest pain
- heart failure clinics

Sub-speciality respiratory, such as

- Oxygen Therapy

Diagnostics

The following diagnostic services are no longer available at Hinchingbrooke (last 12-months):

- ***Nuclear medicine***

The following services are not available at Hinchingbrooke currently, but are an opportunity to develop post-merger.

- Bronchoscopies
- Sleep studies
- Nuclear medicine

Better Safer Local

* services have ended in the past 12 months

** service is a sub-specialty of orthopaedics not currently provided by PSHFT either.

Clinical integration - overview

- The Clinical Advisory Group prioritised those services which face the greatest sustainability risks for integration first, identifying them with a change readiness evaluation tool
- Priority services for focus are:
  - Stroke
  - Emergency Department
  - Diagnostic imaging
  - Cardiology
  - Respiratory medicine
  - Clinical haematology (blood disorders)

Clinical integration approach

- Excellent engagement by clinical staff in the process
- Clinicians from both Trusts have been meeting to:
  - Jointly assess their strengths and weaknesses
  - Assess their current readiness for change
  - Plan their future milestones for integrating their service

Clinical integration - progress update:

- **Haematology**
  - Rapid progress: solutions in place by April 2017
  - Consultant haematologist appointed mid Sept
- **Cardiology, Stroke and Respiratory**
  - Substantial service improvements/enhancements by March 2018
- **Emergency Department and Diagnostic Imaging**
  - National shortage of specialist staff may delay progress
  - Training/sub-specialisation opportunities pursued

Wider benefits and opportunities

- All clinical services from both sites have been engaged with - and identified that merger will:
  - Strengthen single-handed sub-specialties and support services
  - Improve access to emergency and 7-day services
  - Formalise and expand training clinical rotations
  - Help staff on all sites learn from best practice to improve services
  - Increasing resilience to meet requirements for rapid access to services, such as 2 week waits

Wider benefits and opportunities

- Strengthening and/or repatriating services
- Core training and development to enhance staff access to skills across all sites
- Expansion of clinical trials building on existing strengths
- Standardising services commissioned across the area
- Strengthened working with community provider partners
- Joint recruitment to attract high quality staff
- Opportunity to benefit from clinical leadership of colleagues in specific areas

Recap on merger plan

The Clinical Case

The Financial Case

Benefits and Risks

What happens next

Your questions

The Financial Case

- Merger saves at least £9m recurrently
- The transition costs are circa £13m (non-recurrent)
- Positive contribution delivered from Year 3 with opportunities for further future savings
- Reduction in the recurrent deficit support

The Financial Case

- Financial performance 2015/16:
  - HHCT £18.8m deficit (16.8% of turnover)
  - PSHFT £37.1m deficit (14.2% of turnover)
- 2016/17 Plan:
  - Including S&T funding £4m = £9.9m deficit
  - Including S&T funding £10.8m = £20.2m deficit
- Combined 5 year plans forecast deficit of £17.7m but exclude impact of continued S&T funding and PFI support
- Merger is part of our journey to financial sustainability

Recap on merger plan

The Clinical Case

The Financial Case

Benefits and Risks

What happens next

Your questions

The benefits

- Improves clinical sustainability - wide range of services
- Chance to share/implement best practice
- Saves at least £9m - corporate and back office savings (also supports the health system Sustainability & Transformation Plan)
- Facilitates more robust infrastructure – IT; Equipment and Estate Usage and Rationalisation
- Engagement with community through Foundation Trust membership and Council of Governors

The risks

- Too optimistic regarding workload, timelines and resources to deliver the programme
- Under estimation of funding to deliver project and the subsequent integration
- Failure to engage staff and gain support, especially from clinicians
- Failure to engage the public
- Due diligence revelations

Recap on merger plan

The Clinical Case

The Financial Case

Benefits and Risks

What happens next

Your questions

What happens next

- Full Business Case submitted to regulator, NHS Improvement
- Detailed Financial, Clinical and Governance Assurance programmes under way
- Engagement ongoing with staff and the public – started in July and ends in November
- Work with fragile clinical services (commenced June)
- Further development of clinical case and start of early collaboration (commenced June and is ongoing)

What happens next - membership

- Work commenced on building a wider membership base to vote for public and staff governors who can represent the areas served by both trusts
- Proposal for 3 public constituency areas to represent:
  - Stamford and South Lincolnshire
  - Greater Peterborough
  - Huntingdonshire
- Proposal for 3 staff constituency areas representing Peterborough, Stamford and Hinchingbrooke Hospitals
- Membership engagement events begin mid-October across the areas served by all three hospitals

What happens next – establishing governors

- Public members from each area can vote for their local governors to ensure each area is represented
- Representation will be proportionate to the size of population served by each hospital. Therefore:
  - Stamford and South Lincs – **6** public governors
  - Huntingdonshire - **6** public governors
  - Greater Peterborough - **7** public governors
- Discussions with partner organisations commenced – includes statutory representation from Pboro City Council, Cambs County Council, Lincs County Council

What happens next – establishing governors

- Staff members from each site can vote for their local staff governors to ensure each area is represented
- Representation will be proportionate to the size of staff numbers and concerns. Therefore, proposed as:
  - Stamford – **1** staff governor
  - Hinchingbrooke – **3** staff governors
  - Peterborough – **3** staff governors
- Elections are to take place with preparations starting in January 2017 so that a representative Council of Governors in place for 1 April 2017

What happens next

- **End Nov 2016:** The Full Business Case will be reviewed again by the boards of both Trusts at public meetings – taking all recent feedback into account
- **End Dec 2016:** Name of new organisation decided
- Our regulator will make its recommendation to the Secretary of State for final approval in **March 2017**
- **Post end Nov:** If the Full Business Case is ratified by both Trust board, implementation/integration plans will be shared with staff asap
- Merger date proposed: **1 April 2017**
- Implementation and benefits **2017-2020**

Responses to frequently-asked questions

- The Sustainability and Transformation Plan has identified that 24/7 urgent care services, and consultant-led obstetric and paediatric services would continue to be provided at all three acute sites
- Patients will not have to travel to access services they previously accessed at their local hospital – there are no proposals to change the location of any services
- Patients in Huntingdon will benefit from improved services at their hospital - via A&E, Haematology, imaging, respiratory services and cardiology

Responses to frequently-asked questions

- The PFI costs of Peterborough City Hospital does not, and will not, impact upon patient care across any of the three hospitals
- Patients can have a greater say in how their hospital is run, through becoming members of the merged Foundation Trust – and by being able to stand as Governors. This is a particular benefit to Huntingdonshire patients who fear that not having a board dedicated to their hospital alone will mean the local 'voice' is lost

Responses to frequently-asked questions

- The boards of each Trust recognise that in bringing the two organisations together we need to give full consideration to how we integrate the cultures in Peterborough, Hinchingbrooke and Stamford Hospitals
- In merging we are aware we must not lose the things that our staff love about working in their hospital – this will help us achieve the best of both organisations

Responses to frequently-asked questions

- The merger will not affect any plans to redevelop our hospital at Stamford – the new MRI scanner is a good example of this
- We will aim to keep any redundancies to a minimum. Any losses will be from staff in 'back office' functions
- We will ensure all staff are properly supported throughout any process to integrate our hospitals

Our Joint Vision

Delivering excellence in care in the most efficient way in hospitals where it is great to work

Our Joint Strategy

Clinical Excellence

Doing the very best for our patients

Financial Sustainability

Getting value for money for taxpayers for our services

Operational Sustainability

Making the most of our hospitals for the future

Underpinned by Our Values

Across the populations of South Lincolnshire, Peterborough and Huntingdonshire we will…

Provide safe and timely care for our patients

Ensure that our staff feel valued and have opportunities for development

Design our services to meet the changing needs of our patients

Your questions?

Hinchingbrooke Health Care NHS Trust

Peterborough and Stamford Hospitals NHS Foundation Trust

Merger of
Hinchingbrooke Health Care NHS Trust and Peterborough and Stamford Hospitals NHS Foundation Trust

Full Business Case

Summary version
September 2016

Better Safer Local

Summary of the Full Business Case

This document is a summary of the Full Business Case.
It sets out the clinical and financial reasons why a merger is being proposed.
The Full Business Case was approved by the boards of both Peterborough and Stamford Hospitals NHS Foundation Trust and Hinchingbrooke Health Care NHS Trust in their meetings at the end of September 2016.
The Full Business Case explains how patients in Huntingdonshire, Greater Peterborough and South Lincolnshire will benefit from the services provided by our 6,000 staff working in one single hospital foundation trust, based on three hospital sites: namely Hinchingbrooke, Peterborough and Stamford Hospitals

Contents

Foreword by Chief Executives Lance McCarthy and Stephen Graves

We are pleased to deliver the Full Business Case for the proposed merger of Hinchingbrooke Health Care Trust and Peterborough and Stamford Hospitals NHS Foundation Trust.

The Full Business Case contains the latest information on the clinical and financial benefits of merging, compiled following extensive engagement between the clinical and administration teams in both organisations. It examines what this means for both patients and staff. It does not recommend changing services at any one of the three hospital sites, but it does highlight the risks of the organisations not collaborating at all, which could have a negative impact upon some services for patients, particularly in Huntingdonshire.

We believe the merger of Peterborough and Stamford Hospitals NHS Foundation Trust and Hinchingbrooke Health Care NHS Trust will help to improve clinical and financial sustainability in our three hospitals and provide exceptional opportunities to deliver a step change in the strength and depth of many of the patient services currently provided. These opportunities will arise as a combination of the increased catchment population and critical mass of clinical specialists.

The strategic directions of both trusts are aligned, and the vision, as articulated by each organisation, fit well with each other.

The combined trust will deliver robust services that are currently unsustainable, and people living in the Hinchingbrooke area will have access to some services which cannot be provided without merger.

The newly-formed trust will be significantly more attractive to prospective job applicants and clinical leaders which, in partnership with primary care, community and specialist partners, will improve services for the patient population.

The merger will deliver £9m efficiencies which will contribute to the required system-wide savings. Reductions will be in back office and corporate costs, although this will result in minimal redundancies.

For those clinical services that will continue to provide 24/7 emergency cover, and those where there are significant national recruitment challenges, there will initially be some opportunities to make improvements. Over time clinical services will benefit from an increase in team size which will further improve overall quality and performance standards from the current CQC 'Good' ratings.

Lance McCarthy

Stephen Graves

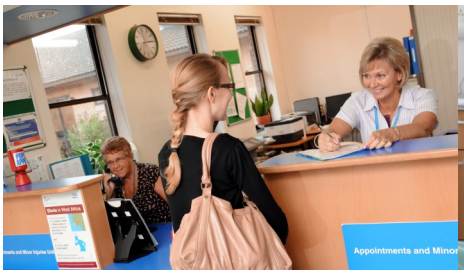
The Sustainability and Transformation Plan, published by the Cambridgeshire and Peterborough health and care system in July 16, gave assurances that the following key services will remain at Hinchingbrooke:

- 24/7 A&E services, seeing minor injuries and major cases
- 24/7 obstetric-led maternity and paediatric services.

The first 18 months of the merger, while challenging, will be an exciting time in which to establish the level of ambition for the combined trust. During that time, we will further develop the clinical vision described in this summary document. The right culture will be fostered to provide clinical and managerial leaders and teams with sufficient autonomy and freedom to take advantage of the available opportunities.

Throughout this business case, the steps being proposed have been informed by the lessons learned from previous NHS mergers.

Lance McCarthy and *Stephen Graves*
Chief Executive Officers,
Hinchingbrooke Health Care NHS Trust &
Peterborough and Stamford Hospitals NHS Foundation Trust




The headlines, at a glance

- A merged organisation will deliver clinical, financial and organisational sustainability to both trusts and improve the sustainability of some fragile clinical services at Hinchingbrooke Hospital
- Clinical services will continue to be delivered as currently at all three hospital sites - Hinchingbrooke, Peterborough City and Stamford Hospitals
- Our goal is to ensure patients will need to travel less for treatment – not more
- Together we can improve our patients' experience by recruiting and retaining the best specialists with shared rotas that are robust and with more training and educational opportunities
- Hinchingbrooke patients and people of Huntingdonshire will have a greater say in how their hospital is run, by becoming members or governors of the merged Foundation Trust
- The merger will not affect any plans to redevelop Stamford Hospital or the Health Campus at Hinchingbrooke
- The PFI costs of Peterborough City Hospital does not, and will not, impact upon patient care across any of the three hospitals.
- There will be redundancies as we integrate back office staff, but these will be kept to a minimum. Staff will be supported through-out the process to merge our hospitals
- The boards of each Trust recognise that we need to give full consideration to how the cultures in Hinchingbrooke, Peterborough and Stamford Hospitals are integrated to develop a merged organisation that delivers the best of both for our patients and staff.
- Doing nothing is not an option for either Trust

Next steps

The Full Business Case was approved by the boards of both Trusts in their meetings held in public at the end of September 2016. Their approval was subject to consideration of feedback from:

- The independent local Clinical Senate on the integration of clinical services, and;
- Staff and public engagement sessions held in October and early November 2016.

Meanwhile, the Full Business Case has been referred to our regulator, NHS Improvement, to review.

The boards of both trusts will meet again, separately, at the end of November 2016 to review all feedback to ensure it is reflected in the Full Business Case and the accompanying implementation plan. They are then expected to ratify the Full Business Case in readiness for the merger to take place on 1 April 2017.

In the interim, both trusts will work together to provide safe services, particularly in areas identified as being unsustainable.

Some benefits will be achieved by April 2017, with full benefits delivered by Autumn 2020.

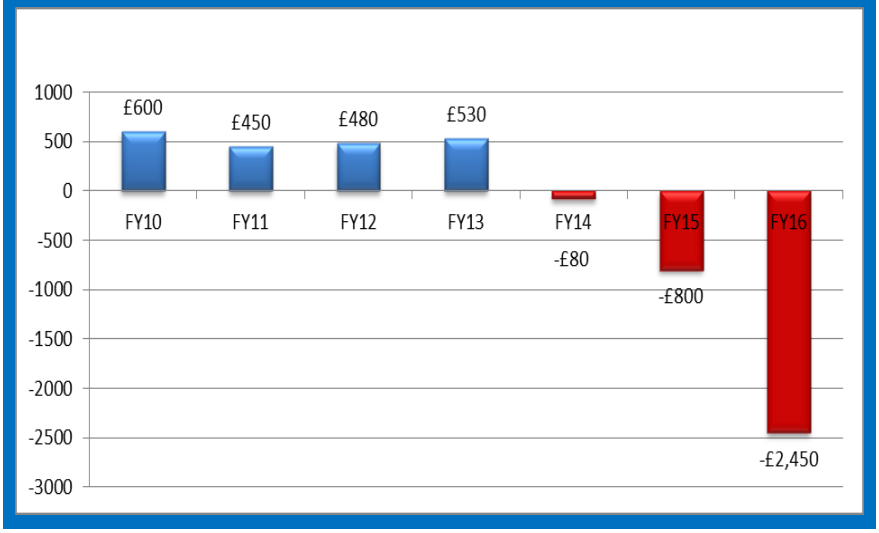
We recognise that in bringing the two organisations together we need to fully consider how we integrate the cultures in Hinchingbrooke, Peterborough and Stamford Hospitals.

- Stephen Graves, Chief Executive, Peterborough and Stamford Hospitals NHS Foundation Trust

PART 1:
The bigger picture - national and local case for change

A&E attendances across the UK increased by 35% to 22.3 million between 2004 and 2016.
Increased demand from an ageing population and requirements for above average efficiency have placed significant pressure and financial constraints across the entire NHS.
In 2014 the NHS reported its first deficit. Two years later the total deficit for NHS trusts was £2.45bn. Now, 89% of acute trusts are reporting a deficit.

NHS trusts end of year financial results 2009/10 - 2015/16



Our local health system - rising demand from a growing population

The Cambridgeshire and Peterborough population is forecast to grow by 10% between 2016 and 2021. Peterborough is growing by 11%, while Huntingdon's 'over-65s' age group is set to increase by 17%. People belonging to this group are most likely to experience multiple illnesses, disability and frailty as time goes on. This means both Hinchingbrooke and Peterborough and Stamford Hospitals can expect higher demand for their acute services in the near future.

The financial impact is expected to be high. In the last financial year our local health care system had a collective deficit of £150m - one of the highest in the country. In the next five years, if things continue as they are, the deficit is forecast to reach £250m.

Meeting future demand on services, while managing clinical sustainability within a tight budget, means health service providers need to work together and work differently. Across the country, clinical commissioning groups have developed Sustainability and Transformation Plans.

The Sustainability and Transformation Plans led by Cambridgeshire and Peterborough clinical commissioning group involved both Hinchingbrooke and Peterborough and Stamford hospital trusts.

In November 2015, our trusts agreed to work together to explore four levels of collaboration.

These were:

Option 1 - do nothing for now
Option 2 - shared back office function
Option 3 - as option 2, but with two boards, one executive team and one operational organisation
Option 4 - one organisation

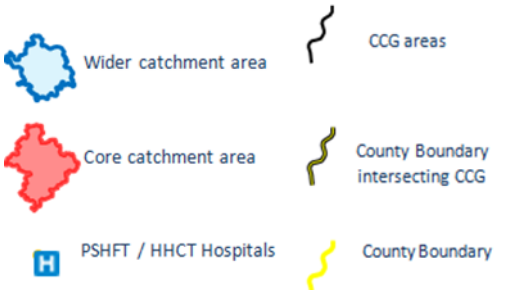
After publication of the Outline Business Case, in May 2016, both boards agreed that one organisation was the best option to pursue.

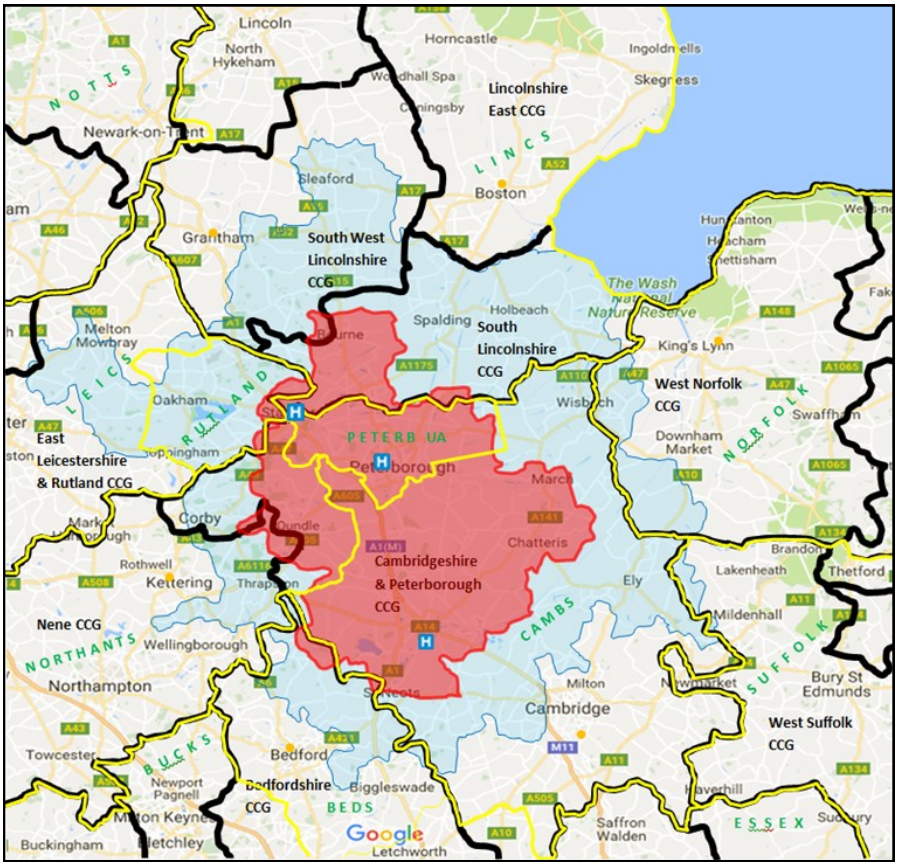
In July 2016 the trusts signed a memorandum of understanding to agree to work together to develop a Full Business Case to show patients and staff the benefits of a merged trust.

PART 2:
Focus on our trusts

Currently Hinchingbrooke Health Care NHS Trust and Peterborough and Stamford Hospitals NHS Foundation Trust serve a diverse and growing population of around 700,000 people, some of whom live in the most deprived areas of the country. Some areas are forecast to experience significant growth in the over 65 age profile, particularly in Huntingdonshire and Rutland.

Key:





This map shows the combined area served by both trusts

Hinchingbrooke Health Care NHS Trust (HHCT) provides care to 193,000 people from Huntingdon and the surrounding area. Peterborough and Stamford Hospitals NHS Foundation Trust (PSHFT) serves a total population of over 500,000 people, including Peterborough, South Lincolnshire and the wider area.

Hinchingbrooke and Peterborough City Hospital are district general hospitals, whereas Stamford Hospital is smaller and has more of a community hospital feel.

Of the two trusts, Peterborough is the larger and delivers a broader range of clinical services. Following revisits by the Care Quality Commission, both trusts have been rated as 'Good' overall.

Most of the inpatient services at PSHFT are delivered on the Peterborough City Hospital site. Significant outpatient services are provided at Stamford Hospital, such as the pain management service, which is one of the largest in the region.

Hinchingbrooke delivers both inpatient and outpatient services from its site.

Both trusts work closely with neighbouring teaching hospitals, particularly Cambridge University Hospitals (Addenbrooke's), to provide specialist services, such as cancer surgery, major trauma and specialist paediatrics. When Papworth Hospital moves to the Addenbrooke's site in 2018, its specialist cardiac centre will move with it.

All trusts are facing an ever-increasing drive for efficiency while delivering improvements, developing seven day services and fulfilling the requirement to meet key service and performance standards.

'We are mindful that we are acting in the interests of a joint population of 700,000 patients and 6,000 staff. This is why feedback from our staff and the public is so important.'

- Lance McCarthy, Chief Executive, Hinchingbrooke Health Care NHS Trust

The trusts at a glance

HHCT = Hinchingbrooke Health Care NHS Trust
PSHFT = Peterborough and Stamford Hospitals NHS Foundation Trust

Here is a list of services currently provided by each trust.

Service	HHCT	PSHFT		Service	HHCT	PSHFT
Accident & Emergency	✓	✓		Obstetrics	✓	✓
Acute Medicine	✓	✓		Oncology	✓**	✓
Ambulatory Care	✓	✓		Ophthalmology	✓	✓
Audiology	✓	✓		Oral and maxillofacial		✓
Breast Surgery	✓	✓		Pain	Acute pain only	✓
Cardiology	✓	✓		Paediatrics	✓***	✓
Clinical haematology	✓	✓		Palliative care	✓	✓
Diabetes and Endocrinology	✓	✓		Pathology	✓	✓
Diagnostic imaging	✓	✓		Plastics and dermatology	✓	✓
Ear, Nose and Throat	✓	✓		Radiotherapy		✓
Endoscopy	✓	✓		Renal	✓**	✓
Gastroenterology	✓	✓		Respiratory	✓	✓
General Medicine	✓	✓		Rheumatology	✓	✓
General Surgery	✓	✓		Stroke	✓****	✓
Geriatric Medicine	✓	✓		Therapy services	✓	✓
Gynaecology	✓	✓		Thoracic Medicine		✓
Lower GI	✓	✓		Trauma and Orthopaedics	✓	✓
Lymphedema		✓		Upper GI	✓	✓
MacMillan centre	✓	✓		Urology	✓	✓
Neonatal	✓***	✓		Vascular	✓*	✓*

*Networked service provided by CUHFT; **Outpatient service only;
***Provided on the HHCT site by Cambridgeshire Community Services ****Stroke rehabilitation only, no acute care

	HHCT	PSHFT
Main commissioners	Cambridgeshire and Peterborough CCG	Cambridgeshire and Peterborough CCG, plus South Lincolnshire CCG
Populations served	193,000	507,000
Turnover 2015/16	£112.3m	£260.8m
Surplus/deficit 2015/16	-£17.1m	-£37.1m
Surplus as % of turnover	-15.2%	-14.2%
Number of beds	235 + 21 day case in Treatment Centre	611 + 22 intermediate care at Stamford Hospital
Staff (whole time equivalent)	1,553	3,665
CQC overall rating	Good	Good

PART 3:
Our current clinical and financial sustainability

Hinchingbrooke Health Care NHS Trust

Clinical sustainability

Despite the passion, commitment and hard work of hospital staff, HHCT is not clinically sustainable in its current form. The hospital is too small for the continued delivery of high quality modern healthcare. The Hinchingbrooke trust board recognises that alternative solutions are needed to ensure all existing services continue to be delivered from its hospital site.
Hinchingbrooke is struggling to provide some key services. Those most affected are clinical haematology (blood disorders), the emergency department (ED) and stroke services.
Recruiting permanent consultants for these services is the main reason for their unsustainability. The trust's ED is the fifth smallest in the country and relies heavily upon locum doctors to provide a safe service. This cannot be sustained in the long term. Other services, such as ortho-geriatrics, neurology, cardiology and end of life care are also significantly challenged due to staff shortages.
In addition, the size and mix of patient health issues means Hinchingbrooke is likely to face further clinical service issues in future.

Financial sustainability

The financial challenge at Hinchingbrooke is also significant. National efficiency work led by Lord Carter identified Hinchingbrooke as the country's second most financially inefficient hospital. It has one of the country's largest deficits as a proportion of turnover - £17.1m on a £112m turnover. The Trust has a five year financial recovery plan. This relies upon an ambitious cost reduction programme, additional revenue from a new Strategic Estates Partnership Health Campus development and collaboration with other organisations to reduce back office costs.
However, even if delivered fully, the clinical sustainability issues remain.

Peterborough and Stamford Hospitals NHS Foundation Trust

Clinical sustainability

PSHFT also has clinical challenges in specific service areas such as gastroenterology and diagnostic imaging.

Financial sustainability

Despite its track record of delivering above average cost improvements for each of the past four years, Peterborough and Stamford's financial position on 31 March 2016 was a deficit of £37.1m. In its current form, it will not be able to deliver a balanced budget for the foreseeable future.
The trust has a recovery plan based on three main areas:

- delivering above average cost improvements
- savings made by working with Hinchingbrooke
- agreement from the Department of Health to fund an additional £15m to cover the PFI cost

External analysis has identified additional savings, including Lord Carter's review which highlighted further opportunities to reduce bank and agency costs.
In 2015 the former NHS regulator Monitor (now NHS Improvement) identified potential combined savings of £10m by Peterborough and Stamford working collaboratively with Hinchingbrooke through the reduction of back office and corporate costs.
Experts, including the National Audit Office, the Contingency Planning Team and PriceWaterhouseCoopers, have all identified that an additional £25m ongoing tariff subsidy is required to meet the additional costs of the PFI. The Trust currently receives £10m subsidy from the Department of Health towards this, so a further £15m is required.
A combination of all three will return the trust back to a position of financial surplus.

Commitment to provide services that are better, safer and local

Both trusts are passionate about providing services that are better, safer and delivered locally and there is joint commitment from both trust boards to ensure the ongoing delivery of safe, sustainable core acute services from Hinchingbrooke Hospital.

This cannot be a guarantee that things will never change, as it is possible our commissioners may want to see services delivered differently in the future. However, any significant changes to the way clinical services are delivered would require full public consultation.

Merger would join all clinical teams together under a single operational management structure. This would result in larger teams, with medical staff working equitably across locations with a shared workload, rotas and out of hours cover.

Merger would also lead to single governance arrangements, greater opportunities for staff through training and 'sub-specialist' care, recruitment and retention. It would also reduce the use of agency staff and create clinical consistency through shared best practice.

There is a compelling case for clinical collaboration to address service vulnerability, particularly for the population of Huntingdon, which is disproportionately disadvantaged.

Clinical collaboration would strengthen the provision of a number of services across both sites to ensure long term, sustainable, high quality health services for the populations of Cambridgeshire, Huntingdon, Peterborough and South Lincolnshire.

PART 4:
Return to financial sustainability

Creating a single organisation will reduce overall expenditure on corporate and back office services, without impacting upon front line services.

The merger will save at least £9m recurrently. That's £9m of savings every year, year on year. The cost of merging the trusts is in the region of £13m. This is a non-recurring 'one-off' cost. This includes expected redundancy costs and the cost of purchasing new IT systems that will be required in a single organisation. The hospitals will be linked by a shared computer system which means consultants in Peterborough could, for example, review the results of a patient they had seen in a clinic at Hinchingbrooke earlier in the week and vice versa.

From year three post merger, we will start to see the financial benefit of merging and by then will also have identified opportunities for further future savings. This will lead to reduction in deficit support for both organisations and ultimately, financial sustainability.

The £9m of projected savings from the merger does not include any that arise from integrating clinical services. All financial savings achieved from clinical integration will be used to reinvest in services, and to meet the annual improvements in efficiency and cost reduction. The core focus of clinical integration is to deliver services that are clinically sustainable, however there are significant opportunities to reduce the use of locum medical staff.

Reduction in posts

Board-related savings will be achieved through a reduction in the number of executive and non-executive director positions across both trusts.

The posts lost will generate a saving of around £6.8m of the £9m total in recurrent savings.

Breakdown of reduction in corporate and back office functions

Department	Reduction in agency	Reduction in posts
CEO department		✓
Finance	✓	✓
HR	✓	✓
Nursing		✓
Facilities	✓	✓
Ops		✓
IT/IS	✓	✓
Clinical Support	✓	✓



PART 5:
Why 'doing nothing' is not an option

Unsustainable services identified	Unsustainable	
	Now	Medium term
Accident & Emergency	✓	
Acute Medicine		✓
Cardiology		✓
Clinical haematology	✓	
Diagnostic imaging / Interventional radiology		✓
Gastroenterology (PSHFT issue)		✓
Renal dialysis		✓
Neurology		✓
Ortho-Geriatrics (part of orthopaedics)		✓
Palliative care		✓
Spinal surgery (part of orthopaedics)	✓	
Stroke	✓	

For both trusts, 'doing nothing' is not an option. We have identified clinical services that face challenges at both trusts, and currently HHCT faces the greatest challenge. In the past 12 months, services such as pain medicine, spinal surgery and dermatology are no longer offered at Hinchingbrooke.

The Outline Business Case described 12 services that are unsustainable now or in the medium term if there is no change to the immediate situation or approach. They are highlighted in the table above.

We have identified six priority areas that require immediate attention. They are:

1. Stroke
2. Emergency Department
3. Diagnostic Imaging
4. Cardiology
5. Respiratory Medicine
6. Clinical Haematology

The clinical teams of both trusts have examined why these services are unsustainable and how integration will address issues and improve quality.

For some services, such as Clinical Haematology, progress will be rapid, with services in place and benefits demonstrated by the time the trusts formally merge in April 2017. For other services such as Stroke, Cardiology and Respiratory, a merger will provide the clear opportunity to move to substantial service improvements and enhancements by the end of the first full year of merger. Benefits will be gained from working as a single service across more than one site and better local access to high quality services.

For Diagnostic Imaging and both emergency departments, progress is likely to be slower due to the national challenge of recruitment to consultant and middle-grade posts and the shortages in qualified ED nurses.

However, even at an early stage, it is clear that there are opportunities to work together on the aspects which will make the new organisation more attractive to prospective candidates, such as training and development and sub-specialisation. We will also be able to progress joint approaches to accreditation, emergency planning, equipment and IT connections.

PART 6: Sustainable services Better for patients, better for staff

In this section we examine at the six priority areas and how they would be improved by merging

Stroke Services

Current patient experience

Care for patients who have suffered a stroke (damage to the brain tissue cause by either a bleed or blockage of blood supply to the brain) is generally defined in four phases:

1. Hyper-acute – the first 24 hours
2. Acute – days 1-3
3. Sub-acute – 3-7 days
4. Rehabilitation – around 30 days in a hospital, with ongoing care in the community

Peterborough City Hospital has a specialist hyper-acute stroke unit. There are four full-time consultants, two of which are locums, supported by four neurologists, currently running the service. There is currently no specialist stroke provision at Hinchingbrooke Hospital and there is reduced provision for vascular treatment. There are currently staff recruitment challenges at both sites. At Hinchingbrooke Hospital there are no specialist stroke consultants. This means patient rehabilitation is not overseen by a specialist. There is also no psychology support for stroke patients.
Community provision is also weak. There is no discharge support pathway at either site and patients are unable to access rehabilitation at home as early as best practice recommends. Therefore patients are staying longer in hospital.

Patient experience under a merged trust

A merged trust would provide all patients with a fully integrated stroke service with strengthened rehabilitation and community links. This reflects the ambition that rehabilitation services for stroke patients should be delivered locally. This integrated service will benefit Hinchingbrooke stroke patients in particular, as they will see the greatest improvement in patient care and outcomes, and reduced length of time spent in hospital.
As defined in the four phases of care for stroke patients in the column on the left, all stroke patients will continue to receive treatment for acute stroke at the specialist stroke units at either Peterborough City Hospital or Addenbrooke's Hospital to ensure they receive timely treatment delivered by specialist stroke staff. Once discharged, they will undergo a period of rehabilitation at whichever hospital is local to where they live. As the merged trust will be in a position to rotate four full-time stroke consultants across the combined area, Hinchingbrooke patients undergoing rehabilitation will benefit from the care of a specialist stroke consultant who will oversee their recovery, improving their outcomes.
Another major benefit to Hinchingbrooke patients is that specialist stroke consultants will provide seven-day cover across both sites. This also means that patients from the Huntingdon area who have suffered a TIA (also referred to as a 'mini-stroke'), will receive treatment at Hinchingbrooke Hospital. Stroke services will develop further as part of the wider local health system plan. Future developments are expected to prioritise rehabilitation at home, so patients can leave hospital as quickly as possible.
These improvements will not all happen overnight, as they will be partly dependent upon filling existing vacancies, however this should be easier to fill within a merged trust

Additional benefits:

The trust will be in a position to meet clinical standards for stroke care and time to treatment. We can reduce reliance on the current 'tele-medicine' service and provide additional consultant resource for 'tele-medicine' service. As a merged trust there will be increased research and development opportunities. We will be in a better position to attract, recruit and retain specialist stroke staff.

Sustainable services

Emergency Department Services

Current patient experience

The Emergency Department at Hinchingbrooke Hospital is the fifth smallest in England. On average, it sees 132 patients per day, of which 29 patients require admission. During the first quarter of 2016, the department at HHCT saw 11% more patients than last year. The increase in A&E attendances is now a national trend.
Due to its size, some specialist services are not provided (such as trauma, heart problems and stroke). Patients presenting with these types of illnesses are treated at Papworth, Peterborough City or Addenbrooke's hospitals.
Hinchingbrooke is struggling to recruit and retain emergency consultants due to its size, as well as being affected by the national shortage of emergency consultants and nurses that all hospitals are experiencing. It currently has two full-time consultants and one part-time consultant out of the six it requires. These consultants are supported by locum doctors which impacts upon the continuity of care received by patients. These challenges are expected to continue if the trusts do not merge.
Following the Care Quality Commission inspection in August 2016, which recommended that Hinchingbrooke should come out of special measures, the ED was rated '*requires improvement'.* The ED is not considered sustainable in its current form.
Peterborough City Hospital has made good progress in recruiting consultants, with 11 out 12 permanent posts filled. However several middle-grade vacancies are still covered by locums, and there is an over-reliance upon agency nursing.

Patient experience under a merged trust

Both Hinchingbrooke and Peterborough City hospitals will continue to provide urgent care services to their local populations 24 hours a day. The minor injuries unit at Stamford Hospital will continue to operate Monday to

Friday between 9am and 5pm. Patients who require treatment for severe trauma or complex illnesses will be continue to be referred to specialist centres, such as Addenbrooke's Hospital.
Hinchingbrooke patients will experience the greatest benefit from a merged Emergency Department. They will see an enhanced quality of service as they are treated by a larger number of experienced consultants, nurse practitioners and junior doctors, who will rotate shifts between the two hospitals. This will provide a safer service and ensure staffing levels meet patient demand.
One development for Hinchingbrooke patients will be the growth of support for frail and elderly patients and the increase in emergency and advanced nurse practitioner roles. These nurse practitioners have already proved to be very popular with patients and they help free up senior medical staff so they can spend more time with patients who have the most serious conditions.

Additional benefits

The merger provides greater opportunity to improve the recruitment, development and retention of skilled doctors, nurses and other health care professionals. This will mean patients at Hinchingbrooke Hospital will have better access to permanent staff, which brings with it greater continuity and quality of care from a settled team.
By rotating emergency staff between the two hospitals, consultants will provide training and teaching sessions to ensure staff can develop their skills. Together this will provide attractive prospects for all grades of emergency staff.

Sustainable services

Cardiology Services

Current patient experience

The cardiology service at Hinchingbrooke Hospital is unsustainable due to the size of its clinical team. At the moment patients are seen by one permanent consultant, two locum consultants and two visiting consultants who provide outpatient clinics. The department requires three permanent consultants.

Recruiting cardiology consultants is difficult for both trusts. For Hinchingbrooke, this is due to its size, and for Peterborough, this is because some services are provided by Papworth, our local specialist heart hospital. Trainee posts at Hinchingbrooke have been withdrawn while recruitment of consultants continues. There is also a need for ongoing close working with Papworth Hospital to develop new cardiology services.

Patient experience under a merged trust

Patients will benefit from a combined and strengthened cardiology service across the area, supported by Papworth in preparation for the move to its new hospital on the Cambridge Biomedical Campus in 2018.

For patients who have Hinchingbrooke as their local hospital, the increased team will be able to provide an extended range of cardiology outpatient services and diagnostic tests locally.

There will be sufficient depth of consultant cover for patients across the combined area, which means we will be able to offer a wider range of procedures at Peterborough City Hospital, such as cardiac pacing. We will also be able to provide inpatients with greater access to specialist consultant opinions throughout the week.

Patients requiring the most complex procedures and care will still be referred to the world-class services of Papworth Hospital.

Additional benefits

We will be able to reinstate trainee doctors at Hinchingbrooke, and there will be more support for innovations in heart surgery.

Diagnostic Imaging Services

Current patient experience

There is a concern that Diagnostic Imaging (such as X-rays and MRI scans) will become unsustainable at both sites. There is a lack of staff at Hinchingbrooke Hospital, increasing reliance on costly locum cover and outsourced reporting. There are delays in reporting results which impacts on clinical decision making and for patients this means waiting longer to find out results of scans and X-rays. There is currently an inability to meet the demands of seven-day working.

Patient experience under a merged trust

Under a merged trust, patients at all sites will benefit by being seen by members of one combined radiology team. The team will support all three hospital sites and will use a single reporting system. This will improve treatment times and patient outcomes as the department strengthens its staffing and technology.

Patients will experience shorter waiting times and be given the choice to attend for scans and X-rays at Hinchingbrooke, Peterborough City or Stamford hospitals. Patients will also receive their results faster because consultants will be able to view images at either hospital site, seven days a week. Inpatients will have their scans reported in a more timely fashion, as there will be seven-day reporting of urgent scans. There will also be the opportunity for trainees to work across all sites, this presents attractive career opportunities for new radiology doctors and radiographers and will be important for ensuring sustainable radiology services are provided for the future.

Sustainable services

Respiratory medicine services

Current patient experience

Respiratory medicine at both sites cannot be sustained as they are. There are two respiratory consultants at Hinchingbrooke and both of these posts are shared with Papworth. Continuity of care for respiratory inpatients is a challenge and the range of outpatient services is restricted.

Peterborough has five permanent consultants. The expectation is that diagnostics undertaken at Papworth will increase travelling time for both patients and staff when it moves to Cambridge.

Patient experience under a merged trust

Merging the respiratory teams will enable the development of services locally so that patients who currently need treatment to be carried out elsewhere, can receive their treatment at Hinchingbrooke or Peterborough. This means fewer longer journeys for patients. A merged trust will see respiratory patients benefitting from the expertise of a larger team. This will benefit Hinchingbrooke patients as it will enable a greater range of planned, diagnostic and outpatient services to be provided than currently offered. This will also strengthen support for inpatients.

Specialist clinics will be introduced for Hinchingbrooke patients providing treatment for tuberculosis, chronic obstructive pulmonary disease, lung cancer, asthma and oxygen therapy services.

Walk-in clinics will be established alongside both emergency departments at Hinchingbrooke and Peterborough to reduce urgent care demand. The respiratory physiology service currently based at Hinchingbrooke will be able to develop specialist imaging, interventional support and sleep studies.

Patients requiring the most complex procedures and care will still be referred to the world class services of Papworth Hospital.

Additional benefits

The greater population area will be supported by the development of specialist services provided locally, so that patients will not need to travel further afield to Leicester or Addenbrooke's hospitals.

Patients can expect to see an improvement in out of hours and seven day services.

Sustainable services

Clinical Haematology Service

Current patient experience

Currently the Clinical Haematology service at Hinchingbrooke Hospital is run by two locum consultants who run outpatient clinics alongside permanent nursing staff. The service is configured to deliver less intensive chemotherapy. Patients who require more complex therapy are referred to other hospitals.

The specialist Haematology/Oncology Unit at Peterborough City Hospital has five permanent consultants.

Adult patients from the Huntingdon area diagnosed with acute Leukaemia (a severe, sudden and life threatening condition), have to travel to Peterborough City Hospital to receive not only their inpatient chemotherapy, but also their ongoing outpatient treatment, which is delivered by the specialist Haematology/ Oncology Unit. This means that patients have to travel regularly to Peterborough, sometimes daily, for a period of up to five months for transfusions and doctor appointments.

Patients living in Peterborough have an easier experience because the distance they need to travel is less. In addition, Huntingdon patients aged 19-24 are not permitted to receive any cancer treatments at Hinchingbrooke Hospital. Instead they must travel to Addenbrooke's or Peterborough hospitals. Peterborough patients in that age group have their treatment at Peterborough because the unit is one of three designated hospitals in East Anglia for teenagers and young adults with cancer, supported by staff from the charity CLIC Sargent, which can make this very difficult time in a young person's life a little easier.

Patients at Peterborough benefit from seeing the same member of the five-strong permanent consultant team, this offers them greater continuity of care, which is beneficial to their mental and physical health.

Patient experience under a merged trust

Under a merged trust, the clinical haematology services at both trusts would combine. Adult patients at Hinchingbrooke will see the greatest benefit because they will have access to a wide range of haematology services at their local hospital, delivered by an expanded, permanent team. They will rarely need to travel to Peterborough, unless they require specialist care as an inpatient.

The expanded haematology team will run haematology clinics at all hospital sites, where they will deliver specialist medical and nursing expertise. This will give Hinchingbrooke patients access to a larger team of experts across the whole range of blood diseases at their local hospital. This also means that patients who have to make regular hospital visits will receive high quality care from specialists on long term contracts. This means they will be able to build ongoing relationships with their consultant.

Hinchingbrooke's Haematology patients in the 19-24 age range will be able to access the full range of CLIC Sargent services from the Hinchingbrooke site.

For Hinchingbrooke cancer patients, treatment will be provided in excellent modern facilities at the superb new Macmillan Woodlands Centre at Hinchingbrooke Hospital. Cancer patients from Peterborough and South Lincolnshire will continue to receive excellent treatment in the Oncology Department at Peterborough City Hospital.

Additional benefits

A larger team that offers a wider case mix of patients and different working environments will be a more attractive prospect for doctors in this field, eliminating the recruitment issues that have been faced by Hinchingbrooke.

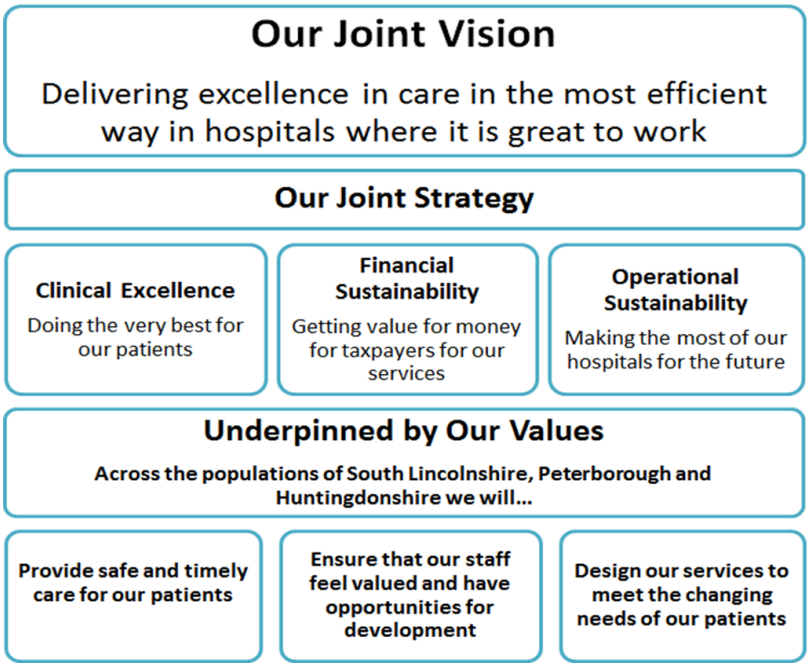
The newly refurbished Macmillan Woodlands Centre is a great venue with a good reputation. This will also help attract new staff.

PART 7:
Our joint vision for a merged Trust

Keeping services on site

Throughout our engagement with members of the public and staff, we have been clear that there are no plans to reduce any services at any hospital site.

The local Sustainability and Transformation Plan published by Cambridgeshire and Peterborough Clinical Commissioning Group in July 2016 gave assurances that 24/7 A&E and maternity services will remain at Hinchingbrooke Hospital.



Enhanced services

Merging the trusts will help improve clinical and financial sustainability and will deliver exceptional opportunities to strengthen many of the patient services currently provided.

Attracting clinical expertise

The merged trust will be significantly more attractive to prospective job applicants and clinical leaders which will lead to improved patient services.

Building relationships with community partners

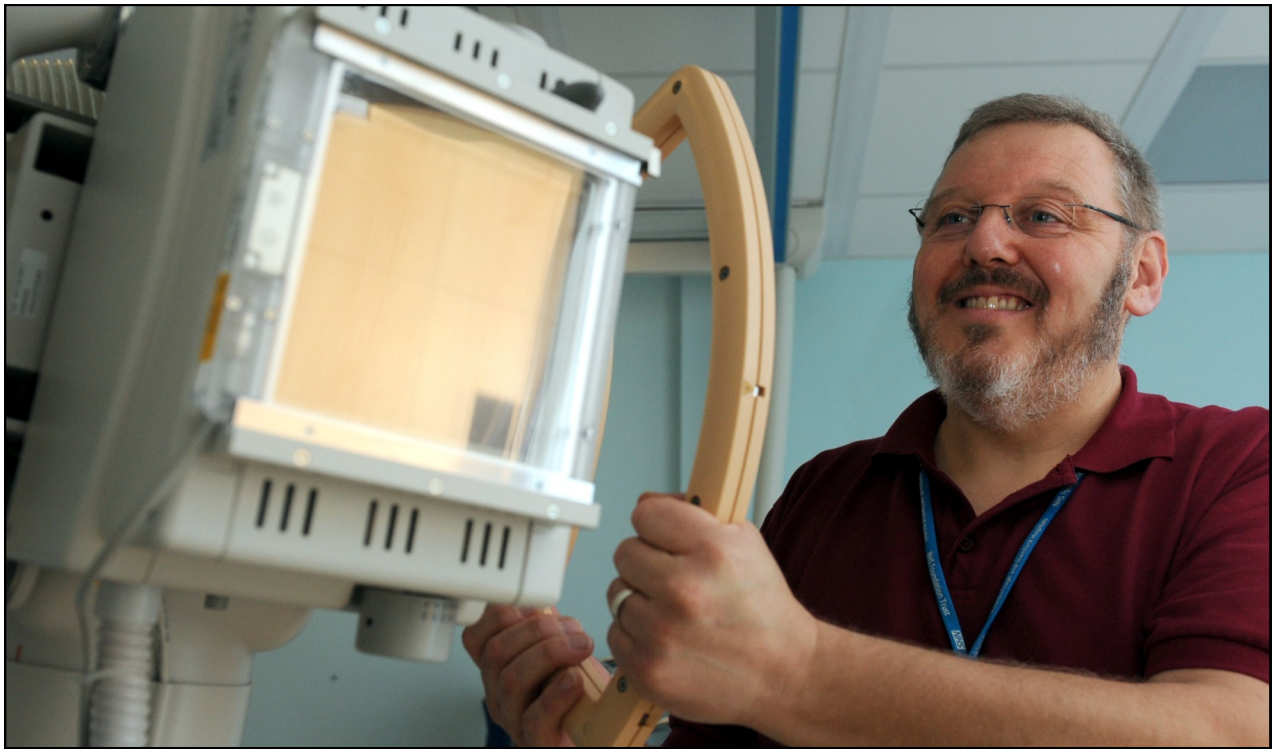
As one trust we will develop durable relationships with our community partners to reduce pressure on the healthcare system.

Five-year vision

A clinical vision for the combined trust has been developed by the Clinical Advisory Group and the boards of both trusts. It sets out an overarching five-year vision to deliver excellent, efficient health care from our hospitals which is great for patients and great for staff.

We will deliver this vision by:

- Consistently delivering high quality services regardless of location or time
- Ensuring equality and ease of access for all services with minimal duplication and delay
- Being an organisation that is always learning and teaching
- Having a diverse workforce that is confident, competent, happy and able to meet our patients' needs
- Delivering patient care in the right setting and through innovations, such as the new Health Campus development in Huntingdon, to keep people out of hospital
- Increasing research to enable us to continually improve our services
- Comparing and benchmarking our quality and safety against others to learn how we can improve our services



We want your views

We want to hear what you think about our plan to merge our trusts.

We also want your feedback on how best we can ensure Hinchingbrooke, Peterborough City and Stamford hospitals are fully represented within the new organisation by members and governors. In particular we want to know what you think to the proposal that the merged Foundation Trust membership constituency areas should be split into three, to represent the areas served by each individual hospital.

We also are looking for a name for the new organisation. As it will care for a wider catchment of patients across Cambridgeshire and in South Lincolnshire, a geographical name may not be suitable.

You can discuss this and give your feedback at our public and staff engagement events taking place in October and early November 2016. You can also email your thoughts to: peh-tr.workingtogether@nhs.net.

PETERBOROUGH AND STAMFORD HOSPITALS NHS FOUNDATION TRUST AND HINCHINGBROOKE HEALTH CARE NHS TRUST

Assurance of the merger transaction full business case and due diligence – summary of findings

22 September 2016

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EXECUTIVE SUMMARY

The boards of Peterborough and Stamford Hospitals NHS Foundation Trust (PSHFT) and Hinchingbrooke Health Care NHS Trust (HHCT) have asked for PA's review of their collaboration full business case (FBC) and due diligence processes. For the due diligence review we were asked to look at the process followed by the trusts through their Transition Programme Board and to comment on the comprehensiveness of the approach. We were not asked to look at the specific outputs of due diligence work.

We have assured the FBC approach against two official standards:

- HM Treasury's Five Case Model – based on the Green Book and associated business case guidance[1]
- Monitor's guidance: *Supporting NHS providers: guidance on transactions for NHS foundation trusts*[2]

We have reviewed the due diligence process and scope against the indicative due diligence recommended in the Monitor guidance.

The collaboration programme team has been working to tight timescales to develop the FBC and complete due diligence. This review is against version 2.0 of the FBC, dated 16 September 2016. We have summarised our priority recommendations below with the detailed findings in section 4 of this document.

Summary of priority recommendations:

- Review the risk register and ensure that risks are fully quantified, with risk owners identified and clear mitigation actions set out that are incorporated into the plan.
- Revisit the options appraisal. The long list needs to be clear why potential solutions are not taken forward, this should include the reason for collaboration and why the two trusts are working with each other and not other parties. The appraisal of the short listed options should be revisited to ensure that it is still valid.
- Review the benefits to ensure that all benefits are captured, the beneficiaries identified, the type of benefit identified (whether it is cash-releasing, financial but non cash-releasing, quantitative (non-financial) or qualitative) and any financial benefits quantified.
- Review the estimated costs and benefits of the programme in the financial case; ensure they include inflation and VAT (if relevant).
- Include a summary plan for the whole programme in the FBC, covering both the transaction and other change activities that demonstrates that the trusts are ready for day one of the merger.
- Explore what contingency arrangements should be made if a transaction cannot be completed by 1 April 2017.

[1] https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

[2] https://www.gov.uk/government/publications/supporting-nhs-providers-considering-transactions-and-mergers

CONTENTS

1 INTRODUCTION

This document provides PA's findings in relation to assurance of the merger-transaction programme FBC for PSHFT and HHCT.

We have assured the FBC against two well established standards:

- HM Treasury's Five Case Model – based on the Green Book and associated business case guidance[3]
- Monitor's guidance: *Supporting NHS providers: guidance on transactions for NHS foundation trusts*[4]

We have also reviewed the due diligence process and scope against the indicative due diligence recommendations in Monitor's guidance.

The collaboration programme team has been working to tight timescales to develop the FBC and complete due diligence. This review is against version 2.0 of the FBC, dated 16 September 2016. We have set out our summary recommendations below with the detailed findings in section 4 of this document.

As the FBC has been in development during the assurance period, the assurance process has been iterative, with PA feeding in suggestions and recommendations during the drafting period.

The remainder of this document sets out:

- A summary of our findings with the outstanding recommendations
- The methodology followed
- The detailed quality assurance assessment against the guidance

[3] https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-governent

[4] https://www.gov.uk/government/publications/supporting-nhs-providers-considering-transactions-and-mergers

2 SUMMARY OF FINDINGS

We have carried out the assurance process in two phases, giving the project team the opportunity to incorporate comments before the final assurance. However, timescales have been particularly tight and there are some areas of the document that have not been revised between versions.

There is nothing that currently suggests that the outstanding recommendations will affect the decision being made.

We have summarised our outstanding recommendations below, with references to the specific QA tests which are presented in full detail in section 4.

Our recommendations for the FBC are summarised in two groups:

- 'Must do' recommendations
- 'Should do' recommendations

2.1 FBC 'must do' recommendations

The following are material aspects that the trusts should prioritise in order to respond to the QA findings referenced before signing off the final version of the FBC.

Ref	Recommendation	QA reference(s)[5]
R-01	**Review the risk register** to ensure that risks are fully quantified, with risk owners identified and clear mitigation actions set out that are incorporated into the plan. An estimate of the financial impact of the risks should be included in the forecast for the transaction. Explain risk rating (eg is it severity × likelihood; and is the rating pre- or post-mitigation?) The current sensitivity analysis does some of this, but it covers elements that are not specific to the transaction/programme and it is not clear what risk has been allowed for in the cost forecasts.	A-08, A-16, A-21, A-22, A-23, A-37, A-45, B-05, B-20, B-21
R-02	**Revisit the options appraisal**. The long list needs to be clear why potential solutions are not taken forwards, this should include the reason for collaboration and why the two trusts are working with each other and not other parties. The appraisal of the short listed options should be revisited to ensure that it is still valid. The output should also demonstrate the costs, benefits, risks and net present value (NPV) of all short listed options. The selection of the preferred option should be tested through sensitivity analysis, and the impact on different groups (distributional analysis) assessed.	A-12, A-13, A-15, A-17, A-20, A-23, A-24, B-13, B-15, B-16, B-17
R-03	**Review the benefits** to ensure that all benefits are captured, the beneficiaries identified, the type of benefit identified (whether it is cash-releasing, financial but non cash-releasing, quantitative (non-financial) or qualitative) and any financial benefits quantified as described in the benefits table and identify those benefits that accrue to parties other than the merged trust, eg the clinical benefits that accrue to patients.	A-07, A-19, A-44, B-22

5 References "A-n" refer to QA tests against the HM Treasury Five Case Model; "B-n" against the Monitor guidance

Ref	Recommendation	QA reference(s)[5]
	We recommend developing a benefits register to ensure this process is thorough and there should be a benefits realisation strategy and plan for realisation of the benefits.	
R-04	**Review the estimated costs and benefits** of the programme in the financial case; ensure they include inflation and VAT (if relevant). (It is not clear whether inflation and/or VAT have been factored in.) Show clearly how the estimated costs and benefits feed into the impact on the combined trust financial position (tables 52 and 54). Explain whether there is any impact on assets and liabilities through the merger.	A-32, A-33, A-36
R-05	Include a **summary plan** for the whole programme in the FBC, covering both the transaction and other change activities that demonstrate that the trusts are ready for day one of the merger. It should include monitoring arrangements for implementation and post implementation evaluation arrangements. The basis of estimates should be set out, including the basis of timing estimates for the transaction milestones and how input from managers has fed in to the Post Transaction Integration and Implementation Plan (PTIIP).	A-41, A-46, A-47, B-01, B-08, B-14, B-24
R-06	Explore what **contingency arrangements** should be made if a transaction cannot be completed by 1 April 2017. Review whether contingency arrangements are required for loss of personnel or any other risks (cf A-48)	A-48, B-09

2.2 FBC 'should do' recommendations

These recommendations suggest improvements in response to the QA findings referenced that would lead to a stronger FBC, but may not be material to the FBC decision.

Ref	Recommendation	QA reference(s)
R-07	Set out that clear programme governance arrangements are in place, including: • What programme management approach is being used (eg MSP) • The programme governance structure and processes • The use of special advisors	A-39, A-40, A-42, B-18, B-19, B-23
R-08	Set out how clinical sustainability will be measured.	A-03
R-09	Provide a summary of the potential areas of scope	A-06
R-10	Set out the dependencies and constraints for the programme	A-09, A-22
R-11	There is statement to the effect that the CMA doesn't intend looking further at the potential merger. A positive impact on sustainability is alluded to, but does not seem to have been fully assessed. Include a more definitive statement and/or quote legal advice on this. Describe regulatory implications (CQC/NHSI/NHSE steps/requirements once intention to merge agreed)	A-18
R-12	Provide more information on the **technical aspects of the transaction**: • Review whether there are further contractual processes and terms that could be detailed in the business case • Describe what the impact will be on assets and liabilities; identify what will transfer and whether the detailed analysis has been completed, or when it will be	A-25, A-29, A-31, B-12
R-13	Explore the development of a commercial/procurement strategy for the new merged trust	A-25
R-14	Set out a clear plan for operational management	A-43

Ref	Recommendation	QA reference(s)
R-15	Provide a log of assumptions that sit behind the cost and benefit estimates. Ensure this distinguishes between assumptions for the transaction/programme, and those that also affect baseline forecasts.	B-03
R-16	Include a summary of the findings of the culture review in the business case	B-06
R-17	Ensure that the financial case is clear about whether financing is required to fund the programme and explains how the outstanding deficit will be managed. Ensure that the financial case demonstrates how funding for the transaction is going to be secured.	B-11, B-29, A-35

2.3 Key messages on the due diligence process

The process followed by the trusts:

- Follows good risk management principles
- Has been fully comprehensive in ensuring that each due diligence item is being owned and obtained/developed by a workstream lead
- Has sought to reduce risk to the trusts by appointing expert advisors to undertake specialist reviews

In addition, the involvement and contribution of NHS Improvement through the Transition Programme Board throughout the development of the OBC, FBC and associated assurance processes will have ensured likely areas of difficulty were identified early on and mitigated.

Finally, the systematic review of clinical services (with the development of integration plans and the identification of the six priority clinical services), the systematic review of internal functions by executive directors of both trusts will have enabled informal as well as formal understanding and due diligence to take place. This will have further enhanced the understanding of risks and likelihood of omissions of due diligence.

2.4 Key messages on the due diligence scope

Our detailed due diligence analysis is set out in section 4.3.

Key messages:

- The trusts' due diligence process comprehensively covers all of the Monitor line items
- If all external and internal due diligence work is delivered on time and with the specified content, there should be no items outstanding that are likely to be material to the FBC decision
- However, 57 items (19%) identified as to be delivered by external work are not explicitly or not fully covered by the specification for that work and will need to be verified as present in the final external due diligence deliverables
- In addition, there are 73 further items (24%) of external and internal work that will need to be completed before the merger transaction can take place

Next steps:

In respect of the line items assessed in section 4.3.2, the trusts should take the following actions:

Ref	Recommendation
R-18	**Green:** these are items fully within the scope of external due diligence work due to deliver on time; or internal due diligence work that has already been delivered • Continue to monitor progress on delivery of line items yet to complete
R-19	**Yellow: for external due diligence reviews**, these are items that need to be checked are included in the final external due diligence deliverables • Check with external due diligence providers that items are in scope and will be delivered on time

Ref	Recommendation
R-20	**Yellow: for internal due diligence work**, this is work underway that has not yet completed but is unlikely to be material to the FBC decision • Ascertain whether trust boards will want to see these items before the FBC decision • Ensure that work is completed and line items obtained/produced, before the transaction at the latest
R-21	**Amber:** work not yet started and unlikely to be material to the FBC decision • Ensure that work is completed and line items obtained/produced before the transaction at the latest

3 METHODOLOGY

In the full version of this document provided to the trusts, this section describes PA's quality assurance methodology

4 QUALITY ASSURANCE

In the full version of this document provided to the trusts, this section provides the detailed review against the two standards following PA's methodology

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CONSULTING
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HHCT-PSHFT Merger Programme

Update to standalone LTFM assessment in relation to proposed transaction

—

14 September 2016

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Private and confidential

14 September 2016

The Directors
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The Directors
Hinchingbrooke Health Care NHS Trust
Hinchingbrooke Hospital
Hinchingbrooke Park
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Cambridgeshire
PE29 6NT

Attention: Mark Avery, Deputy Director – System Transformation

Ladies and Gentlemen

Hinchingbrooke Health Care NHS Trust ('HHCT') and Peterborough and Stamford Hospitals Foundation Trust ('PSHFT') proposed merger – Update to the LTFM assessment

In accordance with the terms of reference set out in our Contract Letter dated 11 July 2016, as amended by our Variation Letter dated 19 August 2016 (together 'our Contract Letter'), we enclose our report on the Update to the LTFM assessment in relation to the proposed merger of HHCT and PSHFT.

The scope of work set out in our Contract Letter is attached as Appendix 1 to the report. This details the agreed scope of our enquiries. The important notice overleaf should be read in conjunction with this letter.

Our report is for the benefit and information only of those Parties who have accepted the terms and conditions of our Contract Letter and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent, except as specifically permitted in our Contract Letter. To the fullest extent permitted by law, we will not accept responsibility or liability to any other party (including those Parties' legal and other professional advisers) in respect of our work or the report.

Yours faithfully

KPMG LLP

KPMG LLP

Important notice

- This document has been prepared in accordance with our contract letter dated 11 July 2016, as amended by our Variation Letter dated 19 August 2016. It is subject to the terms and conditions of that contract.
- Our fieldwork for Part 1 (the initial assessment of the standalone Long Term Financial Models ('LTFM') commenced on 18 July 2016 and was completed on 21 July 2016. A draft report outlining our initial findings and recommendations from Part 1 was issued dated 22 July 2016. Our fieldwork for Part 2 (update to the assessment of the standalone LTFMs) commenced on 22 August and was completed on 30 August 2016. We have not undertaken to update our report for events or circumstances arising after that date.
- Our report is for the benefit and information of the addressees only and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent. The scope of work for this report, included in Appendix 1, has been agreed by the addressees and to the fullest extent permitted by law we will not accept responsibility or liability to any other party (including the addressees' legal and other professional advisers) in respect of our work or the report.
- In preparing our report, our primary source of information has been information supplied by Hinchingbrooke Health Care NHS Trust ('HHCT') and Peterborough and Stamford Hospitals Foundation Trust ('PSHT'). We do not accept responsibility for such information and have not in this stage of our work sought to establish its reliability through reference to other evidence.
- The scope and assessment procedures carried out are limited and substantially less than those which would have been performed in a due diligence exercise. You should note that our findings do not constitute recommendations to you as to whether or not you should proceed with the potential merger of HHCT and PSHT. Instead, they are intended to highlight key issues and further required actions to be considered as HHCT and PSHT further advance their LTFMs and proceed towards drafting a Full Business Case for the merger.
- Our report makes reference to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the underlying data.
- The analysis of underlying surplus/deficit is for indicative purposes only. We have sought to illustrate the effect on reported surplus/deficit of adjusting for those items identified by management in the course of our work that may be considered to be 'non-recurring' or 'exceptional'. However, the selection and quantification of such adjustments is necessarily judgmental. Because there is no authoritative literature or common standard with respect to the calculation of 'underlying' surplus/deficit, there is no basis to state whether all appropriate and comparable adjustments have been made. In addition, while the adjustments may indeed relate to items which are 'non-recurring' or 'exceptional' or otherwise unrepresentative of the trend, it is possible that the surplus/deficit for future periods may be affected by such items, which may be different from the historical items.
- The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.
- We must emphasise that the realisation of the prospective financial information set out within our report is dependent on the continuing validity of the assumptions on which it is based. We accept no responsibility for the realisation of the prospective financial information. Actual results are likely to be different from those shown in the prospective financial information because events and circumstances frequently do not occur as expected, and the differences may be material.
- This report has been reviewed by the management of Hinchingbrooke Health Care NHS Trust or Peterborough and Stamford Hospitals Foundation Trust, who have provided comments on the factual accuracy of its contents.

Glossary of terms

A&E	Accident and Emergency
APR	Annual Plan Return
BPPC	Better Payments Practice Code
C&P CCG	Cambridge and Peterborough CCG
CCG	Clinical Commissioning Group
CFO	Chief Financial Officer
CIP	Cost Improvement Programme
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
FYxx	Financial Year xx
HHCT	Hinchingbrooke Health Care NHS Trust
ITFF	Independent Trust Financing Facility
LIFT	Local Improvement Finance Trust
LTFM	Long Term Financial Model
MFF	Market Forces Factor
MRI	Magnetic Resonance Imaging
NHSI	NHS Improvement
OBC	Outline Business Case
PAS	Patient Administration System
PDC	Public Dividend Capital
PFI	Private Finance Initiative
PLICS	Patient Level Information Costing System
PPE	Property, Plant and Equipment
PSHFT	Peterborough and Stamford Hospitals NHS Foundation Trusts
QIPP	Quality, Innovation, Productivity and Prevention
SEP	Strategic Estates Partnership
SLR	Service Line Reporting
SOCI	Statement of Comprehensive Income
SOFP	Statement of Financial Position
STF	Sustainability Transformation Funding
STP	Sustainability and Transformation Plan
TPB	Transition Programme Board

Contents

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KPMG

Executive Summary

Executive summary - Headlines

Progress since the July assessment	— Both Trusts have made significant progress in the development of the standalone LTFMs, including addressing the majority of the outstanding areas and technical aspects of the LTFM from our Part 1 assessment. This includes working in collaboration with respect to the further alignment of key assumptions, including the treatment of commissioner QIPP and STF funding. — However, there are a number of areas that we recommend still require addressing as the Trusts look to finalise the standalone LTFMs that will feed the transaction LTFM and the FBC, set out in the detail of this report. — We also believe that there are two key areas that the TPB need to consider and agree an approach on with regards to treatment in the transactional LTFM and the FBC – the level of SEP and standalone CIP (see below for further detail).
SEP	— We continue to recommend that the TPB carefully monitors the status of progress of development of the SEP FBC and contracting as the FBC for the merger is advanced, so that the deliverability of projected SEP EBITDA contribution is assessed for robustness and factored into sensitivity analysis and a downside case as appropriate.
Standalone CIP	— PSHT has assumed delivery of recurrent CIP at 4.2% in FY18 and then 2.4%/2.5% per annum across the forecast period, which reflects the effect for classification of CIP now separately from the baseline. — HHCT has assumed an increase in the delivery of recurrent CIPs to between 3.0% and 4.6% per annum between FY18 to FY22, which reflects the inclusion of additional CIPs in FY21 and FY22 where previously CIP had been assumed to be delivered by the SEP alone – this equates to additional cumulative CIP of £13.1 million (including for the inclusion of income CIP now classified separately). HHCT has also included the delivery of £3.2 million of income CIP in FY17/18 and FY18/19 related to planned repatriation of theatre activity and recoding activities, which has not been agreed with commissioners. — The increase in the assumed level of recurrent cost CIP (and the income CIP) planned to be delivered appears challenging, particularly for HHCT at between 3.0% and 4.6% per annum given the Trust's current cost base, the track record of delivering recurrent CIP and the unconfirmed nature of the income CIP planned in FY17/18 and FY18/19. — Furthermore, we understand that the level of HHCT CIP has been updated since the date of the August LTFM to reclassify the marginal rate generated by assumed additional demographic income CIP in the latest HHCT standalone LTFM – previously just the marginal rate was shown as income CIP within the LTFM, while the latest version of the LTFM reclassifies the full amount of additional demographic income as an income CIP. This results in an increase in the level of overall HHCT CIP, taking the percentage range year on year to between 4.6% and 4.9%.

Executive summary - Headlines (cont.)

Sensitivity analysis

— We understand that the Trusts and the TPB have agreed that sensitivity analysis will be considered and undertaken as part of preparation of the transaction LTFM. However, the TPB should consider the indicative impact if i) all of the income from SEP were to be sensitised in a worse case downside scenario given it is currently uncontracted and ii) if HHCT CIPs (excluding SEP) were adjusted to the same level as PSHT at 4.2% in FY18 and then 2.4%/2.5% per annum thereafter.

— The indicative sensitivities below have been based upon the updated income CIP figures reflected in the updated HHCT LTFM:

Sensitivity					
£000's	FY18 F'cast	FY19 F'cast	FY20 F'cast	FY21 F'cast	FY22 F'cast
HHCT (deficit)/surplus	(10.1)	(5.8)	(1.7)	.8	1.3
PSHFT (deficit)/surplus	(30.1)	(28.7)	(29.8)	(30.3)	(30.7)
Combined total	(40.2)	(34.5)	(31.5)	(29.5)	(29.4)
Sensitivity					
Removal of SEP	.0	(.4)	(2.2)	(4.5)	(4.5)
HHCT CP at PSHFT%	(.7)	(3.2)	(4.3)	(4.6)	(7.2)
Sensitised total	**(40.9)**	**(38.1)**	**(38.0)**	**(38.6)**	**(41.1)**

The level of inclusion of SEP, recurrent CIPs and income CIPs in the LTFM base case is subject to approval by the Boards.

Sensitivities will also need to be agreed by the TPB and the Boards and are shown here for indicative purposes only.

— Adjusting for these items results in an increase in the combined Trust's deficit year-on-year, equating to a cumulative impact of £32 million.

— Whilst this is simplistic sensitivity analysis and indicative only, the TPB should agree on the level of SEP, standalone CIP and income CIP (amongst other areas) to be included in the base case of the FBC and also in any downside sensitivity analysis.

Executive Summary - Introduction

Introduction

Background

- The Boards of Peterborough and Stamford Hospitals NHS Foundation Trusts ('PSHFT') and Hinchingbrooke Health Care NHS Trust ('HHCT') approved the Outline Business Case ('OBC') recommending the merger of the two organisations in May 2016.
- The current timetable is geared towards the merged organisation being operational from 1 April 2017. As a result, the two organisations are running an accelerated transaction process, committed to the following timetable:
  - September 2016: Completion of final business case ('FBC'), subject to public engagement; and
  - September 2016: Submission of FBC to NHS Improvement ('NHSI')
  - 1 April 2017: Transaction completion
- Both organisations are working closely to complete as much of the pre-transaction requirements as possible, utilising an internal PHFT/HHCT programme team.
- A Transition Programme Board ('TPB') is overseeing the work of the programme team. Membership includes members of the programme team, both boards, local commissioners (Cambridge and Peterborough CCG), and NHSI.

Context of this report

- HHCT, PSHFT and the TPB are seeking independent assessment of the certain key elements of the merger programme are key points throughout the process, to provide a degree of comfort to both Trust Boards.
- KPMG has therefore been engaged to independently assess the standalone Long Term Financial Model ('LTFM') that each of the organisations are in the process of developing, as well as the merger/transaction LTFM that will support the FBC for the merger.
- KPMG undertook an initial Part 1 assessment of the standalone LTFMs in July 2016, with a draft report outlining our initial findings and recommendations issued dated 22 July 2016. We have subsequently undertaken an updated assessment of the standalone LTFMs in late August 2016, the main areas of focus for the updated assessment covered in this report are:
  - Assess and comment on progress against the KPMG recommendations made in Part 1;
  - Assess and comment on the application of revised assumptions to the HHCT and PSHFT standalone LTFMs; and
  - Summarise and comment on a bridge of the HHCT financials and the PSHFT financials in the latest LTFMs to the respective LTFMs in Part 1.

Executive Summary - Financial Overview (HHCT)

SOCI overview - HHCT								
£m	FY16 Actual	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	FY16-21
Income								
Tariff income	92.8	95.4	100.1	102.9	105.0	108.4	111.1	3.1%
Other block or Cost and Volume contract	2.8	3.8	3.8	3.8	3.8	3.8	3.8	0.1
Total NHS clinical Income	95.6	99.2	103.9	106.7	108.8	112.3	114.9	3.1%
Private patient revenue	0.9	1.5	1.5	1.8	2.0	2.0	2.0	0.2
Other non protected revenue	0.8	0.7	0.7	0.7	0.7	0.7	0.7	-2.6%
Other Operating revenue	15.0	16.4	12.2	12.8	15.0	17.7	18.0	4.3%
Total Income	**112.3**	**117.8**	**118.3**	**122.0**	**126.4**	**132.7**	**135.6**	**3.2%**
Expenses								
Employee benefit expenses	-77.0	-77.0	-77.9	-77.9	-78.8	-81.3	-82.8	0.0
Drug expenses	-10.6	-10.7	-11.2	-11.3	-11.6	-12.1	-12.5	0.0
Clinical supplies and services expenses	-9.7	-10.6	-10.1	-9.4	-8.7	-8.8	-8.9	-0.0
Other expenses	-23.2	-21.6	-20.9	-21.1	-21.5	-21.8	-22.0	-0.0
Total Expenses	**-118.9**	**-119.6**	**-120.1**	**-119.7**	**-120.5**	**-124.0**	**-126.2**	**1.0%**
EBITDA	-6.6	-1.8	-1.8	2.3	5.9	8.7	9.4	
Non-operating items								
Gain/(loss) on asset disposals	-	-	-	-	-	-	-	
Net interest expense	-2.3	-2.4	-2.4	-2.6	-2.7	-2.7	-2.7	3.2%
Depreciation and Amortisation	-5.1	-4.1	-4.7	-4.8	-4.6	-4.9	-5.1	0.6%
PDC Dividend	-2.0	-1.5	-1.1	-0.7	-0.4	-0.3	-0.3	-27.9%
Impairment of fixed assets	-2.7	-	-	-	-	-	-	
Surplus/(Deficit)	**-18.8**	**-9.9**	**-10.1**	**-5.8**	**-1.7**	**0.8**	**1.3**	
KPIs								
EBITDA margin	-5.9%	-1.6%	-1.6%	1.9%	4.7%	6.6%	7.0%	
Net margin	*-19.6%*	*-10.0%*	*-9.7%*	*-5.4%*	*-1.6%*	*0.7%*	*1.1%*	

Source: Management Information: HHCT LTFM

Increase in elective activity in 17/18 and 18/19 driven by £3.2 million of income CIP schemes related to repatriation of theatre activity and recoding, which need to be formally agreed with commissioners. An additional £1 million of surgery income is assumed through growing profitable areas in 18/19, of which plans are under development.

Subject to agreement by the Boards on the level of inclusion of cost CIP and income CIP in the base case, as well as for the level of sensitivity analysis of CIPs in a downside.

Other operating revenue is projected to decrease for the removal of SFT funding in FY21 and FY22

Expenditure growth has increased compared with the July LTFM following a change in the assumption of marginal cost following an analysis of PLICs data. This has been offset by additional CIPs, including a reduction in corporate costs in FY17 and FY18.

A significant reduction in PDC dividend has been forecast per annum, based upon a recalculation of the PDC dividend which takes into account the effect of additional loans in the calculation.

We recommend that this is reassessed as part of preparation of the transaction LTFM and assumptions around funding for the merged Trust.

HHCT is projecting to return to a 1% surplus position by FY22, predominantly driven by the impact of the SEP and the assumed delivery of recurrent CIP of between 3.0% and 4.6% per annum.

EBITDA margin increases steadily throughout the forecast period as a result of variable costs increasing at a lower rate than income growth, as well as for the impact of additional CIPs and the SEP

Executive Summary - Financial Overview (PSHFT)

SOCI overview - PSHFT								
£m	FY16 Actual	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	FY16-FY21 CAGR
Income								
Tariff income	215.7	239.4	245.2	251.0	257.0	265.2	273.6	
Other clinical income from mandatory services	13.5	1.6	1.7	1.8	1.9	2	2.2	-31.50%
Total NHS clinical Income	229.3	241	246.8	252.7	258.9	267.2	275.8	3.10%
Private patient revenue	0.5	0.7	0.7	0.7	0.7	0.8	0.8	6.90%
Other non protected revenue	0.9	-	-	-	-	-	-	-100.00%
Other Operating revenue	30.1	42.8	29.7	30	30.2	30.6	30.9	0.30%
Total Income	**260.8**	**284.4**	**277.2**	**283.4**	**289.9**	**298.5**	**307.5**	**2.70%**
Expenses								
Employee benefit expenses	-171	-174.6	-171.3	-172.7	-174.1	-177.7	-181.3	0.80%
Drug expenses	-28.1	-18	-18.7	-19.4	-20.1	-20.8	-21.6	-5.80%
Clinical supplies and services expenses	-25.9	-25.1	-25.3	-25.8	-26.2	-26.6	-27.1	0.60%
Other expenses	-45.5	-58.5	-61.5	-63.9	-67.2	-70.7	-74.2	9.20%
Total Expenses	**-270.5**	**-276.2**	**-276.9**	**-281.7**	**-287.6**	**-295.9**	**-304.2**	**1.80%**
EBITDA	**-9.7**	**8.2**	**0.3**	**1.7**	**2.3**	**2.7**	**3.3**	
Non-operating items								
Gain/(loss) on asset disposals	-0.07	-	-	-	-	-	-	-100.00%
Net interest expense	-13.8	-14.7	-15.4	-16.1	-17.4	-18.3	-19.2	5.80%
Depreciation and Amortisation	-13.5	-13.7	-14.1	-14.3	-14.7	-14.7	-14.8	1.80%
PDC Dividend	-	-	-0.9	-	-	-	-	
Impairment of fixed assets	-0.1	-	-	-	-	-	-	-100.00%
Net deficit	**-37.1**	**-20.2**	**-30.1**	**-28.7**	**-29.8**	**-30.3**	**-30.7**	**-3.90%**
KPIs								
EBITDA margin	-3.70%	2.90%	0.10%	0.60%	0.80%	0.90%	1.10%	
Net margin	-14.20%	-7.10%	-10.80%	-10.10%	-10.30%	-10.20%	-10.00%	-6.50%

Source: Management Information: PSHFT LTFM

Activity increases are assumed at between 3.5% and 4.1% across non-elective, elective admissions and outpatient and A&E attendances. PSHFT has assumed that the CCG's QIPP schemes will now deliver in the updated LTFM.

£13m one-off STF income in FY17 which flows through to EBITDA in this year.

PSHFT has assumed significant CIPs in FY18, which more than offsets the staff requirement needed to deliver the growth in activity.

The level of CIP are 4.2% in FY18 and then 2.4/2.5% per annum thereafter across the forecast period.

Interest expense continues to rise steadily due to additional deficit loan funding required each year throughout the projected period.

PSHFT continues to forecast a deficit of approximately £(30) million across the forecast period

The significant increases in EBITDA margin in FY17 are driven by a high CIP target along with STF funding.

Executive Summary - Key findings

The following pages summarise the key findings contained within this report as a result of our work to date, including for our Part 2 updated assessment of the standalone LTFMs. For each of the areas identified we have provided our comments and recommendations, as well as our view of the relative importance of each area for consideration by the TPB, HHCT and PSHFT in assessing the next steps required going forwards in terms of further advancement of the LTFMs and with respect to drafting the FBC for the merger.

The relative importance allocated to each area is based on the perceived importance for the Transaction Programme Board to address in advancing the merger programme, as well as on our experience of how NHS Improvement carry out its transaction reviews and were they will look to probe and challenge the LTFMs and FBC.

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
LTFM set up and modell -ing	▪ The standalone LTFMs we assessed as part of our initial review in Part 1 were both still a work in progress, with a large amount of areas and work to be addressed. ▪ Both standalone LTFMs had been developed using a number of working papers, which are directly linked into the respective LTFMs.	▪ As part of our work we have reconciled the input data to both the HHCT and PSHFT annual plans and historical reported positions, with only minor discrepancies identified – see pages 33 and 49. ▪ In our experience, the current status of development of the LTFMs is not unusual at this stage in the process with approximately two months to go before a draft FBC is provided to the TPB. ▪ However, a large amount of ongoing work and development of the LTFMs will be required and the requirement for pace in addressing the LTFM will increase as the transaction progresses. We recommend that HHCT and PSHFT should assess the capacity of the current dedicated finance staff against the wider requirements of the merger programme and consider whether they require dedicated specialist support in developing the LTFMs going forwards. ▪ We recommend that the LTFMs are updated for the latest available current trading and forecast outturn for each Trust, with the LTFM updated on a regular ongoing basis as results come available and the impact on the forecast financial position assessed for any deviation in trading performance.	H/M	▪ Both Trusts have made significant progress in the development of the standalone LTFMs, including addressing the majority of the outstanding areas and technical aspects of the LTFM from our Part 1 assessment. ▪ However, there are a number of areas that we recommend still require addressing as the Trusts look to finalise the standalone LTFMs that will feed the transaction LTFM and the FBC. These are set out in the detail of this report, but the key areas are: – Workforce modelling – HHCT has a simple workforce model. However, we continue to recommend that more detailed workforce modelling is carried out by both Trusts to better understand the future workforce requirements, which is integrated with forecast changes in activity and planned CIPs. – Supporting workbooks – significant effort has been made by both Trusts to remove and simplify external links and consolidate analysis. However, there are still many links that are linked to external Excel sheets. We recommend that this process continues towards NHSI submission, including removal of the external links and tidy up within the LTFM.	H/M

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
LTFM set up and modell-ing (cont.)		▪ We recommend that links to external working papers are removed from the LTFMs prior to submitting to an external assessment by NHSI. ▪ We also recommend that working papers are consolidated into a smaller number of Excel files to provide stronger version control as the LTFMs are further developed.	**H/M**	– HHCT working capital - a large decrease in receivable days and creditor days have been assumed in FY20, assumed in order to manage the HHCT cash position. The impact is a net cash inflow of £4.1 million. We recommend that further work is required to analyse and address this for the transaction LTFM.	**H/M**
Alignment of assumptions	▪ The majority of assumptions have been aligned through the collaborative working of the teams at HHCT and PSHFT.	▪ In the course of our assessment we have identified some key areas of difference in input assumptions in the standalone LTFMs. The key differences relate to: 1. The inclusion of QIPP in the HHCT LTFM, but not the PSHFT LTFM; 2. The approach to calculation of CIPs (as described on page 17); and 3. The inclusion of STF funding from FY21 in the HHCT LTFM, but not the PSHFT LTFM. ▪ In our experience: – the TPB will need to clearly evidence to NHSI why commissioner QIPP has not be included in its projections; and – NHSI will typically remove external funding in its downside scenario when assessing the financial sustainability of a merged Trust. ▪ We recommend that the TPB seek to agree a common approach to assumptions around areas such as application of QIPP and S&T funding, or clearly document in detail its rationale for its assumptions.	**M**	▪ The Trusts have continued to work in collaboration with respect to the further alignment of key assumptions, including: – The alignment of treatment of QIPP across both standalone LTFMs; and – The alignment of treatment of STF funding, with the removal of STF funding from the HHCT LTFM in FY21 and FY22 ▪ However, we have identified that some inflation assumptions (with respect to non-protected, non-mandatory clinical income, Education and Training and Capital expenditure) are slightly misaligned and should be addressed for the transaction LTFM. ▪ Moreover, the approach the calculation and treatment of standalone CIPs across the organisations varies, with significant differences in the % of recurrent CIP assumed to be delivered – see page 17 for further detail.	**H/M**

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
Bridging of LTFMs		▪ N/a	N/a	▪ There have been a number of key changes which have been made between the July and August LTFMs. A number of these have been done based on our prior recommendations. ▪ A full bridge of the SOCI between the July and August LTFMs has been produced on page 35 for HHCT and on page 51 for PSHT. ▪ However, the key changes are set out below. **HHCT** ▪ **Income** – reclassification of STF income between non-clinical and clinical income, with STF funding for FY20 and FY21 removed. ▪ **Expenditure** – reduction of expenditure reflecting changes in marginal cost assumptions overset by additional CIP. ▪ **Non-Operating Expenses** – Reduction in PDC Dividend expense following a recalculation for the impact of interest bearing borrowings. **PSHFT** ▪ **Income** – The inclusion of QIPP following an alignment of assumptions with HHCT has led to a decrease in income between FY18-22, together with a reduction in income for a change in Education and Training inflation. These are offset marginally by the change in the treatment of Pass Through Drugs income. ▪ **Expenditure** – Expenditure has decreased in line with marginal cost for the drop in clinical income for the inclusion of QIPP and once the impact of Pass Through Drugs is removed.	H/M

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
Strategic Estates Partnership ('SEP')	▪ HHCT is currently in the process of drafting a FBC for its SEP, as well proceeding with the initial procurement and contracting arrangements. As a result, the current income and expenditure forecasts included in the LTFM are based on high level assumptions. ▪ The projected EBITDA resulting from SEP significantly contributes to HHCT's projected surplus position from 2020/21 onwards.	▪ The financial impact of SEP is largely from 2019/20 onwards, which results in a significant projected benefit to the HHCT standalone financial position. ▪ Given that this is a relatively non-standard LTFM input, this is undoubtedly an area that NHSI will probe in detail due to the materiality on the financial sustainability of HHCT. ▪ HHCT management have informed us that they have assumed the lower end of the income projections proposed by the SEP partner within their base case LTFM. This results in a recurrent contribution of £4.5 million from 2020/21 onwards. ▪ At this stage, whilst the income projections suggested by the SEP partner are based on the experience of that partner, the schemes that sit behind them have not yet have been fully developed or tested. ▪ NHSI will seek further assurance around the deliverability of the programme than is currently available and, without that, it would likely seek to sensitise the delivery of the SEP in its downside scenario when assessing the financial sustainability of the merged Trust. ▪ We recommend that the TPB carefully monitors the status of progress of development of the SEP FBC and contracting over the coming months as the FBC for the merger is advanced, so that the deliverability of projected SEP EBITDA contribution is assessed for robustness and factored into sensitivity analysis and a downside case as appropriate.	**H**	▪ HHCT has assumed a consistent amount of income and expenditure from the SEP in the updated version of the LTFM. ▪ We understand that the SEP continues to be non-contracted and the detailed schemes are still under development. ▪ We continue to recommend that the TPB carefully monitors the status of progress of development of the SEP FBC and contracting as the FBC for the merger is advanced, so that the deliverability of projected SEP EBITDA contribution is assessed for robustness and factored into sensitivity analysis and a downside case as appropriate. ▪ We continue to believe that the more evidence that can be provided for the levels of EBITDA included (for example are there areas where projected Trust income is able to be 'contractualised' into the final agreement with the SEP partner?) the more easily the figures will be able to satisfy NHSI challenge. ▪ For the transaction LTFM, we continue to recommend that the TPB should consider and agree levels for further stress testing of the scenarios associated with SEP within the downside, base and upside cases of the transaction LTFM.	**H**

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
Strategic Estates Partner-ship ('SEP') (cont.)		▪ The more evidence that can be provided for the levels of EBITDA included (for example are there areas where projected Trust income is able to be 'contractualised' into the final agreement with the SEP partner?) the more easily the figures will be able to satisfy NHSI challenge. ▪ For the transaction LTFM, TPB should consider and agree levels for further stress testing of the scenarios associated with SEP within the downside, base and upside cases of the transaction LTFM.	H		H
Clinical Synergies	▪ Through our fieldwork and discussions with Management to date, we understand that it is the intention of the Trusts to include savings from clinical collaboration (clinical synergies) as a result of the merger within the standalone LTFMs, but classified as CIPs.	▪ In our experience, key stakeholders and particularly NHSI would expect to see the FBC clearly articulate all of the benefits that will result from the merger, with these clearly set out (both clinical and other (e.g. back office) synergies) to demonstrate the case for change and to support the merger's economic and financial cases. ▪ The inclusion of clinical collaboration savings as CIP within the standalone LTFMs would not demonstrate this clearly and articulate the case for change in as compelling a way as if they are described as clinical synergies and included in the transaction LTFM. ▪ We therefore recommend that the TPB consider the pro and cons of describing and modelling savings from clinical collaboration as both standalone CIP and as specific merger synergies.	H/M	▪ We will re-assess and update our findings in this area upon our Part 3 assessment of the transaction LTFM.	N/a

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
Stand alone CIPs	▪ Different approaches to the development of CIPs for the LTFM have been applied by both organisations. ▪ PSHFT has applied a 2% efficiency assumption from FY18 onwards, whereas HHCT has developed themes for FY18 to FY20. ▪ HHCT and PSHFT are currently in the process of developing detailed efficiency plans for the first two years post-merger.	▪ In our experience, at the point of assessment of the FBC for the merger NHSI will expect detailed schemes to be developed for the first two years following the merger, as well as themes for the three remaining forecast years. ▪ In our experience, NHSI would typically expect to see between 2% and 4% CIP as well as 4% to 7% per annum of merger synergies. ▪ Detailed implementation plans will be needed to underpin delivery and ensure individuals are signed up to the savings. ▪ We recommend that the Trusts continue to develop the detailed CIP schemes and implementation plans for future years, with an appropriate level of detail developed to underpin the savings plans included within model, including: – A named executive lead and a named manager lead; – Further development of the link between individual enablers and schemes and their impact on activity and WTEs to avoid the risk of double counting and provide robust evidence for activity assumptions; – Developing operational plans which identify actions, milestones and dependencies for the implementation of each saving; and – Undertaking detailed demand and capacity analysis to ensure that they have enough capacity and resource in the community to accommodate additional activity.	**H/M**	▪ PSHT has assumed the delivery of recurrent CIP at 4.2% in FY18 and then 2.4%/2.5% per annum across the forecast period – this equates to cumulative CIP of £6.6 million (for the inclusion of income CIP now classified separately). ▪ HHCT has assumed an increase in the delivery of recurrent CIPs to between 4.6% and 4.9% per annum between FY18 to FY22 (per the latest updated LTFM), including delivery of additional CIPs in FY21 and FY22 where previously CIP had been assumed to be delivered by the SEP alone – equating to additional cumulative CIP of £19.1 million (for the inclusion of income CIP now classified separately). ▪ We have also identified that HHCT has assumed £3.2 million of income CIP schemes in FY17/18 and FY18/19 related to planned repatriation of theatre activity and recoding activities, which need to be formally agreed with commissioners. An additional £1 million of surgery income is assumed through growing profitable areas in 18/19, of which plans are under development. ▪ The increase in the assumed level of recurrent cost CIP (and the income CIP) planned to be delivered appears challenging, particularly for HHCT at between 4.6% and 4.9% per annum given the Trust's current cost base, the track record of delivering recurrent CIP and the unconfirmed nature of the income CIP planned in FY17/18 and FY18/19.	**H**

Executive Summary - Key findings (cont.)

<table>
<tr><th>Area</th><th>Description</th><th>KPMG Comment and Recommendation - July</th><th>Importance</th><th>KPMG Comment and Recommendation - August</th><th>Importance</th></tr>
<tr><td>Stand alone CIPs
(cont.)</td><td></td><td>

This level of supporting detail and governance will be required in advance of Monitor and Reporting accountant assessments.
As merger synergies are further developed alongside the standalone CIPs the Trusts should work closely to ensure there is no overlap and therefore double counting of these efficiencies.

</td><td>H/M</td><td>

We recommend that the TPB agree on an approach to assumptions around delivery of forecast CIPs for the transaction LTFM, including undertaking sensitivity analysis for the level of CIP that could be delivered by the merged Trust for both HHCT and PSHFT.
For example, if HHCT CIPs were adjusted to the same level as PSHT at 4.2% in FY18 and then 2.4%/2.5% per annum thereafter, then the aggregated impact on the net surplus of HHCT would be £(31.6) million across FY18 to FY22:

<table>
<tr><th colspan="6">HHCT</th></tr>
<tr><th>£'000</th><th>FY18 F'cast</th><th>FY19 F'cast</th><th>FY20 F'cast</th><th>FY21 F'cast</th><th>FY22 F'cast</th></tr>
<tr><td>CIPs - base case</td><td>5,899</td><td>5,963</td><td>5,944</td><td>5,721</td><td>5,841</td></tr>
<tr><td>CIP %</td><td>4.9%</td><td>4.9%</td><td>4.9%</td><td>4.6%</td><td>4.6%</td></tr>
<tr><td>Sensitivity (assuming PSHFT CIP %)</td><td>(669)</td><td>(2,946)</td><td>(2,895)</td><td>(2,599)</td><td>(2,548)</td></tr>
<tr><td>Cumulative sensitivity</td><td>(669)</td><td>(3,615)</td><td>(6,510)</td><td>(9,109)</td><td>(11,658)</td></tr>
</table>

We recommend that further work is undertaken to continue to develop detailed schemes and themes for planned CIP in the run up to finalisation of the FBC and as integration planning is advanced.
We have identified that HHCT have assumed £877k of corporate reduction schemes in FY17 and FY18. There is a risk that these could be duplicate to planned back office merger synergies.
We recommend that these corporate schemes are assessed in detail against planned merger synergies as part of preparation of the transaction LTFM to avoid potential double counting.

</td><td>H</td></tr>
</table>

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
Marginal cost	▪ We understand that the underlying assumption for marginal cost increases is 50% and 56% of income for HHCT and PSHFT respectively.	▪ Whilst we understand that some analysis has been carried out, we recommend that further work based on SLR/PLICS data is undertaken to verify the impact of this assumption.	**M**	▪ HHCT in the August LTFM have since changed their assumption on marginal costing based on analysis supported by their PLICS data, assuming 60% marginal cost in FY18, FY19 and FY20, increasing to 80% marginal cost in FY21 and FY22. ▪ PSHT has retained its assumption of 56% marginal cost. ▪ The difference in marginal costs assumptions can be understood by the different fixed and variable costs make up of each hospital Trust ▪ The Trusts need to ensure that there is sufficient evidence to support assumptions around marginal cost, as well as ensuring that this reflects a realistic position in the transaction LTFM for the merged Trust when consolidated.	**M**
Sensitivity analysis	▪ We note that sensitivity analysis has not yet been carried out within both Trusts' LTFMs.	▪ We understand that discussions are ongoing within the project team and at the TPB as to whether risk and sensitivities should be considered at an individual Trust level or at the merged Trust level. ▪ We recommend that key risks and sensitivities are considered for each standalone Trust and therefore within the standalone projections as the LTFM modelling is further advanced and the business case further developed. This will need to include the development of detailed mitigating actions that can then be reflected in the merger case going forwards.	**M**	▪ We understand that the Trusts and the TPB have agreed that sensitivity analysis will be considered and undertaken as part of preparation of the transaction LTFM. ▪ We will re-assess and update our findings in this area upon our Part 3 assessment of the transaction LTFM.	**N/a**

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation - July	Importance	KPMG Comment and Recommendation - August	Importance
Reconciliat-ion of input data	▪ The 2016/17 inputs to the LTFM reconcile to the individual organisation annual plans and historical statutory accounts.	▪ The reconciliations have found some classification differences which could impact the forecast financials in the LTFM outputs. The Trusts should seek to understand the classification differences and assess the impact on the LTFM modelling.	**L**	▪ There continue to be some potential classification differences for HHCT for FY17 outturn, which need to be worked through and understood.	**L**

KPMG

Comparison of standalone LTFM key assumptions

Key assumptions comparison

Area	HHCT	PSHFT	KPMG comments and recommendations - July	KPMG comments and recommendations - August
Sustainability and Transformation Funding ('STF')	▪ HHCT has assumed that Sustainability & Transformation Funding ('STF') will be received in FY17, but not between FY18 and FY20. ▪ Thereafter HHCT initially assumed STF will be received in 2020/21 onwards	▪ PSHFT has assumed STF will be received in FY17, but not thereafter. ▪ PSHFT has not re-included STF from FY21 onwards as they have assumed: - that this will only be used to fund transformation rather than linked to activity; and - the funding will be provided to CCGs for local allocation rather directly funding providers.	▪ The inclusion STF has a significant impact of the financial position of the organisations. ▪ The Boards (and TPB) should agree a consistent approach for both organisation, particularly with regard to the transaction LTFM.	▪ HHCT has removed receipt of STF funding in FY21 and FY22, a total £8.4 million (£4.2 million in each financial year). ▪ Both HHCT and PSHFT now have a consistent assumption with respect to the receipt of STF funding.
Cost inflation	▪ Cost inflation had been assumed to be in line with NHSI guidance.	▪ Cost inflation had been assumed to be in line with NHSI guidance.	▪ Through our analysis we identified that HHCT's Pay cost inflation assumption for FY21 and FY22 was not in line with NHSI guidance (1.6% assumed, rather than 2.9% in NHSI guidance)	▪ The cost inflation assumption for HHCT has been amended in the August LTFM to 2.9% for FY21 and FY22 which is in line with the NHSI guidance. ▪ Following discussions between both HHCT and PSHFT now have consistent cost inflation assumptions.
Activity and inflation	▪ HHCT assumed activity growth (population and non-demographic) in line with the STP forecast. ▪ For activity purposes HHCT assumed that the 3% CCG QIPP will deliver in full.	▪ We understand that PSHFT assumed activity growth (population and non-demographic) in line with STP forecast. ▪ For activity purposes PSHFT has assumed that the CCG will deliver no QIPP.	▪ In the course of our work we confirmed with Cambridge and Peterborough CCG that the activity inflation used as the input for working was in line with their 2016/17 commissioning intentions, and that the 2017/18 onwards activity growth assumptions were in line with their most up to date forecasts.	▪ Both HHCT and PSHFT have assumed activity growth in line with STP forecast. ▪ PSHFT has now assumed the CCG will deliver QIPP in full in line with the STP. ▪ HHCT and PSHFT activity assumptions are now consistent across both organisations.

Key assumptions comparison (cont.)

Area	HHCT	PSHFT	KPMG comments and recommendations - July	KPMG comments and recommendations - August
Activity and inflation (cont.)			▪ In our conversation, the Cambridge and Peterborough CCG CFO made clear that the CCG is currently behind plan on QIPP delivery and therefore acknowledged significant risks to the delivery in FY17. ▪ Separately we assessed that the activity growth in the underlying LTFM workings was driven based on these assumptions, which also align to the Cambridgeshire and Peterborough footprint STP.	▪ Nevertheless, it appears that significant risk still exists to the delivery of QIPP by CCGs across the forecast period. This presents a potential upside to activity and income for the merged Trust, albeit a risk to the wider local health economy and STP plans. ▪ We recommend that these assumptions, although consistent, be assessed through scenario analysis for the impact on the merged Trust.
Tariff inflation	▪ NHSI guidance suggests (2%) tariff deflation for the period 2016/17 to 2020/21, however HHCT has assumed the following: - 2016/17 – 0% - 2017/18 – 0.3% inflation - 2018/19 – 0% - 2019/20 – 0% - 2020/21 – 0.9% inflation - 2021/22 – 0.9% inflation	▪ NHSI guidance suggests (2%) tariff deflation for the period 2016/17 to 2020/21, however PSHFT has assumed the following: - 2016/17 – 0% - 2017/18 – 0.3% inflation - 2018/19 – 0% - 2019/20 – 0% - 2020/21 – 0.9% inflation - 2021/22 – 0.9% inflation	▪ We understand that PSHFT and HHCT sought guidance from NHSI around that application of the tariff deflator guidance, and they advised that the tariff deflation should be net of "Overall" cost inflation. ▪ The figures assumed match this assumption, but we have not verified this treatment with NHSI.	▪ Both HHCT and PSHFT have continued to assume the same tariff inflation as in July. ▪ As previously stated these assumptions do not align with published NHSI guidance, but align to the application of tariff deflation guidance sought from NHSI.

Key assumptions comparison (cont.)

<table>
<tr><th>Area</th><th>HHCT</th><th>PSHFT</th><th>KPMG comments and recommendations - July</th><th>KPMG comments and recommendations - August</th></tr>
<tr>
<td>Tariff inflation (cont.)</td>
<td>
Other income has been profiled as follows:
Income Inflation - HHCT
<table>
<tr><th>£m</th><th>FY17</th><th>FY18</th><th>FY19</th><th>FY20</th><th>FY21</th><th>FY22</th></tr>
<tr><td>Clinical Income</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Non Protected/Non Mandatory Clinical income inflation</td><td>-</td><td>1.8%</td><td>1.9%</td><td>2.0%</td><td>2.0%</td><td>2.0%</td></tr>
<tr><td>Other Income</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Education & Training</td><td>-</td><td>0.3%</td><td>-</td><td>-</td><td>0.9%</td><td>0.9%</td></tr>
<tr><td>Research & Development</td><td>-</td><td>1.8%</td><td>1.9%</td><td>2.0%</td><td>2.0%</td><td>2.0%</td></tr>
<tr><td>Other income</td><td>-</td><td>1.8%</td><td>1.9%</td><td>2.0%</td><td>2.0%</td><td>2.0%</td></tr>
</table>
</td>
<td>
Other income has been profiled as follows:
Income Inflation - PSHFT
<table>
<tr><th>£m</th><th>FY17</th><th>FY18</th><th>FY19</th><th>FY20</th><th>FY21</th><th>FY22</th></tr>
<tr><td>Clinical Income</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Non Protected/Non Mandatory Clinical income inflation</td><td>1.8%</td><td>0.3%</td><td>0.0%</td><td>0.0%</td><td>0.9%</td><td>0.9%</td></tr>
<tr><td>Other Income</td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>Education & Training</td><td>1.0%</td><td>1.8%</td><td>1.9%</td><td>2.0%</td><td>2.0%</td><td>2.0%</td></tr>
<tr><td>Research & Development</td><td>1.0%</td><td>1.8%</td><td>1.9%</td><td>2.0%</td><td>2.0%</td><td>2.0%</td></tr>
<tr><td>Other income</td><td>1.0%</td><td>1.8%</td><td>1.9%</td><td>2.0%</td><td>2.0%</td><td>2.0%</td></tr>
</table>
PSHFT has included FY17 inflation.
</td>
<td>
We noted that there are differences in the non-protected, non-mandatory clinical income inflation assumptions as well as education and training assumptions which HHCT and PSHFT should seek to align.
Whilst the FY17 inflation input does not impact the output financials, PSHFT should remove this as a presentational correction.
</td>
<td>
There remain differences in non-protected, non-mandatory clinical income inflation assumptions. We recommend that HHCT and PSHFT should seek to align these assumptions.
We identified a difference in Education and Training inflation assumptions between HHCT and PSHT, but we understand these are now aligned between both organisations.
There is a small difference in assumptions between HHCT and PSHFT with respect to Capex inflation for the year FY18. We recommend that HHCT and PSHFT seek to align these assumptions.
</td>
</tr>
<tr>
<td>Marginal cost of activity</td>
<td>
We understand that the underlying HHCT assumption around marginal cost increases is based on 50% of income.
</td>
<td>
We understand that the underlying PSHFT assumption around marginal cost increases is based on 56% of income.
</td>
<td>
Due to the way in which the LTFM reports cost movements we were not been able to reconcile this through the LTFM at the point in time of our July review.
Further work will be required by the Trusts to ensure that there is sufficient evidence to support assumptions around marginal cost.
</td>
<td>
HHCT in the August LTFM have since changed their assumption on marginal costing based on analysis supported by their PLICS data, assuming 60% marginal cost in FY18, FY19 and FY20, increasing to 80% marginal cost in FY21 and FY22.
The initial assumption of 50/50 split between pay and non-pay from additional marginal cost has also been adjusted to 90/10 based on PLICs data analysis.
</td>
</tr>
</table>

Key assumptions comparison (cont.)

Area	HHCT	PSHFT	KPMG comments and recommendations - July	KPMG comments and recommendations - August
Marginal cost of activity (cont.)				▪ PSHT has retained its assumption of 56% marginal cost. ▪ The difference in marginal costs assumptions can be understood by the different fixed and variable costs make up of each hospital Trust ▪ The Trusts need to ensure that there is sufficient evidence to support assumptions around marginal cost.
CIPs – FY17	▪ FY17 CIPs have been modelled into the baseline position in the LTFM and are therefore not shown separately. ▪ Income CIPs have been included in the baseline income inputs in the LTFM.	▪ FY17 CIPs have been modelled into the baseline position in the LTFM and are therefore not shown separately.	▪ We recommend that CIPs for the outturn year are shown separately to the baseline – it is likely that NHSI will require a revised version of the LTFM separating out CIPs if this is not the case.	▪ Cost CIPs for both HHCT and PSHFT have now been split out separate from the baseline. ▪ Income CIPs for HHCT have been identified in a CIP memo line.
CIPs – FY18 to FY22	▪ We understand that efficiency themes have been developed for FY18 and FY19 driving the CIPs included in the LTFM. ▪ No CIPs have been assumed for FY21 and FY22.	▪ PSHFT has assumed that CIPs for FY18 onwards will be 2% of the cost base. ▪ We have not seen any themes or CIP planning for FY18 onwards.	▪ HHCT and PSHFT should agree on an approach to future CIPs for the transaction LTFM.	▪ CIPs have been now developed into more detailed LTFM categories for both HHCT and PSHFT. ▪ HHCT has assumed an increase in the delivery of recurrent CIPs to between 4.6% and 4.9% per annum between FY18 to FY22 (per the latest LTFM), including delivery of CIPs in FY21 and FY22.

Key assumptions comparison (cont.)

Area	HHCT	PSHFT	KPMG comments and recommendations - July	KPMG comments and recommendations - August
CIPs – FY18 to FY22 (cont.)				▪ PSHT has assumed delivery of recurrent CIP at 4.2% in FY18 and then 2.4%/2.5% per annum across the forecast period, which reflects the classification of income CIP now separately from the baseline. ▪ We have also identified that HHCT has assumed £3.2 million of income CIP schemes in FY17/18 and FY18/19 related to planned repatriation of theatre activity and recoding activities, which need to be formally agreed with commissioners. An additional £1 million of surgery income is assumed through growing profitable areas in 18/19, of which plans are under development. ▪ We recommend that the TPB agree on an approach to assumptions around delivery of forecast CIPs for the transaction LTFM. ▪ We have identified that HHCT have assumed £877k of corporate reduction schemes in FY17 and FY18. There is a risk that these could be duplicate to planned back office merger synergies. ▪ We recommend that these corporate schemes are assessed in detail against planned merger synergies as part of preparation of the transaction LTFM to avoid potential double counting.

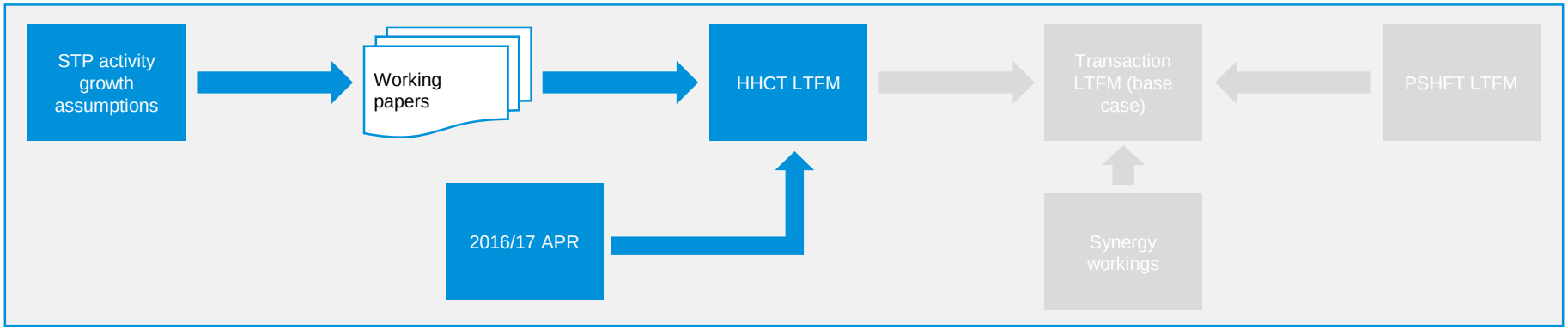
Key assumptions comparison (cont.)

Area	HHCT	PSHFT	KPMG comments and recommendations - July	KPMG comments and recommendations - August
Service developments	▪ HHCT has included SEP as a service development.	▪ PSHFT has not included any service developments.	▪ See page 39 for more detail on SEP. ▪ We recommend that HHCT and PSHFT agree the level of inclusion of SEP in the base, upside and downside transaction LTFMs. ▪ We recommend that income CIPs are included as service developments as opposed to being included in the baseline income.	▪ HHCT has assumed the same amount of income and expenditure from the SEP in the updated version of the LTFM. ▪ We understand that the SEP continues to be non-contracted and the detailed schemes are still under development. ▪ We continue to recommend that the TPB agree the level of SEP to be included in the transaction LTFM, including undertaking sensitivity and scenario analysis.
Contingency and Property Rent Increases	▪ HHCT have built in contingency and property rental increases within the LTFM.	▪ PSHFT have built into the LTFM an element for both contingency as well as property rent increases.	▪ It is recommended that there is an agreement between HHCT and PSHFT as to the level of contingency and property rent increases that should be entered into the LTFM.	▪ PSHFT has continued to include both contingency and property rental increases, while HHCT has increased the contingency slightly in the latest version of the LTFM.

KPMG

Supporting analysis - HHCT

Basis of preparation - HHCT



Basis of preparation

- The LTFM has been developed on the basis of the standalone organisation. However, wherever possible HHCT has worked alongside PSHFT to make assumptions as consistent as possible, including the further alignment of assumptions following our Part 1 assessment.
- HHCT has developed a number of working papers which feed the LTFM model, which are directly linked into the 'live' version of the LTFM. This is normal practice as part of the LTFM development process; however, we recommend that external links are removed from the LTFM prior to submitting for NHSI review to prevent reference errors.
- HHCT has advanced and consolidated a number of working papers since our last review. We continue to recommend that this process continues towards NHSI submission, including removal of the external links and tidy up within the LTFM.
- Activity has been based on the 2016/17 planned activity as per the HHCT annual plan, with growth assumptions aligned with the recently developed Sustainability and Transformation Plan ('STP') for Cambridge and Peterborough CCG ('C&P CCG') thereafter.
- The 2016/17 financial outturn forecast continues to be based on the HHCT annual plan. Projections form 2017/18 onwards are calculated based the various activity, income and expenditure assumptions summarised on pages 40 to 44 of this report. We recommend that the LTFMs are updated for current trading (i.e. actuals plus forecast), in particular for any deviation from the annual plan, as well as for the latest available forecast when this is available.

Basis of preparation (cont.)

- The cash flows included in the version of the LTFM provided for the updated assessment has now been completed. We have identified some assumptions regarding the treatment of NHS receivables and payables days that significant improve the cash position in FY20, which we recommend should be reassessed as part of the preparation of the transaction LTFM.
- On the following page we have highlighted specific observations around the LTFM set up and modelling approach, including areas which are outstanding for our Part 2 assessment and recommendations for changes to approach.
- At present the LTFM continues to have been modelled based on costs, with workforce being calculated based on the total costs. We continue to recommend that more detailed workforce modelling is carried out to provide a better understanding of future workforce requirements.

Approach to consolidating into transaction LTFM

- We note that the approach to constructing the transaction LTFM has been carried out within an extremely short timespan (approximately one week).
- Whilst the work to make the two standalone LTFMs as consistent as possible has likely simplified the process, we would typically expect the transaction LTFM to take much longer and the modelling team should continue to refine the transaction LTFM in the coming weeks as the FBC is further developed.

LTFM set up and modelling observations

As part of our work we have made a number of observations around the overall set up and modelling approach of the LTFM template at HHCT. Whilst we recognise that the LTFM version we initially reviewed as part of our assessments was very much a work in progress, and where possible we have provided feedback on these areas during the course of our work, the findings from our initial assessment and our update against these are summarised below:

Area	Comments - July	Priority - July	Comments - August	Priority - August
Outstanding elements of the LTFM	We identified a number of areas of the LTFM which had yet to be completed in the version we were provided with to assess, which we recommend are completed as a priority: — Sensitivity analysis in the 'S_Input' worksheet has not been completed — The Checklist worksheet has not completed — No normalisation adjustments in addition the automated adjustments have been considered (see recommendation on sensitivity analysis in the executive summary) — PFI – Further analysis was unavailable at the time of the assessment, however we understand the HHCT has been receiving external support to develop its PFI forecasting. Separately the PFI costs included in the 'I_PFI' worksheet should be shown including inflation. — Deficit funding – this was not included in the version of the model provided to us for assessment, leading to a significant cash deficit — The 'I_Comm_Smry (memo)' worksheet has not been completed — The 'I_Budgt per' worksheet has not been completed	H	HHCT has undertaken significant work to update the LTFM, including addressing the recommendations we raised at Part 1. The changes identified are: — Normalisation adjustments have now been made for the STF funding and are now included in the 'I_NE' worksheet — BDO have undertaken a review of HHCTs PFI model – the outputs in the LTFM now align with a detailed working paper and are included in the a separate I_PFI' worksheet. — The 'I_Comm_Smry (memo) worksheet has now been completed. — The 'I_Budget per' worksheet has now been completed. Recommendations that still needs addressing are: — The LTFM has now been updated for assumed levels of cash to support forecast deficits. However, we have identified some assumptions regarding the treatment of NHS receivables and payables days that significant improve the cash position in FY20, which we recommend should be reassessed as part of the preparation of the transaction LTFM. — Completion of the Checklist tab. — Sensitivity analysis in the 'S_Input' worksheet has not been completed.	M

LTFM set up and modelling observations (cont.)

Area	Comments - July	Priority - July	Comments - August	Priority - August
External links and reference errors	We recognised that some of the errors experienced would not be visible when linked to all of the underlying working papers, however when transferred across to us we found '#REF' errors present in a number of areas. Many of these were due to the LTFM linking to HHCT's LTFM from 2015/16. When assessing we found that the LTFM links to 22 external Excel files in total. Whilst we understand the need to use external links to facilitate simpler updating, we recommend that external links are removed prior to submitting the LTFM for external assessment by NHSI. In addition, we recommend that the number of working papers is consolidated to enable simpler updating and increase the level of version control.	H	There have been significant reductions in the number of '#Ref' errors following the tidying up of the various working papers. In addition, effort has been made to remove and simplify external links. However, there are still many links that are linked to external Excel sheets. We recommend that this process continues towards NHSI submission, including removal of the external links and tidy up within the LTFM. We advise that HHCT removes links that are still linked to old LTFM spreadsheets.	L
Reconciliation	We note that there is a difference between the 2015/16 closing balance sheet position and 2016/17 opening position. However, the differences arise from reclassifications, with no difference in net assets. In addition in reconciling the LTFM SOCI inputs for 2016/17 to the APR we found classification differences. The impact of this on the LTFM modelling should be assessed.	L	The difference between the 2015/16 closing balance sheet position and the 2016/17 opening position has now been resolved. A reclassification of LTFM SOCI inputs has also taken place.	N/a
2016/17 Cost Improvement Plans (CIPs)	HHCT has included 2016/17 CIPs within the baseline financial position. In our experience NHSI would typically expect this to be included separately, as CIPs. We therefore recommend that this is extracted from the baseline and included in the 'I_CIP' worksheet. In the version of the LTFM provided to us for assessment, income CIPs were included in the baseline income and not separated out in the 'memo' section of the CIP inputs. It is recommended that income CIPs are shown as Service Developments, and also on the 'memo' section on the CIP inputs, to allow NHSI to more simply understand the impact of these. In addition the LTFM does not show any CIPs for 2020/21 and 2021/22. We understand that these are intended to be delivered through the SEP service development.	M	The cost CIPs for 2016/17 and future years have now been split out from the baseline. The value of income CIPs are shown as a memo line within the 'CIP_Summary' worksheet, but have not been reflected as separate Service Developments. We recommend that this is done to allow NHSI to more simply understand the impact of these. The LTFM now shows increased CIPs in each financial year, as well as the inclusion of CIPs for 2020/21 and 2021/22. The value of these CIPs; £4.5 million and £3.4 million.	L

LTFM set up and modelling observations (cont.)

Area	Comments - July	Priority - July	Comments - August	Priority - August
Market Forces Factor (MFF)	In the version of the LTFM provided to us for assessment, the impact of MFF on income was factored into the baseline and not shown separately. We recommend that MFF is shown separately.	M	The impact of MFF has now been shown separately to the baseline in the 'I_Income_BASE' worksheet.	N/a
Workforce	Workforce numbers included in the financial projections have been based solely on dividing the output costs in the LTFM by the average staff cost from the previous year. We recommended that more detailed workforce modelling is carried out to provide a better understanding of future workforce requirements.	H	Since the July LTFM assessment a simple workforce model has been created and submitted the HHCT HR Department. The status of the workforce model has not yet been determined. We continue to recommend that a more detailed workforce model is carried out in conjunction with the HR Department to better understand the future workforce requirements, which is integrated with forecast changes in activity and planned CIPs.	H
Income	HHCT has included reconciliation lines labelled as balancing figures. We understand that these figures relate to the difference between expected activity based income and actual income. We recommend that these are included in the baseline income instead of shown as balancing figures.	L	HHCT has now removed all reconciliation lines labelled as balancing figures in the 'I_Incme (Base)' tab.	N/a
Output KPIs	We note that the LTFM outputs show a significant change in the payables and receivables days leading to significant working capital movements in 2019/20. It is recommended that this is reviewed to understand the reasons for this and adjust as appropriate.	M	Large variations remain in the August LTFM with respect to the KPIs. We have been advised that the changes are due to cash requirements, with the assumption of lower NHS receivables and payables days boosting the cash position while reducing the requirement for loans. We recommend that these assumptions are assessed as part of the preparation of the transaction LTFM for the merged Trust.	H

Reconciliation of input data

Reconciliation of SOCI inputs						
£m	**Annual Planning Return**		**LTFM - August**			
	FY16	**FY17**	**FY16**	**FY17**	**FY16**	**FY17**
Income						
Clinical	97.3	101.3	97.3	101.4	0	0.1
Non-clinical	15	16.1	15	16.4	0	0.3
	112.3	117.4	112.3	117.8	0	0.4
Expenditure						
Pay	-77	-75.37	-77	-77.0	0	-1.6
Non-pay	-40	-40.7	-40	-40.9	0	-0.2
PFI / LIFT	-1.9	-1.9	-1.9	-1.7	0	0.2
	-118.9	-117.9	-118.9	-119.6	0	-1.7
EBITDA	**-6.6**	**-0.5**	**-6.6**	**-1.8**	**0.0**	**-1.3**
EBITDA margin %	-6%	0%	-6%	-2%	*0.1%*	*-1.5%*
Other operating expenses	-7.9	-5.3	-7.9	-4.1	0	1.2
Non-operating income	0		0	-	0	0.0
Non-operating expenses	-4.3	-4.2	-4.3	-4	0	0.2
Surplus / (Deficit)	**-18.8**	**-9.9**	**-18.8**	**-10.0**	**0.0**	**0.0**

Source: Management Information: HHCT LTFM, HHCT APR

- The table above shows a reconciliation of the LTFM outputs to the HHCT 2016/17 Annual Plan Return ('APR') data. The APR contains data for the 2015/16 actual performance as well as the 2016/17 plan. We have identified reconciliation differences in 2016/17, which have changed from our Part 1 assessment.
- The key largest changes for the outturn year FY17 are the reduction in depreciation and amortisation in other operating expenses, which is offset by increased pay expenditure. Further analysis is required to bottom out the explanations for these variances.
- In addition to the above, as part of our Part 1 assessment we carried out a reconciliation exercise of the 2013/14 and 2014/15 historical financial inputs into the LTFM to the reported position in the HHCT published statutory accounts and found no differences.
- We understand that HHCT does not routinely carry out a re-forecasting exercises until the end of Q1. We continue to recommend that the LTFM is updated to the latest available forecast position when this exercise is carried out to ensure that the LTFM reflect the latest available position.
- As part of our Part 1 work to reconcile the input data we held a conversation with Cambridge and Peterborough CCG to confirm that the activity growth rates assumed in the HHCT workings were consistent with their commissioning intentions. The CCG confirmed that this was the case based on alignment to the STP.

Mapping of current LTFM to LTFM in July

Movement of LTFM July - August HHCT															
	LTFM (July)					LTFM (Aug)					Difference				
	FY18	FY19	FY20	FY21	FY22	FY18	FY19	FY20	FY21	FY22	FY18	FY19	FY20	FY21	FY22
Income															
Clinical	102.7	105.3	107.7	114.4	117.1	106.1	109.2	111.5	115.0	117.6	3.4	3.9	3.8	0.6	0.6
Non-clinical	16.3	17.1	19.3	22.2	22.6	12.2	12.8	15.0	17.7	18.0	-4.2	-4.3	-4.4	-4.4	-4.6
	119.1	122.4	127.0	136.5	139.7	118.3	122.0	126.4	132.7	135.6	-0.8	-0.4	-0.6	-3.8	-4.0
Expenditure											0.0	0.0	0.0	0.0	0.0
Pay	-77.0	-77.1	-78.6	-81.0	-83.4	-77.9	-77.9	-78.8	-81.3	-82.8	-0.8	-0.8	-0.2	-0.3	0.6
Non-pay	-40.9	-40.1	-40.4	-42.0	-43.3	-40.5	-40.1	-39.9	-40.8	-41.5	0.4	0.0	0.5	1.2	1.8
PFI / LIFT	-1.9	-1.9	-1.9	-1.9	-1.9	-1.7	-1.8	-1.8	-1.8	-1.9	0.1	0.1	0.1	0.0	0.0
	-119.8	-119.0	-120.9	-124.8	-128.6	-120.1	-119.7	-120.5	-124.0	-126.2	-0.3	-0.7	0.4	0.8	2.4
EBITDA	**-0.7**	**3.4**	**6.1**	**11.7**	**11.0**	**-1.8**	**2.3**	**5.9**	**8.7**	**9.4**	**-1.1**	**-1.1**	**-0.2**	**-3.0**	**-1.6**
EBITDA margin %	-0.6%	2.7%	4.8%	8.6%	7.9%	-1.6%	1.9%	4.7%	6.6%	7.0%	-1.0%	-0.9%	-0.2%	-2.0%	-1.0%
Other operating expenses	-4.7	-4.8	-4.6	-4.9	-5.6	-4.7	-4.8	-4.6	-4.9	-5.1	0.0	0.0	0.0	0.0	0.5
Non-operating income	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Non-operating expenses	-4.2	-4.2	-4.2	-4.2	-4.2	-3.6	-3.3	-3.1	-3.0	-3.0	0.7	0.9	1.1	1.2	1.2
Surplus / (Deficit) after tax	**-7.5**	**-5.7**	**-2.6**	**2.6**	**1.2**	**-10.1**	**-5.8**	**-1.7**	**0.8**	**1.3**	**-2.5**	**-0.1**	**0.9**	**-1.8**	**0.0**

Source: Management Information: HHCT LTFM

- There have been a number of key changes which have been made between the July and August LTFMs. A number of these have been done based on prior recommendations following review of the July LTFM. A full bridge of the SOCI between the July and August LTFMs has been produced overleaf. However, the high level changes are as follows:
  - **Income** – reclassification of STF income between non-clinical and clinical income, with STF funding for FY20 and FY21 removed.
  - **Expenditure** – reduction of expenditure reflecting changes in marginal cost assumptions, offset by additional CIP.
  - **Non-Operating Expenses** – Reduction in PDC Dividend expense following a recalculation for the impact of interest bearing borrowings.

July to August LTFM Bridge

As part of our work we have made bridged the main adjustments between the HHCT LTFM we assessed at Part 1 in July 2016 with the revised HHCT LTFM was have assessed in August 2016. The main items are set out below:

Reference	Bridge (+ve = improvement)	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22
Net Surplus July		**-7.5**	**-5.7**	**-2.7**	**2.6**	**1.2**
1	STF funding removed in FY21 and FY22	-	-	-	-4.2	-4.2
2	Changes in Other Income and inflation assumptions	-0.8	-0.3	-0.5	0.5	0.4
3	Revision of Private Patient Forecast	0	-0.1	-0.1	-0.1	-0.2
4	Marginal cost – nursing expenditure	-0.8	-1.3	-1.5	-1.7	-1.8
5	Marginal cost – other pay Expenditure	-0.2	0.3	0.7	-0.5	-0.5
6	Marginal cost – non-pay	0.5	0.5	0.5	0.8	1.3
7	Additional Pay CIPs	0.2	0.3	0.6	1.9	2.9
8	Additional Non-Pay CIPs	-0.1	-0.5	0	0.3	0.5
9	Revised calculation on PFI costs	0.1	0.1	0.1	0	0
10	Disposal of an asset	-2.1	-	-	-	-
11	Revision of depreciation estimate in final year	0.3	0.1	0	0	0.4
12	Recalculation of PDC Dividend	0.4	0.8	1.1	1.2	1.2
Net Surplus August		**-10.1**	**-5.8**	**-1.7**	**0.8**	**1.3**
Memo	Additional CIP Income	3.0	2.0	3.0	3.3	2.0

Source: Management Information: HHCT LTFM, KPMG analysis

July to August LTFM Bridge

Overview

- The following adjustments have been made for changes in key assumptions between the July 2016 LTFM and the August 2016 LTFM:
  1. STF funding – has been removed in FY21 and FY22. The treatment of STF income is now consistent across both HHCT and PSHFT.
  2. Changes in other income and inflation assumptions – Inflation assumptions have been changed to align across the organisations. However, we note that there are still some differences on income inflation between the Trusts that should be looked to be aligned as part of the transaction LTFM.
  3. Private patients – revision of private patient forecast to a 0% increase in activity. This aligns HHCTs assumption on PPI growth to that of PSHFT.
  4. Marginal cost – nursing expenditure. This is resulting from a change in the marginal cost assumption from 50% to 60% in FY18, FY19 and FY20, increasing to 80%in FY21 and FY22. This has been based on further analysis of PLICs data. In addition, the split of additional expenditure has been assumed to be allocated from 50/50 pay/non-pay to 90/10 pay/non-pay.
  5. Marginal cost – other pay expenditure. The impact of changes in assumptions for marginal costs (as per 4 above) on other pay cost categories.
  6. Marginal cost – non-pay. The impact of changes in assumptions for marginal costs (as per 4 above), in particular reducing non-pay expenditure due to the change in the split of additional expenditure assumed to be allocated from 50/50 pay/non-pay to 90/10 pay/non-pay.
  7. Additional Pay CIPs – the impact of additional pay CIP added since the July version of the LTFM. The current CIPs continue to show £874k for corporate cost reductions in FY17 and FY18.
  8. Additional Non-Pay – the impact of additional non-pay CIPs added since the July version of the LTFM.
  9. PFI costs – following the revision of the PFI model by BDO, a reduction in PFI cost has been identified.
  10. Disposal of an asset – the disposal of an asset was present in the July version of the LTFM, which has been omitted in the August version. This has been flagged as a potential error in the August LTFM and we understand that this is being rectified in an updated version.
  11. Depreciation – revision of depreciation estimate in final year following review, together with the impact of lower depreciation in FY18 and FY19 due to the omission of the asset disposal.
  12. PDC dividend – a recalculation of the PDC dividend has led to a reduction in expenditure. This is due to a reduction in the assets used for the calculation caused by drawing on interest earing loans to finance forecast cash deficits.
- We have also identified a memo item, relating to an increase in CIP income (memo only). This is a memo item only as CIP remains in base line for both July and August LTFMs.

Financial overview - HHCT SOCI

SOCI overview - HHCT								
£m	FY16 Actual	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	FY16-21
Income								
Tariff income	92.8	95.4	100.1	102.9	105.0	108.4	111.1	3.1%
Other block or Cost and Volume contract	2.8	3.8	3.8	3.8	3.8	3.8	3.8	0.1
Total NHS clinical Income	95.6	99.2	103.9	106.7	108.8	112.3	114.9	3.1%
Private patient revenue	0.9	1.5	1.5	1.8	2.0	2.0	2.0	0.2
Other non protected revenue	0.8	0.7	0.7	0.7	0.7	0.7	0.7	-2.6%
Other Operating revenue	15.0	16.4	12.2	12.8	15.0	17.7	18.0	4.3%
Total Income	**112.3**	**117.8**	**118.3**	**122.0**	**126.4**	**132.7**	**135.6**	**3.2%**
Expenses								
Employee benefit expenses	-77.0	-77.0	-77.9	-77.9	-78.8	-81.3	-82.8	0.0
Drug expenses	-10.6	-10.7	-11.2	-11.3	-11.6	-12.1	-12.5	0.0
Clinical supplies and services expenses	-9.7	-10.6	-10.1	-9.4	-8.7	-8.8	-8.9	-0.0
Other expenses	-23.2	-21.6	-20.9	-21.1	-21.5	-21.8	-22.0	-0.0
Total Expenses	**-118.9**	**-119.6**	**-120.1**	**-119.7**	**-120.5**	**-124.0**	**-126.2**	**1.0%**
EBITDA	-6.6	-1.8	-1.8	2.3	5.9	8.7	9.4	
Non-operating items								
Gain/(loss) on asset disposals	-	-	-	-	-	-	-	
Net interest expense	-2.3	-2.4	-2.4	-2.6	-2.7	-2.7	-2.7	3.2%
Depreciation and Amortisation	-5.1	-4.1	-4.7	-4.8	-4.6	-4.9	-5.1	0.6%
PDC Dividend	-2.0	-1.5	-1.1	-0.7	-0.4	-0.3	-0.3	-27.9%
Impairment of fixed assets	-2.7	-	-	-	-	-	-	
Surplus/(Deficit)	**-18.8**	**-9.9**	**-10.1**	**-5.8**	**-1.7**	**0.8**	**1.3**	
KPIs								
EBITDA margin	-5.9%	-1.6%	-1.6%	1.9%	4.7%	6.6%	7.0%	
Net margin	*-19.6%*	*-10.0%*	*-9.7%*	*-5.4%*	*-1.6%*	*0.7%*	*1.1%*	

Source: Management Information: HHCT LTFM

Increase in elective activity in 17/18 and 18/19 driven by £3.2 million of income CIP schemes related to repatriation of theatre activity and recoding, which need to be formally agreed with commissioners. An additional £1 million of surgery income is assumed through growing profitable areas in 18/19, of which plans are under development.

Subject to agreement by the Boards on the level of inclusion of cost CIP and income CIP in the base case, as well as for the level of sensitivity analysis of CIPs in a downside.

Other operating revenue is projected to decrease for the removal of SFT funding in FY21 and FY22

Expenditure growth has increased compared with the July LTFM following a change in the assumption of marginal cost following an analysis of PLICs data. This has been offset by additional CIPs, including a reduction in corporate costs in FY17 and FY18.

A significant reduction in PDC dividend has been forecast per annum, based upon a recalculation of the PDC dividend which takes into account the effect of additional loans in the calculation.

We recommend that this is reassessed as part of preparation of the transaction LTFM and assumptions around funding for the merged Trust.

HHCT is projecting to return to a 1% surplus position by FY22, predominantly driven by the impact of the SEP and the assumed delivery of recurrent CIP of between 3.0% and 4.6% per annum.

EBITDA margin increases steadily throughout the forecast period as a result of variable costs increasing at a lower rate than income growth, as well as for the impact of additional CIPs and the SEP

Financial overview - HHCT SOFP

SOFP overview - HHCT								
£m	FY16 Actual	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	*FY16-FY21*
Non Current Assets								
PPE, intangibles & other	101.7	100.7	99.6	98.6	99.2	98.3	97.3	-0.7%
Current Assets								
Inventories	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.8%
NHS trade receivables	2.7	7.0	6.1	5.4	1.8	2.8	4.8	32.9%
Non-NHS trade receivables	3.7	0.0	0.2	0.3	0.5	0.6	0.6	165.0%
Other assets	0.5	0.0	0.0	0.0	0.0	0.0	0.0	
Cash	0.9	1.0	1.4	1.7	1.8	1.9	1.9	14.5%
Total current assets	**9.4**	**9.8**	**9.4**	**9.1**	**5.9**	**7.1**	**9.1**	**0.0**
Total assets	**111.1**	**110.4**	**109.0**	**107.7**	**105.1**	**105.4**	**106.3**	**-0.0**
Current liabilities								
Trade Payables, Current	-11.7	-11.4	-11.1	-11.1	-9.2	-9.4	-9.6	-2.8%
Other Payables, Current	0.0	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	
Capital Payables, Current	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-
Accruals, Current	-0.7	0.0	0.0	0.0	0.0	0.0	0.0	
Other liabilities	-3.9	-3.4	-3.5	-2.9	-2.9	-2.7	-2.8	-5.2%
Total current liabilities	**-16.8**	**-15.6**	**-15.4**	**-14.8**	**-12.8**	**-12.9**	**-13.2**	**-0.0**
Net current assets	-7.4	-5.9	-6.0	-5.7	-6.9	-5.8	-4.1	-7.8%
Non-current liabilities	-38.9	-50.2	-59.1	-64.2	-65.4	-64.7	-64.1	0.092058
Net assets	**55.4**	**44.6**	**34.5**	**28.7**	**26.9**	**27.8**	**29.1**	**-0.1**
Taxpayer's equity								
Public dividend capital	94.2	94.2	94.2	94.2	94.2	94.2	94.2	-
Retained Earnings	-65.4	-75.3	-85.4	-91.2	-92.9	-92.1	-90.8	5.8%
Revaluation reserve	26.6	25.7	25.7	25.7	25.7	25.7	25.7	-0.6%
Total taxpayer's equity	**55.5**	**44.6**	**34.5**	**28.7**	**26.9**	**27.8**	**29.1**	**-0.1**
KPIs								
NHS Trade receivable days	10.0	25.3	21.2	18.1	6.0	9.0	15.0	28.6%
Trade payable days	100.1	96.5	94.8	95.8	79.0	79.0	80.0	-3.4%

Source: Management Information: HHCT LTFM

The NBV of PPE has increased slightly from the July LTFM.

We recommend that the requirement for the capital programme for the merged Trust be assessed as part of the preparation of the transaction LTFM.

Assumed cash surplus in each year from outturn year following adjustments for funding of a cash deficit, as well a change in NHS receivable days and payables days in FY20.

We recommend that the assumptions on WC day changes in FY20 are assessed as part of development of the transaction LTFM.

Increased non-current liabilities from additional loan financing taken out to fund cash deficits.

The LTFM calculates working capital movements using different method from year 4 (FY20), but there is a large decrease in receivable days to manage the HHCT cash position. The impact is a net cash inflow of £4.1 million. Further work is required to analyse and address this for the transaction LTFM.

Prior to this period trade creditor days appear to be extremely high, well outside of BPPC guidance.

Strategic Estates Partnership ('SEP')

SEP - HHCT financial projections						
	FY17	FY18	FY19	FY20	FY21	FY22
£m	Outturn	Forecast	Forecast	Forecast	Forecast	Forecast
Income						
Long term land leasehold arrangements - £1.8m pa			0.3	0.8	1.5	1.5
Income from new Hinchingbrooke Living development			0.2	0.4	0.6	0.6
Operational revenue from clinical support				0.2	0.5	0.5
Additional Income from Estates Management Services				0.5	1.0	1.0
SLA income from back office support				0.2	0.4	0.4
Utilities supply and administration				0.1	0.2	0.2
Income from new Education/ R&D Facility				0.1	0.3	0.3
Medi-Hotel income				0.1	0.2	0.2
Total Income	**-**	**-**	**0.5**	**2.4**	**4.7**	**4.7**
Expenses						
Employee benefit expenses	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Drug expenses	-	-	-	-	-	-
Clinical supplies and services expenses	-	-	-	-	-	-
Other expenses	(0.1)	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)
Total Expenses	**(0.2)**	**(0.2)**	**(0.1)**	**(0.1)**	**(0.1)**	**(0.1)**
EBITDA	**(0.2)**	**(0.2)**	**0.4**	**2.2**	**4.5**	**4.5**

Source: Management Information: HHCT LTFM

Overview

- A key area of inclusion in the HHCT LTFM is the inclusion of a service development for HHCT, related to a Strategic Estates Partnership ('SEP').
- The SEP is an initiative driven around working with a partner (through a Joint Venture) to re-align estates to make the footprint more up-to-date and enable the use of estates for a combination of 'living', 'care' and 'education'. The JV partner would be expected to plan, fund, procure and project manage the individual development projects, with both joint venture parties sharing 50% of the benefits. There are a number of schemes proposed within SEP including working with the Local Authority, a new CPFT mental health provision, key worker and student accommodation and care home support.

Current status of development

- The partnership has been developed as part of the Sustainability and Transformation Planning ('STP') exercise, with the overall procurement and contracting process ongoing.
- At this stage, we understand that the Full Business Case is being finalised and the preferred partner has been chosen, with contractual and commercial negotiations ongoing.

Financial overview

- As shown on the left, the contribution of SEP to the overall HHCT position is significant. At this stage HHCT have assumed the lower end of their income projections within their base case LTFM, showing a recurrent contribution of £4.5 million from 2020/21 onwards.

KPMG recommendations

- Due to the stage of the procurement and contracting process the overall financials are still continuing to be developed in more detail. Delivery of the SEP is key to the overall financial sustainability of HHCT and we therefore continue to recommend further stress testing of the scenarios associated with SEP within the downside, base and upside cases of the transaction LTFM. In the July report we recommended that HHCT and PSHFT come to an agreement over the level of SEP to be included in the transactional LTFM, which we believe is still applicable.
- In our experience of similar schemes there are risks associated with the delivery of these types of scheme (e.g. project delays) which we recommend are considered as part of the sensitivity analysis.

Key assumptions - HHCT

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
Sustain-ability and Transformation Funding (STF)	▪ HHCT has assumed that STF of £4 million will be received in 2016/17. For LTFM modelling purposes this has therefore been assumed as non-recurrent funding ▪ As per STP guidance, no STF has been assumed thereafter until 2020/21, where £4 million recurrent funding has been assumed.	▪ This approach appears to be consistent with NHSI guidance, although it should be noted that STF is likely to be put in place to fund specific transformation projects and not necessary linked to activity.	▪ SFT funding has been removed in FY21 and FY22, following the recommendation in July that both HHCT and PSHFT agree on a consistent treatment of STF funding.
Cost inflation	▪ Cost inflation has been assumed to be in line with NHSI guidance.	▪ We have identified that the FY17 to FY21 cost inflation assumptions are in line with NHSI guidance ▪ Through our analysis we have identified that the Pay cost inflation for FY22 is not in line with NHSI guidance (1.6% assumed, rather than 2.9% in NHSI guidance).	▪ Pay cost inflation for FY22 has been changed to 2.9% in the latest LTFM for FY20, FY21 and FY22, in line with NHSI guidance.
Tariff inflation	▪ NHSI guidance suggests (2%) tariff deflation for the period 2016/17 to 2020/21, however the HHCT LTFM has assumed the following: - 2016/17 – 0% - 2017/18 – 0.3% inflation - 2018/19 – 0% - 2019/20 – 0% - 2020/21 – 0.9% inflation - 2021/22 – 0.9% inflation	▪ We understand that HHCT sought guidance from NHSI around that application of the tariff deflator guidance, and they advised that the tariff deflation should be net of “Overall” cost inflation. The figures assumed match this assumption, but we have not verified this treatment with NHSI.	▪ No changes in the assumptions around tariff deflation for the period 2016/17 to 2020/21.

Key assumptions - HHCT (cont.)

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
Tariff inflation (cont.)	▪ Other income has been profiled as follows: **Income Inflation - HHCT** **£m** FY17 FY18 FY19 FY20 FY21 FY22 **Clinical Income** Non Protected/Non Mandatory Clinical income inflation - 1.8% 1.9% 2.0% 2.0% 2.0% **Other Income** Education & Training - 0.3% - - 0.9% 0.9% Research & Development - 1.8% 1.9% 2.0% 2.0% 2.0% Other income - 1.8% 1.9% 2.0% 2.0% 2.0%		▪ There is a difference in non-protected, non-mandatory clinical income inflation assumption with PSHT. We recommend that HHCT and PSHFT should seek to align these assumptions. ▪ We identified a difference in Education and Training inflation assumptions between HHCT and PSHT, but we understand these are now aligned between both organisations. ▪ There is a small difference in assumptions between HHCT and PSHT with respect to Capex inflation for the year FY18. We recommend that HHCT and PSHT seek to align these assumptions.
Activity growth	▪ HHCT has based activity growth on the population and non-demographic growth assumed as part of the STP process. ▪ As well as this, HHCT has assumed that Cambridge and Peterborough will deliver the 3% QIPP in full in each year of the forecast ▪ HHCT have assumed a 50% marginal expenditure growth compared with income, based on variable costs.	▪ In the course of our work we confirmed with Cambridge and Peterborough CCG that the activity inflation used as the input for working was in line with their 2016/17 commissioning intentions, and that the 2017/18 onwards activity growth assumptions were in line with their most up to date forecasts. ▪ Separately we assessed that the activity growth in the underlying LTFM workings was driven based on these assumptions, which also align to the Cambridgeshire and Peterborough footprint STP. ▪ We recommend that further work based on SLR/PLICS data is undertaken to verify the impact and validity of the 50% marginal expenditure growth assumption.	▪ Following analysis of PLICs data, HHCT has revised the assumption of 50% marginal cost of activity in the latest version of the LTFM, to 60% marginal cost in FY18, FY19 and FY20, increasing to 80% marginal cost in FY21 and FY22. ▪ The split of additional marginal cost was also changed from 50/50 pay/non-pay to 90/10 pay/non-pay. ▪ The assumption that Cambridge and Peterborough CCG would achieve the level of QIPP outlined in the STP is unchanged.
CIPs	▪ 2016/17 CIPs have been modelled into the baseline position in the LTFM.	▪ We recommend that CIPs for the outturn year are shown separately to the baseline – it is likely that NHSI will require a revised version of the LTFM separating out CIPs if this is not the case.	▪ CIPs for the outturn year have now been shown separately to the baseline position. ▪ However, an additional £13.1 million of CIPs have been added to the August LTFM; this includes a memo item for £16.5 million of income CIPs across the forecast period (latest LTFM).

Key assumptions - HHCT (cont.)

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
CIPs (cont.)	**CIP summary - HHCT** £'000 / FY14 / FY15 / FY16 / FY17 / FY18 / FY19 / FY20 / FY21 / FY22 CIP value: 7,260 / 2,354 / 6,687 / - / 3,030 / 4,216 / 2,311 / - / - *CIP %*: *6.6% / 2.0% / 5.4% / - / 2.5% / 3.5% / 1.9% / - / -* *Target*: 7,042 / 6,801 / 8,211 *% vs target*: *103.1% / 34.6% / 81.4%*	▪ Historically HHCT has shown a mixed level of CIP delivery. A high level review of 2016/17 CIPs and a 3 year CIP plan shows that HHCT is looking to develop more strategic CIPs to enable longer term CIP planning. CIPs have not been separated out for 2020/21 and 2021/22 as these are expected to be delivered through the SEP. In our experience NHSI would require the significant proportion of CIPs to be cost reduction with approximately 10-15% based on income.	▪ HHCT has assumed an increase in the delivery of recurrent CIPs to between 3.0% and 4.6% per annum between FY18 to FY22, including delivery of CIPs in FY21 and FY22 where there were previously none. ▪ HHCT has assumed £3.2 million of income CIP schemes in FY17/18 and FY18/19 related to planned repatriation of theatre activity and recoding activities, which need to be formally agreed with commissioners. An additional £1 million of surgery income is assumed through growing profitable areas in 18/19, of which plans are under development. ▪ The increase in the assumed level of recurrent cost CIP (and the income CIP) planned to be delivered appears challenging, particularly for HHCT at between 4.6% and 4.9% per annum given the Trust's current cost base, the track record of delivering recurrent CIP and the unconfirmed nature of the income CIP planned in FY17/18 and FY18/19. ▪ We recommend that the TPB agree on an approach to assumptions around delivery of forecast CIPs for the transaction LTFM, including the level of realistic CIP that could be delivered by the merged Trust.
Strategic Estates Partnership (SEP)	▪ A full analysis of SEP is shown on page 39.	▪ The financial impact of this is largely from 2019/20 onwards. Due to the materiality on the financial sustainability of HHCT it is likely that NHSI would seek further understanding of the plans. We recommend that HHCT is prepared to answer any further questions regarding the robustness of the future financials as further detail is worked up and once the FBC for the SEP (together with its implementation plans) are finalised.	▪ The level of income and expenditure from the SEP remains unchanged. ▪ We understand that the SEP continues to be non-contracted and the detailed schemes are still under development. ▪ We continue to recommend that the TPB agree on the level of SEP to be included in the transaction LTFM, including undertaking sensitivity and scenario analysis.
Capital Expenditure	▪ The capital expenditure forecast for 2016/17 matches annual plan return for 2016/17. However, we note that the capital expenditure for 2017/18 does not match the annual plan return.	▪ We understand that the capital expenditure forecast for 2017/18 onwards is based on a more up to date plan than the annual plan return.	▪ The NBV of PPE has increased from the July LTFM, based on a revised capital expenditure profile. ▪ We recommend that the requirement for the capital programme for the merged Trust be assessed as part of the preparation of the transaction LTFM.

Key assumptions - HHCT (cont.)

<table>
<tr><th>Area</th><th>Description</th><th>KPMG Comment and Recommendation - July</th><th>KPMG Comment and Recommendation - August</th></tr>
<tr><td>Workforce</td><td>■ Forecast workforce appears to be driven from the financials in the LTFM – it appears that there are no underlying workings of workforce profile going forwards.</td><td>■ We recommended that more detailed workforce modelling is carried out to provide a better understanding of future workforce requirements.</td><td>■ We understand that HHCT has developed a simple workforce model supported by an external consultancy. At present we understand this is with HHCTs HR department.
■ We recommend that this model is continued to be developed so that it presents an integrated model for changes in workforce resulting from increased activity and the impact of CIPs.</td></tr>
<tr><td>Working capital</td><td>■ Working capital days assumptions were as follows:
Working Capital Days
<table><tr><th></th><th>FY17</th><th>FY18</th><th>FY19</th><th>FY20</th><th>FY21</th><th>FY22</th></tr><tr><td>NHS Trade debtor days</td><td>35.8</td><td>35.6</td><td>35.1</td><td>20.3</td><td>20.4</td><td>20.5</td></tr><tr><td>Non-NHS trade debtor days</td><td>-</td><td>-</td><td>-</td><td>89.0</td><td>89.0</td><td>90.0</td></tr><tr><td>Trade payable days</td><td>105.8</td><td>106.1</td><td>108.1</td><td>79.1</td><td>79.5</td><td>79.8</td></tr></table></td><td>■ The way in which the LTFM calculates working capital can lead to large changes in the payables and receivables days from 2019/20 onwards leading to significant movements in cash. It is recommended that HHCT review these movements and adjust the input assumptions as appropriate.
■ We note that the payable days appears to be extremely high, well outside of BPPC guidance.</td><td>■ Payable days have reduced from 35.8 days in FY17 in the July version to 25.3 days in FY17 in the August LTFM. This is driven by assumptions on cash flow which HHCT have changed since the July LTFM.
■ There is a large decrease in receivable days and creditor days in FY20, assumed in order to manage the HHCT cash position. The impact is a net cash inflow of £4.1 million.
■ We recommend that further work is required to analyse and address this for the transaction LTFM.</td></tr>
<tr><td>Other balance sheet captions</td><td>Balance Sheet Other Captions
<table><tr><th></th><th>31 Mar 16</th><th>31 Mar 17</th><th>31 Mar 18</th><th>31 Mar 19</th><th>31 Mar 20</th><th>31 Mar 21</th><th>31 Mar 22</th></tr><tr><td>Inventories</td><td>1.7</td><td>1.7</td><td>1.7</td><td>1.7</td><td>1.7</td><td>1.7</td><td>1.7</td></tr><tr><td>Prepayments</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>Accruals</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td></tr><tr><td>Capital payables</td><td>(0.5)</td><td>(1.2)</td><td>(1.2)</td><td>(1.2)</td><td>(1.2)</td><td>(1.2)</td><td>(1.2)</td></tr><tr><td>Other payables</td><td>(4.7)</td><td>(3.1)</td><td>(3.1)</td><td>(2.5)</td><td>(2.5)</td><td>(2.5)</td><td>(2.1)</td></tr></table></td><td>■ The assumptions for these balance sheet captions are relatively simplistic resulting in minimal movements across the forecast period. Whilst this is normal at this stage of planning we recommend that further assessment of this in carried out as the LTFMs are further developed towards the FBC.</td><td>■ The modelling of other balance sheet captions has been further developed, but continues to be based on relatively simplistic straight line assumptions.
■ We recommend that further assessment of this in carried out as the LTFMs are further developed towards the FBC.</td></tr>
</table>

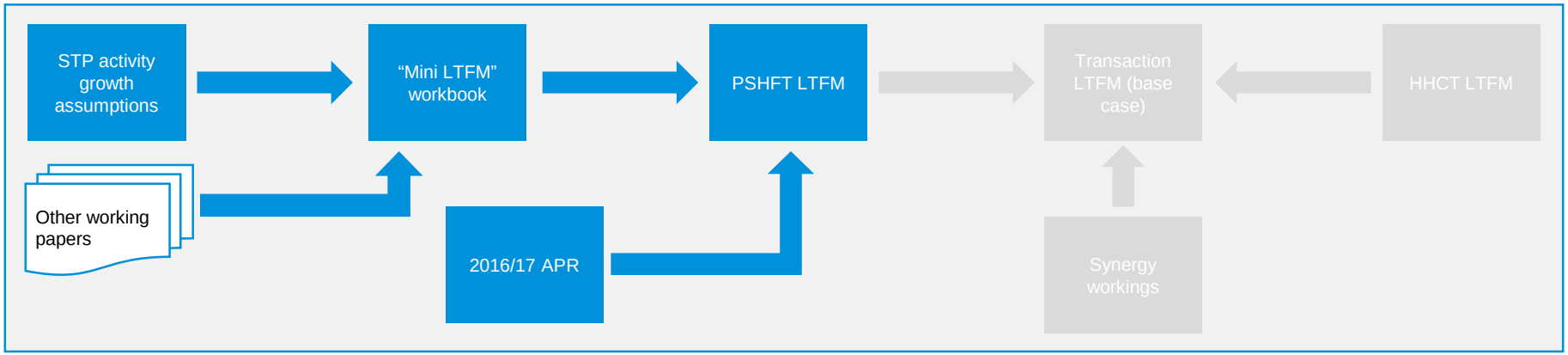
Key assumptions - HHCT (cont.)

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
PDC dividend	▪ The PDC dividend is assumed to be flat across the forecast period.	▪ The PDC Dividend calculation is a simplistic assumption – we recommend that the PDC Dividend model for the trust be reviewed.	▪ The PDC Dividend has been recalculated, resulting in a net benefit in each financial year across the forecast period due to the draw down on additional interest bearing loans and thereby affecting the assets and liabilities used in the calculation. ▪ We recommend that this is re-assessed as part of preparation of the transaction LTFM.
PDC and loans	▪ It has been assumed that future capital funding requirements will require commercial loans and will not be funded through PDC.	▪ This assumption appears to be prudent in the current climate.	▪ No update.
PFI	▪ We understand that the PFI forecasts are currently being developed in further detail.	▪ We have not been able to review the PFI assumptions are they were not complete at the time of the assessment.	▪ The PFI model has now been completed based on a recalculation exercise by external advisors to HHCT. While we have not assessed the revised model itself, the profile of payments in the LTFM are in line with the revised model
Normalisation adjustments	▪ No non-recurrent items have been identified in addition to the automated schedule in the LTFM	▪ We recommend that normalisation adjustment are considered further as development of the LTFM continues.	▪ Further adjustments to the non-recurrent items have been added within the LTFM. Along with S&T fund, three new items are added worth £1.79 million.
Contingency and Property Rental Increases	▪ Contingency and Property Rental Increases have been factored into the LTFM. These are listed under other expense.	▪ Contingency has increased slightly between the July and August LTFM. This remains in the other expense line.	▪ It is recommended that the contingency been split out into a non-recurrent line separate from other expense.

KPMG

Supporting analysis - PSHFT

Basis of preparation - PSHT



Basis of preparation

- PSHT has completed the standalone "assessment" 5 year LTFM, working alongside HHCT to align assumptions where appropriate, including the further alignment of assumptions following our Part 1 assessment.
- PSHT developed a "mini LTFM" workbook, which compiles information from various working papers into the categories required to populate the LTFM, but in a format which is easier to read and work with than the LTFM. The LTFM is directly linked to the mini LTFM.
- At Part 1, we noted that the LTFM is linked to two different versions of the APR and the Month 2 template and we recommended that such links point to a single version. While linking in workings to the LTFM is normal practice, we recommend that all external links are removed prior to final submission.
- PSHT has advanced and consolidated a number of working papers since our last review. We continue to recommend that this process continues towards NHSI submission, including removal of the external links and tidy up within the LTFM.
- Activity has been based on the 2016/17 baseline activity from the trust's APR, with growth assumptions aligned with the recently developed Sustainability and Transformation Plan ('STP') for Cambridge and Peterborough CCG ('C&P CCG') thereafter.

Basis of preparation (cont.)

- The LTFM is still not supported by workforce projections or detailed CIP analyses beyond the outturn year, but we understand that PSHT now plan to focus on these areas in the run up to FBC.
- We recommend that the LTFM is continued to be updated for current trading prior to final submission, including reflecting the impact of any reforecast of the 2016/17 position.
- On the following page we have highlighted specific observations around the LTFM set up and modelling approach, including areas which are outstanding for our Part 2 assessment and recommendations for changes to approach.

Approach to consolidating into transaction LTFM

- We note that the approach to constructing the transaction LTFM has been carried out within an extremely short timespan (approximately one week).
- Whilst the work to make the two standalone LTFMs as consistent as possible has likely simplified the process, we would typically expect the transaction LTFM to take much longer and the modelling team should continue to refine the transaction LTFM in the coming weeks as the FBC is further developed.

LTFM set up and modelling observations

As part of our work we have made a number of observations around the overall set up and modelling approach of the LTFM template at PSHFT. Whilst we recognise that the LTFM version we initially reviewed as part of our assessments was very much a work in progress, and where possible we have provided feedback on these areas during the course of our work, the findings from our initial assessment and our update against these are summarised below:

Area	Comments - July	Priority - July	Comments - August	Priority - August
Outstanding elements of the LTFM	We identified a number of areas of the LTFM which had yet to be completed in the version we were provided with to assess, which we recommend are completed as a priority: — The inclusion of the Market Forces Factor (split out from tariff-driven income) in the appropriate income sections. — The Checklist tab should be completed. — The LTFM includes no normalisation adjustments in the 'I_NE' tab. The trust should consider whether there are one-off or non-recurrent items of income or expenditure that it should include here. For example, it is likely that the S&T funding in 2016/17 would be considered as non-recurrent income. — Historical income and activity numbers are consolidated into a single line. We recommend that this is analysed out into the same categories as future years so that comparisons can be drawn from actuals to projections.	H	We have identified some of the changes that the trust has made to the model as per our recommendations. The changes identified are: — The inclusion of the Market Forces Factor has now been included as a separate line within the base income worksheet. — The Checklist tab has also been completed in the August LTFM following the recommendation made in July. — The LTFM includes normalised expenditure in the 'I_NE' worksheet as per the previous recommendation. — Historical income and activity numbers have been analysed into the same categories as future years to compare actuals to projections.	N/a
External links and reference errors	The LTFM links to 21 external Excel files. We recommend that these links are reviewed to remove duplicates and reduce the likelihood of referencing errors. All external links should be removed prior to submitting the LTFM for assessment by NHSI. In addition, we recommend that the number of working papers is consolidated to enable simpler updating and increase the level of version control.	H	There has been significant work carried out since the last review in reducing the number of linked workbooks. However given the short timescale of the project the work has not yet been completed. We recommend that this process continues towards NHSI submission, including removal of the external links and tidy up within the LTFM.	L
Reconciliation errors	The balance sheet in 2016/17 does not balance and the difference of £108k persists in subsequent years in the LTFM. We note that the monthly phased balance sheets do not show this error and that the difference appears to arise from the cash and loan balances. We recommend this is addressed as a priority.	L	Since the previous review of the July LTFM the balance sheet difference of £108k has now been resolved.	N/a

LTFM set up and modelling observations (cont)

Area	Comments - July	Priority - July	Comments - August	Priority - August
Cost Improvement Plans (CIPs)	PSHFT has included 2016/17 CIPs within the baseline financial position. In our experience NHSI will require this to be analysed in a consistent way to subsequent years in the LTFM. We therefore recommend that this is extracted from the baseline and included in the 'I_CIP' worksheet. We recommend any income CIPs are included in the 'memo' section on the 'I_CIP–summary' inputs so that they are correctly identified on the analysis performed in the 'C_CIP' tab.	M	PSHFT has since the last review removed the 2016/17 CIPs from the baseline financial position. These are now showing as a separate line item.	N/a
Workforce	The staff numbers presented in the 'I_Cost (Base)' tab are calculated from movements in the projected staff costs (driven by activity and CIP impacts). We recommend that the Trust develops a quantified workforce plan which reflects the staff numbers included in the LTFM. There are significant movements (both upwards and downwards) under several agency staff categories between 2015/16 and 2016/17. The Trust should ensure these are supported by relevant plans and analysis.	H	At present there is no workforce model for PSHFT. It is recommended that a workforce model be developed in order to aid PSHFT in understanding their future workforce requirements.	H
Income	The Trust received £18.3m of income in 2015/16 from the UnitingCare Partnership joint venture. This is included under a single line as "non-protected/non-mandatory revenue", whereas it relates to non-elective activity. We recommend that this is reallocated into the relevant non-elective categories to allow for trend analysis between historical and projected periods.	L	£18.3m received in 2015/16 from the UnitingCare Partnership joint venture has been now removed from the "non-protected/non-mandatory revenue" category. This has been re-categorised into non-elective income following the recommendation in July. This allows greater trend analysis.	N/a

Reconciliation of input data - PSHT

Reconciliation of SOCI inputs						
£m	Audited accounts	APR	LTFM - August		Variance	
	2015/16	2016/17	2015/16	2016/17	2015/16	2016/17
Income						
Clinical	230.7	254.9	230.7	241.6	0.0	-13.3
Non-clinical	30.4	29.5	30.1	42.8	-0.3	13.3
Total income	**261**	**284.4**	**260.8**	**284.4**	**-0.3**	**0.0**
Expenditure						
Pay	-170.8	-174.6	-171.0	-174.6	-0.2	0.0
Non-pay	-78.9	-79.6	-80.0	-80.9	-1.1	-1.3
PFI / LIFT	-21.2	-20.7	-19.4	-20.7	1.8	0.0
Total expenditure	**-270.8**	**-274.9**	**-270.4**	**-276.2**	**0.4**	**-1.3**
EBITDA	**-9.8**	**9.5**	**-9.6**	**8.2**	**0.2**	**-1.3**
EBITDA margin %	-4%	3%	-4%	3%	0%	0%
Other operating expenses	-13.5	-15	-13.5	-13.7	0.0	1.3
Loss on disposal	-0.1	0	-0.1	0.0	0.0	0.0
Non-operating expenses	-13.8	-14.6	-13.8	-14.7	0.0	-0.1
Surplus/(deficit)	**-37.1**	**-20.2**	**-37.0**	**-20.2**	**0.1**	**0.0**

Reclassification of S&T funding and penalties

Reclassified restructuring costs

Source: Management Information: PSHT LTFM, PSHFT APR

- The table above shows a reconciliation of the LTFM outputs to the PSHT 2015/16 audited accounts and the 2016/17 Annual Plan Return ('APR').
- We have identified a number of differences in classification in both years. We have commented on the differences in the outturn year above. For 2015/16, we recommend that the Trust prepares a working paper to explain the differences for the purposes of the formal transaction review.
- We recommend that the LTFM is updated to the latest available forecast position on an ongoing basis to ensure that the LTFM reflects the latest available current and forecast financial position.
- The forecast balance sheet as at 31 March 2017 will need to be checked back to any reforecast balance sheet in PSHT's management accounts when available. Currently the LTFM functionality and cash modelling results in differences which therefore needs to be revisited when complete.
- As part of our work to reconcile the input data we held a conversation with Cambridge and Peterborough CCG. The CCG confirmed that the STP growth assumptions were he most appropriate and up to date growth rates to use. We understand that the STP activity workings form the basis of the activity growth rates assumed in the PSHT LTFM.

Mapping of LTFM July to LTFM August

Movement of financials since July LTFM - PSHFT																		
	LTFM - July						LTFM - August						Difference					
	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Income																		
Clinical	241.6	248.3	254.3	260.5	269.3	278.4	241.6	247.5	253.4	259.6	268	276.6	0	-0.8	-0.9	-0.9	-1.3	-1.8
Non-clinical	42.8	29.8	30.2	30.6	31	31.4	42.8	29.7	30	30.2	30.6	30.9	0	-0.1	-0.2	-0.4	-0.4	-0.5
	284.4	**278.1**	**284.5**	**291.1**	**300.3**	**309.8**	**284.4**	**277.2**	**283.4**	**289.9**	**298.5**	**307.5**	**0**	**-0.9**	**-1.1**	**-1.2**	**-1.8**	**-2.3**
Expenditure													0	0	0	0	0	0
Pay	-174.6	-171.8	-173.5	-175.2	-179.3	-183.4	-174.6	-171.3	-172.7	-174.1	-177.7	-181.3	0	0.5	0.8	1.1	1.6	2.1
Non-pay	-80.9	-85	-88.4	-92.9	-97.6	-102.4	-80.9	-84.5	-87.5	-91.6	-95.7	-99.9	0	0.5	0.9	1.3	1.9	2.5
PFI / LIFT	-20.7	-21.1	-21.5	-21.9	-22.4	-22.9	-20.7	-21.1	-21.5	-21.9	-22.4	-22.9	0	0	0	0	0	0
Total expenditure	**-276.3**	**-277.9**	**-283.4**	**-290**	**-299.2**	**-308.7**	**-276.2**	**-276.9**	**-281.7**	**-287.6**	**-295.9**	**-304.2**	**0.1**	**1**	**1.7**	**2.4**	**3.3**	**4.5**
EBITDA	**8.2**	**0.2**	**1.1**	**1**	**1**	**1.1**	**8.2**	**0.3**	**1.7**	**2.3**	**2.7**	**3.3**	**0**	**0.1**	**0.6**	**1.3**	**1.7**	**2.2**
EBITDA margin %	2.87%	0.08%	0.40%	0.36%	0.34%	0.36%	2.87%	0.12%	0.60%	0.78%	0.90%	1.07%	0	0	0	0	0	0
Other operating expenses	-13.7	-14.1	-14.3	-14.7	-14.7	-14.8	-13.7	-14.1	-14.3	-14.7	-14.7	-14.8	0	0	0	0	0	0
Non-operating income	-	-	-	-	-													
Non-operating expenses	-14.7	-15.4	-16.1	-17.4	-18.2	-19.1	-14.7	-15.4	-16.1	-17.4	-18.3	-19.2	0	0	0	0	-0.1	-0.1
Surplus/(deficit)	-20.2	-30.2	-29.3	-31	-32	-32.8	-20.2	-30.1	-28.7	-29.8	-30.3	-30.7	0	0.1	0.6	1.2	1.7	2.1

Source: Management Information: PSHT LTFM

- There have been a number of key changes which have been made between the July and August LTFMs. A number of these have been done based on prior recommendations following review of the July LTFM. A full bridge of the SOCI between the July and August LTFMs has been produced overleaf. However, the high level changes are as follows:
  - **Income** – the inclusion of QIPP in the August LTFM where previously this was not included.
  - **Pay expenditure** – the movement relates to the impact of QIPP reducing the forecast activity and thus pay expenditure has dropped as a result of marginal cost assumptions.
  - **Non-pay expenditure** – the movement reflects the impact of changes for the inclusion of QIPP for marginal non-pay expenditure.

July to August LTFM Bridge

Reference	Bridge (+ve = improvement)	Mar-18	Mar-19	Mar-20	Mar-21	Mar-22
Net Surplus July		**-30.2**	**-29.3**	**-31.0**	**-32.0**	**-32.8**
1	Changes in base case income following inclusion of QIPP	-1.5	-2.3	-3.1	-4.3	-5.6
2	Increased drugs income from pass through drugs	0.7	1.4	2.3	3.0	3.8
3	Reduction in Inflation assumption for Education and Training.	-0.1	-0.2	-0.4	-0.4	-0.5
4	Activity related cost reduction based on marginal cost of reduced income.	1.0	1.7	2.4	3.4	4.5
Net Surplus August		**-30.1**	**-28.7**	**-29.8**	**-30.3**	**-30.7**
MEMO	Reclassification of CIP from baseline	1.2	1.4	1.4	1.3	1.3

Source: Management Information: PSHT LTFM; KPMG analysis

Overview

- The following adjustments have been made for changes in key assumptions between the July 2016 LTFM and the August 2016 LTFM:
  1. The inclusion of the QIPP assumption gives PSHT a consistent approach with that of HHCT. There is a drop in income driven by the inclusion of the QIPP reducing the level of activity.
  2. An adjustment in treatment for pass through drugs has led to an increase in income compounded year on year by inflation.
  3. There has been a reduction in the inflation assumption built into the E&T funding. The change was agreed following discussions with HHCT to take a consistent approach.
  4. With the inclusion of QIPP there has been a drop in the forecast expenditure across pay and non-pay, based upon marginal cost.

  MEMO. Identification of the marginal cost saving on additional income as CIP, based on July review recommendation. There is no impact on the base line expenditure from this reclassification.

Financial overview - PSHFT SOCI

SOCI overview - PSHFT								
£m	FY16 Actual	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	FY16-FY21 CAGR
Income								
Tariff income	215.7	239.4	245.2	251.0	257.0	265.2	273.6	
Other clinical income from mandatory services	13.5	1.6	1.7	1.8	1.9	2	2.2	-31.50%
Total NHS clinical Income	229.3	241	246.8	252.7	258.9	267.2	275.8	3.10%
Private patient revenue	0.5	0.7	0.7	0.7	0.7	0.8	0.8	6.90%
Other non protected revenue	0.9	-	-	-	-	-	-	-100.00%
Other Operating revenue	30.1	42.8	29.7	30	30.2	30.6	30.9	0.30%
Total Income	**260.8**	**284.4**	**277.2**	**283.4**	**289.9**	**298.5**	**307.5**	**2.70%**
Expenses								
Employee benefit expenses	-171	-174.6	-171.3	-172.7	-174.1	-177.7	-181.3	0.80%
Drug expenses	-28.1	-18	-18.7	-19.4	-20.1	-20.8	-21.6	-5.80%
Clinical supplies and services expenses	-25.9	-25.1	-25.3	-25.8	-26.2	-26.6	-27.1	0.60%
Other expenses	-45.5	-58.5	-61.5	-63.9	-67.2	-70.7	-74.2	9.20%
Total Expenses	**-270.5**	**-276.2**	**-276.9**	**-281.7**	**-287.6**	**-295.9**	**-304.2**	**1.80%**
EBITDA	**-9.7**	**8.2**	**0.3**	**1.7**	**2.3**	**2.7**	**3.3**	
Non-operating items								
Gain/(loss) on asset disposals	-0.07	-	-	-	-	-	-	-100.00%
Net interest expense	-13.8	-14.7	-15.4	-16.1	-17.4	-18.3	-19.2	5.80%
Depreciation and Amortisation	-13.5	-13.7	-14.1	-14.3	-14.7	-14.7	-14.8	1.80%
PDC Dividend	-	-	-0.9	-	-	-	-	
Impairment of fixed assets	-0.1	-	-	-	-	-	-	-100.00%
Net deficit	**-37.1**	**-20.2**	**-30.1**	**-28.7**	**-29.8**	**-30.3**	**-30.7**	**-3.90%**
KPIs								
EBITDA margin	-3.70%	2.90%	0.10%	0.60%	0.80%	0.90%	1.10%	
Net margin	-14.20%	-7.10%	-10.80%	-10.10%	-10.30%	-10.20%	-10.00%	-6.50%

Source: Management Information: PSHT LTFM

Activity increases are assumed at between 3.5% and 4.1% across non-elective, elective admissions and outpatient and A&E attendances. PSHFT has assumed that the CCG's QIPP schemes will not achieve any reduction in activity.

£13m one-off STF income in FY17 which flows through to EBITDA in this year.

PSHFT has assumed significant CIPs in FY18, which more than offsets the staff requirement needed to deliver the growth in activity.

Interest expense continues to rise steadily due to additional deficit loan funding required each year throughout the projected period.

The significant increase in EBITDA margin in FY17 is driven by a high CIP target in along with STF funding.

Financial overview - PSHFT SOFP

SOFP overview - PSHFT £m	31-Mar-16 Actual	31-Mar-17 Outturn	31-Mar-18 Forecast	31-Mar-19 Forecast	31-Mar-20 Forecast	31-Mar-21 Forecast	31-Mar-22 Forecast	FY16-FY21 CAGR
Non-current assets								
PPE, intangibles & other	424	431	429.1	425	430.5	426.4	422.6	
Current assets								
Inventories	3.6	3.5	3.5	3.5	3.5	3.5	3.5	-0.50%
NHS trade receivables	11.6	13.1	13.1	13.1	12.9	13.4	13.8	2.80%
Non-NHS trade receivables	-	-	-	-	-	-	-	
Other assets	14.4	15.4	15.4	15.4	15.4	15.4	15.4	1.40%
Cash	1	20.1	2.1	3.5	4.8	7.5	10.6	51.00%
Total current assets	**30.6**	**52.1**	**34.1**	**35.5**	**36.7**	**39.8**	**43.3**	**0.1**
Total assets	**454.6**	**483.2**	**463.2**	**460.5**	**467.2**	**466.2**	**465.9**	**0.50%**
Current liabilities								
Trade Payables, Current	-31.7	-31	-31	-31	-31.5	-32.8	-34.1	0.70%
Other Payables, Current	-	-11.8	-11.8	-11.8	-11.8	-11.8	-11.8	
Capital Payables, Current	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	-9.9	0.00%
Accruals, Current	-	-	-	-	-	-	-	
Other liabilities	-12.6	-12.3	-26.5	-14.4	-12.3	-12.3	-2.4	-0.50%
Total current liabilities	**-54.2**	**-65**	**-79.2**	**-67.1**	**-65.5**	**-66.8**	**-58.2**	**4.30%**
Non-current liabilities								
PFI liability	-347.2	-337.7	-328.2	-318.7	-309.2	-299.8	-299.8	
Loans	-18.3	-46.8	-52.3	-99.9	-147.5	-185	-224	
Other liabilities	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	
Total liabilities	**-367.8**	**-386.8**	**-382.7**	**-420.8**	**-458.9**	**-487**	**-526**	
Net assets/(liabilities)	32.6	31.4	1.3	-27.4	-57.2	-87.6	-118.3	
Taxpayer's equity								
Public dividend capital	264.2	283.2	283.2	283.2	283.2	283.2	283.2	1.40%
Accumulated loss	-326.9	-347.1	-377.2	-405.9	-435.7	-466.1	-496.8	7.40%
Revaluation reserve	95.3	95.3	95.3	95.3	95.3	95.3	95.3	0.00%
Total taxpayers' equity	**32.6**	**31.4**	**1.3**	**-27.4**	**-57.2**	**-87.6**	**-118.3**	**-221.90%**
KPIs								
NHS trade receivables days	18.2	19.6	19.1	18.7	18	18	18	-0.30%
Trade payables days	114.9	110	105.8	102.5	100	100	100	-2.70%

Following the investment in radiotherapy, MRI, UPS and PAS in FY17, the only non-maintenance capital expenditure is a £2.1m additional investment in PAS in FY18 and the £8.8m cost to convert the 4th floor into wards.

The LTFM calculates working capital movements using different method from year 4 (FY20). The impact is a net cash inflow which appears not to reflect the intended output. This line has now been addressed to reflect historic trend

Deficit funding are assumed to be received as ITFF loans instead of PDC.

Trade payables days have been recalculated following review of the July LTFM. These are now in line with historic trend

Prior to this period trade creditor days appear to be extremely high, well outside of BPPC guidance

Source: Management Information: PSHT LTFM

Key assumptions - PSHFT

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
Sustainability and Transformation Funding ('STF')	▪ PSHFT has assumed that £10.8 million of STF will be received in 2016/17 along with a further £2.5 million in penalties. ▪ No further STF has been included in the LTFM.	▪ We understand that STF has not been included in the LTFM from 2021 on the understanding that the funding may go directly to CCGs with no direct impact on PSHFT revenue. The guidance indicates that funding will be provided from FY21 onwards, however it is unclear whether this flow directly to providers or commissioners.	▪ Following discussions with HHCT, STF funding for FY21 and FY22 is not included in both standalone LTFMs and so SHFT and HHCT assumptions now align.
Cost inflation	▪ Cost inflation has been assumed to be in line with NHSI guidance for FY18 to FY21. ▪ Cost inflation has been included for the outturn year. ▪ There are no published final year (FY22) assumed to be the same as the prior year.	▪ We have identified that the FY17 to FY21 cost inflation assumptions are in line with NHSI guidance. ▪ Cost inflation should not normally be included for the outturn year, as the outturn year is based on the trust's operational plan. We note that this has no impact on the output of the LTFM, but we recommend that it is removed for clarity.	▪ Cost inflation for the outturn year has now been removed as per the recommendation in July. ▪ The remainder of the cost inflation assumptions remain in line with NHSI guidance.
Tariff inflation	▪ NHSI guidance suggests (2%) tariff deflation for the period 2016/17 to 2020/21, however the PSHFT LTFM has assumed the following: - 2016/17 – 1.8% - 2017/18 – 0.3% inflation - 2018/19 – 0% - 2019/20 – 0% - 2020/21 – 0.9% inflation - 2021/22 – 0.9% inflation	▪ Tariff inflation should not normally be included for the outturn year, as the outturn year is based on the trust's operational plan. ▪ We understand that PSHFT sought guidance from NHSI around that application of the tariff deflator guidance, and they advised that the tariff deflation should be net of "Overall" cost inflation. The figures assumed match this assumption, but we have not verified this treatment with NHSI.	▪ Tariff inflation for the outturn year has now been removed as per the recommendation in July. The remainder of the tariff inflation assumptions remain unchanged. ▪ There is a difference in non-protected, non-mandatory clinical income inflation assumption with PSHT. We recommend that HHCT and PSHT should seek to align these assumptions. ▪ We identified a difference in Education and Training inflation assumptions between HHCT and PSHT, but we understand these are now aligned between both organisations. ▪ There is a small difference in assumptions between HHCT and PSHT with respect to Capex inflation for the year FY18. We recommend that HHCT and PSHT seek to align these assumptions.

Key assumptions - PSHFT (cont.)

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
Activity growth	▪ Weighted average activity growth excludes QIPP and is included at the following rates: - Elective: 3.5% - Non-elective: 4.1% - Outpatients: 3.3% - A&E: 3.5% ▪ The marginal cost growth assumption is assumed at 56% and a working has been provided to demonstrate this.	▪ We understand that QIPP has been excluded from the activity projections because of the Board's concern at the lack of detail available from the CCG on QIPP plans. ▪ In the course of our work we confirmed with Cambridge and Peterborough CCG that the activity inflation used as the input for working was in line with their 2016/17 commissioning intentions, and that the 2017/18 onwards activity growth assumptions were in line with their most up to date forecasts. ▪ Separately we assessed that the activity growth in the underlying LTFM workings was driven based on these assumptions, which also align to the Cambridgeshire and Peterborough footprint STP.	▪ Following the recommendations in July and alignment of assumptions with HHCT, PSHFT have included the assumption that Cambridge and Peterborough CCG will achieve QIPP.
CIPs	▪ No CIPs modelled for the outturn year, as they are built into the baseline. ▪ Employee costs: 4.8% in 2017/18, 2.0% thereafter ▪ Drug expenses: 2.0% each year ▪ Clinical supplies and services: 2.0% each year ▪ Other expenses: 1.4% each year	▪ The Trust has assumed a significant CIP achievement for 2016/17 and 2017/18. We recommend that 2016/17 CIPs are removed from the baseline and allocated out to relevant cost categories in line with subsequent years. This enables the LTFM to calculate total CIP target for this year. ▪ The 2017/18 CIP target of 2% efficiency plus £5m is 3.8% of the cost base. This is relatively high and the we recommend the Trust has robust plans and analysis to be able to justify this. ▪ PSHFT has modelled CIPs at 2% (equal to the assumed tariff deflator) for most categories after 2017/18. We recommend that the Trusts identifies high level themes for these years.	▪ Cost CIPs have been removed from the base line cost and included as separate CIP cost lines within the LTFM. ▪ Reclassification of £6 million of recurrent income CIP schemes have been added across the forecast period since the July LTFM, assuming PSHT's CIP delivery at 2.4/2.5% per annum. ▪ The level of recurrent CIP to be delivered year-on-year appears challenging and any risk of non-achievement should be considered as part of sensitivity analysis in the transaction LTFM for the merged Trust.

Key assumptions - PSHFT (cont.)

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
Income	▪ Activity-driven income (elective, non-elective, outpatient and A&E attendances) remains constant on for each unit of activity. ▪ Other clinical, non-tariff income: increases by £4.3m (14%) from 2016/17 to 2021/22	▪ We understand that the increase in other clinical, non-tariff income is driven by activity. The Trust should ensure that a description and analysis is available that supports this.	▪ Activity-driven income (elective, non-elective, outpatient and A&E attendances) remains constant on for each unit of activity and therefore is unchanged from July. ▪ We recommend that the Trust should ensure that a description and analysis is available that supports this.
Capital expenditure	▪ Capital expenditure for historical periods has not been populated. ▪ Projected capital expenditure for 2018/19 to 2021/22 *excluding the 4th floor conversion in 2019/20) is significantly less than in previous years.	▪ The Trust should ensure it is able to justify a reduced level of capital expenditure.	▪ Capital expenditure for historical period is now added. ▪ Projected capital expenditure for 2018/19 to 2021/22 *excluding the 4th floor conversion in 2019/20) is significantly less than in previous years. ▪ The Trust should ensure it is able to justify a reduced level of capital expenditure.
Working capital	▪ Trade payables days are assumed at over 100 days. ▪ Movements in the trade payables balance creates cash inflows of £0.9m in 2019/20, £1.4m in 2020/21 and £1.5m in 2021/22. ▪ Movements in the trade receivables balance creates cash outflows of £0.4m in 2020/21 and £0.5m in 2021/22.	▪ The assumed trade payables days should be aligned to the historical payment period unless the Trust intends to make changes in this area. ▪ As the LTFM calculated the payables and receivables balances in different way from 2019/20, we recommend that the Trust adjusts the inputs to the model so that the output of the model is consistent with expected payables and receivables periods.	▪ The Trust's payable and receivable days in the August LTFM now broadly align with previous historical payment periods.
PDC and loans	▪ The Trust has calculated the required deficit funding by initially populating the LTFM without such funding, then adding the loan value required to bring the year end cash balance up to £2m.	▪ The Trust should ensure that the LTFM reflects sufficient loans to cover intra-year and intra-month cash requirements.	▪ The LTFM shows that in all but the outturn year the trust expects to have a cash surplus position. A repayment of loans in FY19 demonstrates that PSHFT have factored in repayments of loans.

Key assumptions - PSHFT (cont.)

Area	Description	KPMG Comment and Recommendation - July	KPMG Comment and Recommendation - August
PFI	▪ The PFI section of the LTFM is linked to two different versions of the APR as well as a separate PFI workings document.	▪ The PFI inputs for the LTFM should be driven by a single integrated PFI working document.	▪ The PFI calculations in the August LTFM now link to a separate memo worksheet within the LTFM. It is recommended that a fully worked PFI model detailing the breakdown of the memo be created.
PDC dividend	▪ The projections suggest that PSHFT will temporarily move into a net asset position for 2017/18 only and will therefore be liable to pay a PDC dividend in that year. ▪ The PDC interest rate has been input at 0.2%.	▪ We understand that the Trust has calculated the PDC outside of the LTFM to compensate for a simplification of the calculation within the LTFM. The Trust should ensure it has the analysis to demonstrate this to NHSI for the formal transaction review.	▪ The PDC dividend is zero across the forecast period given changes to the Trust's asset position. ▪ We recommend that this is re-assessed as part of preparation of the transaction LTFM.
Normalisation adjustments	▪ No non-recurrent items have been identified in addition to the automated schedule in the LTFM	▪ We recommend that normalisation adjustment are considered further as development of the LTFM continues.	▪ There have been no additional normalised adjustments made to the current LTFM since July. ▪ It is recommended that normalised adjustments are made where appropriate.
Workforce	▪ Forecast workforce appears to be driven from financials – appears to be no underlying workings of workforce profile going forwards	▪ We recommended that more detailed workforce modelling is carried out to provide a better understanding of future workforce requirements.	▪ There is currently no workforce model for PSHFT. ▪ We continue to recommend that a workforce model is developed to allow PSHFT to plan future workforce requirements, so that it presents an integrated model for changes in workforce resulting from increased activity and the impact of CIPs.
Contingency and Property Rent Increases	▪ PSHFT have entered an element of contingency and property rent increases into their LTFM. This gives a more prudent forecast for the trust.	▪ It is recommended that agreement be reached with HHCT as to the level of this entry for the transaction LTFM.	▪ The contingency and property rent increases remains within the LTFM.

Appendices

1. **Scope of work**
2. **Sources of information**

Appendix 1 - Scope of work

Scope of work

Part 1 – Assessment of standalone LTFMs for PSFHT & HHCT

- Assessment of existing LTFMs developed by HHCT & PSHFT teams, and review of inputs against source data.
- Assessment of appropriate model set up & use.
- Bridging to financial forecasts undertaken for OBC
- Incorporation of the latest balance sheet forecasts
- PFI specific modelling (I&E, balance sheet, phasing of working capital)
- Population of standalone assumptions (inflation, activity growth, service developments, pay and other cost inflation, CIP requirements, contingencies, cost pressures, the efficiency requirements)
- Cashflow and working capital forecasts
- Capital expenditure forecasts
- Workforce

Part 2 – Assessment of standalone LTFMs for PSFHT & HHCT

1. Assess progress against KPMG recommendations from Part 1 and revised assumptions for the standalone LTFMs for HHCT and PSHFT
   a) Assess and comment on progress against the KPMG recommendations made in Part 1.
   b) Assess and comment on the application of revised assumptions to the HHCT LTFM.
   c) Assess and comment on the application of revised assumptions to the PSHFT LTFM.
2. Summarise and comment on a bridge of the HHCT financials and the PSHFT financials in the latest LTFMs to the respective LTFMs in Part 1.

Appendix 2 - Sources of information

PSHFT	HHCT
Long Term Financial Model	Long Term Financial Model
PSHFT Forward Plan Financial Return (IFRS) Final - Plan for YE March 2017	2015/16 Financial Monitoring and Accounts
PSHFT Trust Annual Plan FY17	2016/17 Financial Monitoring (Full plan)
Board Reports FY15-FY17	STP Provider workings
Capital Programme for APR	CIP Tracker 2016/17-2017/18
CIPs 2013/14-2015/16	SEP outlying presentation
STP Provider workings	Activity workings
Mini LTFM summary	CIP 3 year opportunities
PFI workings	SEP high level financial forecasts
FBC to OBC reconciliation	Loan workings
Other underlying working papers	

HHCT-PSHFT Merger Programme

Assessment of Transaction LTFM in relation to proposed transaction

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14 September 2016

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Private and confidential

14 September 2016

The Directors
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NHS Foundation Trust
Peterborough City Hospital
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Peterborough
PE3 9GZ

The Directors
Hinchingbrooke Health Care NHS Trust
Hinchingbrooke Hospital
Hinchingbrooke Park
Huntingdon
Cambridgeshire
PE29 6NT

Attention: Mark Avery, Deputy Director – System Transformation

Ladies and Gentlemen

Hinchingbrooke Health Care NHS Trust ('HHCT') and Peterborough and Stamford Hospitals Foundation Trust ('PSHFT') proposed merger – Transaction LTFM assessment

In accordance with the terms of reference set out in our Contract Letter dated 11 July 2016, as amended by our Variation Letter dated 19 August 2016 (together 'our Contract Letter'), we enclose our report on the transaction LTFM assessment in relation to the proposed merger of HHCT and PSHFT.

The scope of work set out in our Contract Letter is attached as Appendix 1 to the report. This details the agreed scope of our enquiries. The important notice overleaf should be read in conjunction with this letter.

Our report is for the benefit and information only of those Parties who have accepted the terms and conditions of our Contract Letter and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent, except as specifically permitted in our Contract Letter. To the fullest extent permitted by law, we will not accept responsibility or liability to any other party (including those Parties' legal and other professional advisers) in respect of our work or the report.

Yours faithfully

KPMG LLP

KPMG LLP

Important notice

- This document has been prepared in accordance with our contract letter dated 11 July 2016, as amended by our Variation Letter dated 19 August 2016. It is subject to the terms and conditions of that contract.
- Our fieldwork for Part 1 (the initial assessment of the standalone Long Term Financial Models ('LTFM') commenced on 18 July 2016 and was completed on 21 July 2016. A draft report outlining our initial findings and recommendations from Part 1 was issued dated 22 July 2016. Our fieldwork for Part 2 (update to the assessment of the standalone LTFMs) commenced on 22 August and was completed on 30 August 2016. The final version of the report dated 14 September covering Part 1 and Part 2 should be read in conjunction with this report.
- Our fieldwork for Part 3 (assessment of the Transaction LTFM) commenced on 1 September 2016 and was completed on 7 September 2016. We have not undertaken to update our report for events or circumstances arising after that date
- Our report is for the benefit and information of the addressees only and should not be copied, referred to or disclosed, in whole or in part, without our prior written consent. The scope of work for this report, included in Appendix 1, has been agreed by the addressees and to the fullest extent permitted by law we will not accept responsibility or liability to any other party (including the addressees' legal and other professional advisers) in respect of our work or the report.
- In preparing our report, our primary source of information has been information supplied by Hinchingbrooke Health Care NHS Trust ('HHCT') and Peterborough and Stamford Hospitals Foundation Trust ('PSHFT'). We do not accept responsibility for such information and have not in this stage of our work sought to establish its reliability through reference to other evidence.
- The scope and assessment procedures carried out are limited and substantially less than those which would have been performed in a due diligence exercise. You should note that our findings do not constitute recommendations to you as to whether or not you should proceed with the potential merger of HHCT and PSHFT. Instead, they are intended to highlight key issues and further required actions to be considered as HHCT and PSHFT further advance their LTFMs and proceed towards drafting a Full Business Case for the merger.
- Our report makes reference to 'KPMG Analysis'; this indicates only that we have (where specified) undertaken certain analytical activities on the underlying data to arrive at the information presented; we do not accept responsibility for the underlying data.
- The analysis of underlying surplus/deficit is for indicative purposes only. We have sought to illustrate the effect on reported surplus/deficit of adjusting for those items identified by management in the course of our work that may be considered to be 'non-recurring' or 'exceptional'. However, the selection and quantification of such adjustments is necessarily judgmental. Because there is no authoritative literature or common standard with respect to the calculation of 'underlying' surplus/deficit, there is no basis to state whether all appropriate and comparable adjustments have been made. In addition, while the adjustments may indeed relate to items which are 'non-recurring' or 'exceptional' or otherwise unrepresentative of the trend, it is possible that the surplus/deficit for future periods may be affected by such items, which may be different from the historical items.
- The information contained herein is of a general nature and is not intended to address the circumstances of any particular individual or entity. Although we endeavour to provide accurate and timely information, there can be no guarantee that such information is accurate as of the date it is received or that it will continue to be accurate in the future. No one should act on such information without appropriate professional advice after a thorough examination of the particular situation.
- We must emphasise that the realisation of the prospective financial information set out within our report is dependent on the continuing validity of the assumptions on which it is based. We accept no responsibility for the realisation of the prospective financial information. Actual results are likely to be different from those shown in the prospective financial information because events and circumstances frequently do not occur as expected, and the differences may be material.
- This report has been reviewed by the management of Hinchingbrooke Health Care NHS Trust or Peterborough and Stamford Hospitals Foundation Trust, who have provided comments on the factual accuracy of its contents.

Glossary of terms

A&E	Accident and Emergency
APR	Annual Plan Return
BPPC	Better Payments Practice Code
C&P CCG	Cambridge and Peterborough CCG
CCG	Clinical Commissioning Group
CFO	Chief Financial Officer
CIP	Cost Improvement Programme
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation
FYxx	Financial Year xx
HHCT	Hinchingbrooke Health Care NHS Trust
ITFF	Independent Trust Financing Facility
LIFT	Local Improvement Finance Trust
LTFM	Long Term Financial Model
MFF	Market Forces Factor
MRI	Magnetic Resonance Imaging
NHSI	NHS Improvement
OBC	Outline Business Case
PAS	Patient Administration System
PDC	Public Dividend Capital
PFI	Private Finance Initiative
PLICS	Patient Level Information Costing System
PPE	Property, Plant and Equipment
PSHFT	Peterborough and Stamford Hospitals NHS Foundation Trusts
QIPP	Quality, Innovation, Productivity and Prevention
SEP	Strategic Estates Partnership
SLR	Service Line Reporting
SOCI	Statement of Comprehensive Income
SOFP	Statement of Financial Position
STF	Sustainability Transformation Funding
STP	Sustainability and Transformation Plan
TPB	Transition Programme Board

Contents

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KPMG

Executive Summary

Executive Summary - Introduction

Introduction

Background

- The Boards of Peterborough and Stamford Hospitals NHS Foundation Trusts ('PSHFT') and Hinchingbrooke Health Care NHS Trust ('HHCT') approved the Outline Business Case ('OBC') recommending the merger of the two organisations in May 2016.
- The current timetable is geared towards the merged organisation being operational from 1 April 2017. As a result, the two organisations are running an accelerated transaction process, committed to the following timetable:
  - 30 September 2016: Completion of final business case ('FBC'), subject to public engagement
  - 30 September 2016: Submission of FBC to NHS Improvement ('NHSI'); and
  - 1 April 2017: Transaction completion
- Both organisations are working closely to complete as much of the pre-transaction requirements as possible, utilising an internal PHFT/HHCT programme team.
- A Transition Programme Board ('TPB') is overseeing the work of the programme team. Membership includes members of the programme team, both boards, local commissioners (Cambridge and Peterborough CCG), and NHSI.

Context of this report

- HHCT, PSHFT and the TPB are seeking independent assessment of the certain key elements of the merger programme are key points throughout the process, to provide a degree of comfort to both Trust Boards.
- KPMG has therefore been engaged to independently assess the standalone Long Term Financial Model ('LTFM') that each of the organisations are in the process of developing, as well as the merger/transaction LTFM that will support the FBC for the merger.
- KPMG undertook an initial Part 1 assessment of the standalone LTFMs in July 2016, with a draft report outlining our initial findings and recommendations issued dated 22 July 2016. In late August prior to the completion of the transaction LTFM we undertook a further review of the standalone LTFMs and produced a progress report following our July findings dated 6 September 2016.
- We have subsequently undertaken an assessment of the Transaction LTFM in early September 2016, with the main areas of focus covered in this report covering:
  - Assess the assumptions alignment between HHCT and PSHFT
  - Assess the combined LTFM for the merger of HHCT and PSHFT
  - Summarise and comment on the combined Trust downside and mitigated downside scenarios.

Executive Summary - Key findings

The following pages summarise the key findings contained within this report as a result of our work to date, reflecting our Part 3 assessment of the Transaction LTFM. For each of the areas identified we have provided our comments and recommendations, as well as our view of the relative importance of each area for consideration by the TPB, HHCT and PSHFT in assessing the next steps required going forwards in terms of further advancement of the Transaction LTFM and with respect to drafting the FBC for the merger.

The relative importance allocated to each area is based on the perceived importance for the TPB to address in advancing the merger programme, as well as on our experience of how NHS Improvement carry out its transaction reviews and where they will look to probe and challenge the LTFM and FBC.

Area	Description	KPMG Comment and Recommendation	Import-ance
Preparation of the Transaction LTFM	▪ The Trusts have made significant progress in the development of the Transaction LTFM in a short space of time. ▪ We note that the Transaction LTFM we assessed has been populated using the two standalone LTFMs as of 10 August 2016. Changes and corrections following this date are being documented in a register so that all recommendations and changes can be made at once to a master version. ▪ The preparation of the Transaction LTFM reflects the aggregation of the HHCT and PSHFT baselines, with adjustments overlaid for: – Alignment of common assumptions; – Merger synergies; – Transaction costs; – Funding assumptions; and – Other transaction level adjustments (e.g. PDC dividend calculation).	▪ We note that the approach to constructing the Transaction LTFM has been carried out within a short timespan (approximately one month). ▪ Whilst the work to make the two standalone LTFMs as consistent as possible has likely simplified the process, we would typically expect the Transaction LTFM to take much longer to develop. ▪ We have highlighted specific observations in the detail of the report around the Transaction LTFM set up and modelling that require addressing prior to submission to NHSI. This includes three false error checks that have been identified on the 'control tab'. These we believe are substantive errors, not just rounding, and should be corrected before submission to NHSI. ▪ We recommend that the modelling team should continue to refine and develop the Transaction LTFM in the coming weeks as the FBC is further developed, including the development of workforce modelling as recommend in our report on the standalone LTFMs.	**M**
Clinical synergies	▪ Savings from clinical collaboration are currently under development, with further detailed work in this area planned over the coming months and beyond the proposed transaction date as the clinical strategy and operating model is further developed.	▪ We would typically expect the clinical benefits from merger (including detailed worked up financial benefits) to be clearly set out in a business case as merger synergies, rather than CIP. ▪ In our experience, NHSI's view is that the primary driver for merging NHS Trusts is increased quality of patient care and clinical synergies, with back-office savings as an additional benefit.	**H/M**

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation	Import-ance
Clinical synergies (Cont.)	▪ We understand that the TPB and both Boards wish to present a public message that back-office (non-clinical) synergies will result from the merger and that savings from clinical collaboration will be treated as delivering against forecast CIP targets, rather than as merger synergies.	▪ However, we understand that the TPB has discussed the treatment of clinical savings as CIP with NHSI. ▪ In addition, we recognise that the draft FBC explains that all financials savings achieved from clinical integration will be used to reinvest in services, and to meet the improvements in efficiency and cost reduction that are required of all services annually to offset the pressure of annual cost inflation. ▪ We recommend that the Trust continues to work on the detailed financial benefits that will arise from clinical collaboration. ▪ Where clinical synergies cannot yet be quantified, we recommend that that these are included in the FBC as qualitative clinical synergies. An initiative such as putting best practise in place across both trusts may not yet be quantifiable, but will yield greater quality of care for patients and is therefore still a clinical synergy. ▪ We recommend that both Trusts continue to engage with clinicians in the development of these synergies, as strong clinical engagement is a key factor in developing quality plans and in maximising the chances of a successful implementation.	**H/M**
Back-office synergies	▪ The Trusts are targeting £9.0 million of back-office synergies, with £6.7 million planned from reduction in WTE and which is supported by the production of bottom up merged operating models for the back-office functions. ▪ However, there is currently a unidentified savings gap of £642k, predominantly relating to non-pay. ▪ We understand that the phasing of the current worked up pay savings have not yet been worked through in full, as these will be subject to staff consultation.	▪ We recommend that the Trusts continue to work on the development of additional back-office savings to fill the current gap to the LTFM and that this is reflected in the Transaction LTFM prior to submission, as appropriate. This should include a detailed assessment of corporate CIP schemes against planned merger synergies to avoid potential double counting. ▪ We recommend that if savings cannot be identified to close the gap, this should be reflected in an adjustment to the Transaction LTFM baseline or through further sensitivity analysis for delaying or reducing synergies. ▪ We also recommend that further work be completed on the detailed plans for delivery of synergies as part of further development of integration planning. ▪ We recommend that the TPB reassess the phasing of both pay and non-pay savings, as well as considering this as part of sensitivity analysis.	**H/M**

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation	Import-ance
Transaction costs	■ £13.8 million of transaction costs have been estimated and reflected in the Transaction LTFM. ■ At present we understand that the transaction costs identified have been worked up for the period leading up to the transaction date and that transaction costs for FY18-FY20 have been based on estimates and are subject to change following agreement of the merger and subsequent setting up of the different transition workstreams. ■ For redundancy these costs have been worked up from the back-office synergy calculations and are at present based on midpoint.	■ We recommend that the transaction costs are further developed in detail to determine the quantum and phasing of costs focusing on post merger as the current plans are primarily worked up in detail to the merger date. ■ In addition, specific workstreams should focus on further developing the robustness of transitional cost assumptions that have been factored into the Transaction LTFM. ■ We recommend that to ensure the redundancy costs are robust that a workforce review be completed to establish whether the midpoint assumption is correct. ■ We understand that the trust has undertaken an external IT/IS review. The findings for the recent review should also be factored in to the working paper for IT costs to ensure these are robust.	**H/M**
Funding	■ The Transaction LTFM assumes that the merged Trust will be financed by the draw down of additional loans to support the merged Trust's cash position across the forecast period given the operating deficits that are projected. ■ Additional funding from loans has been factored into the Transaction LTFM to reflect this, given no transitional or central funding has yet been agreed for the merger with commissioners, DH or NHSE.	■ We recommend that the TPB continue to progress its conversations and negotiations with commissioners and central bodies regarding transitional or central funding, updating this into the Transaction LTFM when available to assess the impact on both the I&E and cash position. ■ The TPB should consider an additional sensitivity analysis to reflect a potential change in interest rate above forecast and how this will affect the surplus/deficit position of the merged Trust.	**H/M**
Risks and sensitivities	■ The TPB has considered and modelled six key sensitivities to the Transaction LTFM, including: – Assumption of no growth; – Non-delivery of income CIPs; – CIP delivery at 2%; – SEP – only 50% of income and delayed by one year; – Potential transaction costs/implementation – 50% increase; and – Non achievement of merger savings by 10% and delayed by one year	■ While the sensitivities that have been considered are broadly in line with our expectations, we recommend that the TPB reach agreement on the level of the SEP, standalone CIP and income CIP, and merger synergies to be included in the base case of the FBC and also in any downside sensitivity analysis. ■ This includes the TPB considering a realistic level of CIP to include in the base case across both PSHFT and HHCT, based on the internal due diligence that has been completed and when assessing against the Trusts' historical track record of delivering CIP, the current development of detailed plans underpinning forecast CIP and the financial grip and governance arrangements that are in place.	**H/M**

Executive Summary - Key findings (cont.)

Area	Description	KPMG Comment and Recommendation	Import-ance
Risks and sensitivities (cont.)	▪ A number of upside sensitivities have also been considered and modelled.	▪ In our experience, 10% non-achievement of merger synergies is a mild downside case. We recommend that the TPB consider the possibility of up to a 25% sensitivity, which might provide the TPB and the Boards with a better indication of what underachievement of synergies might look like. ▪ We recommend that the TPB consider a more prudent position with respect to the SEP sensitivity (given it is still uncommitted) to present a downside case that assumes the SEP does not happen at all. This would demonstrate that the TPB and Boards are aware of the risks of delivery and are not relying on this as a fundamental part of making the merger sustainable. ▪ We recommend that that CIP schemes and merger synergies are developed in further detail to give NHSI greater confidence that the schemes can be achieved on time and to the level included in the LTFM. ▪ We recommend that the Trusts' sensitivity analysis is further modelled to include the impact on the cash flow position of the downside case. ▪ We recommend that, following updates to the HHCT standalone LTFM with respect to the re-categorisation of income CIP, that the CIP sensitivity modelling is updated to reflect this change.	**H/M**
Mitigations	▪ We understand that the Trusts' mitigations are currently work in progress, based upon discussions that have taken place at the TPB and at Board level. ▪ However, we have not had sight of these as part of our assessment as they are still under development.	▪ We recommend that mitigations for the downside case are developed in detail to offset the deterioration in both the merged Trusts surplus/deficit and cash position. ▪ In our experience, best practice indicates that mitigations should be developed to a similar level of detail as to CIP plans, with supporting detailed financial analysis and implementation plans.	**H/M**

KPMG

Financial Overview

Financial overview - Transaction LTFM SOCI

SOCI overview - Transaction LTFM							
£m	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	CAGR FY18-22
Income							
Tariff income	241	347	355.7	363.9	375.6	387.8	2.25%
Other block or Cost and Volume contract	0	3.8	3.8	3.8	3.8	3.9	0.52%
Total NHS clinical Income	241	350.8	359.5	367.7	379.5	391.7	2.23%
Private patient revenue	0.7	2.2	2.5	2.8	2.9	3	6.40%
Other non protected revenue	0	0.7	0.7	0.7	0.7	0.7	
Other Operating revenue	42.8	41.9	42.8	45.2	48.2	48.8	3.10%
Total Income	**284.4**	**395.5**	**405.4**	**416.3**	**431.3**	**444.2**	**2.35%**
Expenses							
Employee benefit expenses	-174.6	-251.9	-244.4	-246	-251.9	-256.9	0.39%
Drug expenses	-18	-29.9	-30.7	-31.6	-32.9	-34	2.60%
Clinical supplies and services expenses	-25.1	-35.5	-35.2	-34.9	-35.5	-36	0.28%
Other expenses	-58.5	-86.1	-86.4	-86.3	-90	-93.7	1.71%
Total Expenses	**-276.2**	**-403.5**	**-396.8**	**-398.9**	**-410.3**	**-420.6**	**0.83%**
EBITDA	**8.2**	**-8**	**8.7**	**17.4**	**20.9**	**23.6**	**-224.16%**
Non-operating items							
Gain/(loss) on asset disposals	-	-	-	-	-	-	
Net interest expense	0	0	0	0	0	0	
Depreciation and Amortisation	-13.7	-18.8	-19.1	-19.1	-19.6	-19.9	1.14%
PDC Dividend	0	-2	-0.7	0	0	0	-100.00%
Impairment of fixed assets	-	-	-	-	-	-	
Surplus/(Deficit)	**-20.2**	**-46.7**	**-29.8**	**-21.3**	**-19.2**	**-17.6**	**-17.73%**
KPIs							
EBITDA margin	2.87%	-2.02%	2.14%	4.19%	4.85%	5.30%	-221.28%
Net margin	-7.11%	-11.81%	-7.35%	-5.11%	-4.46%	-3.97%	-19.59%

Source: Management information: HHCT LTFM

Source: Management Information: Transaction LTFM

Increases in clinical income year on year post merger are driven by inflation and income CIP. In FY18 these include specific targets for coding and repatriation of elective activity from STP.

Other operating revenue is projected to increase in FY21022 driven by the contribution from the SEP.

Expenditure growth increases in the first year driven by the inclusion of transaction costs. Expenditure in future years rises driven by the marginal cost of delivering further income. This is offset somewhat by CIP and merger synergies for pay and non-pay.

The absence of HHCT gain/loss on disposal was identified in our previous report as being a £2.1m gain to the surplus/deficit.

Post merger there will be a PDC dividend payable in FY18 and FY19 but no further payments are forecast due to the negative net asset position.

The merged Trust's deficit peaks in FY18 driven by the transaction costs including redundancies and double running. The deficit is projected to improve thereafter for the delivery of assumed CIP, merger synergies and the impact of SEP.

Financial overview - Transaction LTFM SOFP

SOFP overview - Transaction LTFM							
£m	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	CAGR FY18-22
Non Current Assets							
PPE, intangibles & other	431	528.5	523.2	529	523.8	518.8	-0.37%
Current Assets							
Inventories	3.5	5.2	5.2	5.2	5.2	5.2	0.00%
NHS trade receivables	13.1	20.1	20.1	20.1	19	19.6	-0.50%
Non-NHS trade receivables	0	0	0	0	0	0	
Other assets	15.4	15.4	15.4	15.4	15.4	15.4	0.00%
Cash	20.1	1.9	2.1	2.1	2.2	3.0	9.57%
Total current assets	**52.1**	**42.7**	**42.9**	**42.8**	**41.9**	**43.2**	**0.23%**
Total assets	**483.2**	**571.1**	**566.1**	**571.8**	**565.7**	**562.1**	**-0.32%**
Current liabilities							
Trade Payables, Current	-31	-42.5	-42.5	-42.5	-44	-45.5	1.37%
Other Payables, Current	-21.3	-21.7	-21.7	-21.7	-21.7	-21.7	0.00%
Capital Payables, Current	-9.9	-10.4	-10.4	-10.4	-10.4	-10.4	0.00%
Accruals, Current	0	0	0	0	0	0	
Other liabilities	-13.3	-31.2	-17.9	-17.9	-15	-4.5	-32.11%
Total current liabilities	**-75.5**	**-105.7**	**-92.4**	**-92.4**	**-91.1**	**-82.1**	**-4.93%**
Net current assets	**-23.4**	**-63**	**-49.6**	**-49.5**	**-49.2**	**-38.8**	**-9.24%**
Non-current liabilities	**-376.3**	**-436.2**	**-474.2**	**-501.3**	**-515.7**	**-538.7**	**4.31%**
Net assets	**31.4**	**29.2**	**-0.6**	**-21.9**	**-41.1**	**-58.7**	**-214.99%**
Taxpayer's equity							
Public dividend capital	283.2	283.2	283.2	283.2	283.2	283.2	0.00%
Retained Earnings	-347.1	-469.2	-499	-520.2	-539.5	-557.1	3.49%
Revaluation reserve	95.3	120.9	120.9	120.9	120.9	120.9	0.00%
Misc Other Reserves	0	94.2	94.2	94.2	94.2	94.2	0.00%
Total taxpayer's equity	31.4	29.2	-0.6	-21.9	-41.1	-58.7	-214.99%
KPIs							
NHS Trade receivable days	19.6	20.6	20.1	19.7	18	18	-2.66%
Trade payable days	110	100.8	100.3	100	100	100	-0.16%

Source: Management Information: Transaction LTFM

Non Current Asset are projected to decrease across the forecast period, driven by a decrease in the level of planed capital expenditure (net of depreciation).

We recommend that the requirement for the capital programme for the merged Trust be assessed prior to submission of the transaction LTFM to NHSI to ensure level of capital expenditure can be supported.

A cash surplus in projected in each year across the forecast period, reflecting assumptions regarding funding of cash shortfalls through the drawing down of loans.

Increased non-current liabilities from additional loan financing taken out to fund cash deficits.

The net asset position is negative from FY18 onwards. No further payments of PDC are forecast following FY19.

The LTFM calculates working capital movements using different method from year 4 (FY20), but there is a decrease in receivable days to manage the transaction cash position. We recommend that the Trusts develop an explanation for assumed improvement in WC days.

In this period trade creditor days appear to be extremely high, well outside of BPPC guidance.

Financial overview - Transaction LTFM Cash Flow

Cash flow overview - Transaction LTFM							
£m	FY17 Outturn	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast	CAGR FY18-22
Surplus/(Deficit) from operations	**8.2**	**-8**	**8.7**	**17.4**	**20.9**	**23.6**	**-224.16%**
Non cash adjustments	0	0	0	0	0	0	
Operating cash flows before movements in working capital	8.2	-8	8.7	17.4	20.9	23.6	-224.16%
Movement in working capital:	**0.1**	**0**	**0**	**0**	**0**	**0**	
Increase/(decrease) in working capital	18.2	0	0	0	2.7	0.9	
Increase/(decrease) in Non Current Provisions	0	0	0	0	0	0	
Net cash inflow/(outflow) from operating activities	**26.3**	**-8**	**8.7**	**17.4**	**23.6**	**24.4**	**-224.99%**
Cash flow from investing activities							
Property, plant and equipment expenditure	-20.8	-15.6	-13.9	-24.9	-14.5	-14.9	-0.91%
Proceeds on disposal of property, plant and equipment	0	0	0	0	0	0	
Net cash inflow/(outflow) from investing activities	**-20.8**	**-15.6**	**-13.9**	**-24.9**	**-14.5**	**-14.9**	**-0.91%**
CF before Financing	5.5	-23.6	-5.2	-7.5	9.1	9.5	-183.36%
Cash flow from financing activities							
Public Dividend Capital received	19	0	0	0	0	0	
Public Dividend Capital repaid	0	0	0	0	0	0	
Dividends paid	0	0	0	0	-2.7	0	
Interest (paid) on Loans and Leases	-14.7	-17.9	-18.6	-19.6	-20.6	-21.3	3.54%
Interest (paid) on bank overdrafts and working capital facilities	0	0	0	0	0	0	
Interest received on Cash and Cash Equivalents	0	0	0	0	0	0	
Drawdown of Loans and Leases	28.9	33.5	48.7	37.7	25	23	-7.25%
Repayment of Loans and Leases	-10.2	-11.2	-24.7	-10.7	-10.7	-10.5	-1.28%
Other cash flows from financing activities	0	0	0	0	0	0	
Net cash inflow/(outflow) from financing	**23.1**	**4.4**	**5.4**	**7.4**	**-8.9**	**-8.8**	**-214.87%**
Net cash outflow/inflow	**28.6**	**-19.2**	**0.2**	**0**	**0.2**	**0.7**	**-151.57%**

Source: Management Information: Transaction LTFM

Other than the 4th floor conversion at PSHFT in FY20, there is a decrease in levels of capital expenditure post merger. We recommend that this can be justified prior to submission to NHSI.

PDC Dividend payable for FY18 and FY19 deferred payment to FY21.

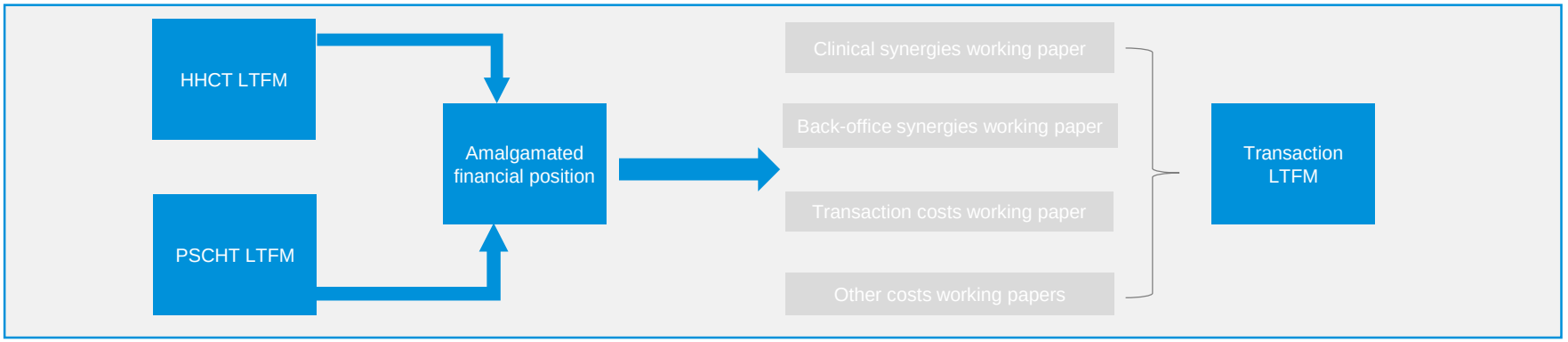
Increase in the drawdown of loans initially post merger to fund the transaction costs. We recommend that while this is prudent, other sources of funding should be explored to part fund this, including commissioners and NHSE.

Small net cash inflows are projected in each financial year (due to the draw down of loan financing), with the exception of FY18 where there is a cash outflow of £(19.2) million driven by the operating deficit in that financial year.

KPMG

Supporting analysis

Basis of preparation - Transaction LTFM



Basis of preparation

- The Transaction LTFM has been developed on the basis of the amalgamated financial positions from the two standalone LTFMs, overlaid with adjustments for synergies, transaction costs and other transaction adjustments. Both HHCT and PSHFT have worked alongside each other to make assumptions as consistent as possible and the stand alone LTFMs have been largely updated based on our previous recommendations.
- A number of working papers were identified which feed the Transaction LTFM, which are not linked into the standalone LTFM; these include working papers for transaction costs and synergies. This is normal practice as part of the Transaction LTFM development process; however, we recommend that external links are removed from the Transaction LTFM prior to submitting for NHSI review to prevent reference errors.
- Three false error checks have been identified on the 'control tab'. These we believe are substantive errors, not just rounding and should be corrected before submission to NHSI – see overleaf.
- The 2016/17 financial outturn forecast continues to be based on the PSHFT annual plan. Projections from 2017/18 onwards are calculated based the amalgamated inputs from HHCT and PSHFT LTFM and inflated based on aligned assumptions to derive the Transaction LTFM.
- Additional costs have been entered for the transaction costs in the first two years of the forecast with cost savings from the identified synergies being delivered in subsequent years.

Basis of preparation (cont.)

- We had previously identified some assumptions regarding the treatment of NHS trade payable days that improved the HHCT cash position in FY20. While this issue has been partly addressed in the Transaction LTFM, we recommend this should be reassessed as there remains an improved Trade Receivables Days position from FY19 onwards that should be explained.
- We have highlighted specific observations overleaf around the Transaction LTFM set up and modelling that require addressing prior to submission to NHSI.
- At present the LTFM continues to have been modelled based on costs, with workforce being calculated based on the total costs. We continue to recommend that more detailed workforce modelling is carried out to provide a better understanding of future workforce requirements.

Approach to consolidating into Transaction LTFM

- We note that the approach to constructing the Transaction LTFM has been carried out within a short timespan (approximately one month).
- Whilst the work to make the two standalone LTFMs as consistent as possible has likely simplified the process, we would typically expect the Transaction LTFM to take much longer and the modelling team should continue to refine the Transaction LTFM in the coming weeks as the FBC is further developed.
- Finally we note that the Transaction LTFM has been populated using the two standalone LTFMs as of 10 August 2016. Changes and corrections following this date are being documented in a register so that all changes can be made at once.

Basis of preparation - Transaction LTFM (cont.)

We have identified the following technical issues in our assessment of the Transaction LTFM. The priority rating is an indicator of urgency prior to submission to NHSI.

Area	Comments	Priority
Three false error checks on the 'Control' tab: • Year end cash balance • Cashflow check • Outturn Reconciliation Check	These are substantive errors, not just rounding and should be corrected before submission to NHSI. The control tab picks up errors in an “Audit checklist”, all of these should read as TRUE prior to submission to NHSI to ensure that the LTFM elements balance.	H
"No" responses in the Checklist should be explained.	The checklist tab questions should all be Yes prior to submission to NHSI. Where the answer is "no" and will remain so for the submission for NHSI, an explanatory note should be added to justify the answer..	M
'I_Activity (memo)', 'I_KPI' and 'I_KPI (Target) (Memo)' not completed	These are memo input sheets, so don't drive financial movements in the model, but NHSI may use this for further analysis. We recommend you enquire with NHSI as to whether this needs to be completed.	M
Units missing from 'C_Incme (Sum - Detailed)' tab	Duplicate the corresponding units from the 'I_Incme (Target)' tab. These figures should match with the “I_Incme (Target)’ tab.	L
Historical capex numbers missing from 'I_Cost (Existing)' tab	NHSI are likely to analyse these inputs when considering sensitivities. We recommend you complete this or confirm with NHSI that an alternative presentation is acceptable.	M
Agency staff numbers missing from 'I_Cost (Existing)' and 'I_Cost (Target)' tabs	NHSI are likely to analyse these inputs when considering sensitivities. We recommend you complete this or confirm with NHSI that an alternative presentation is acceptable.	M
Unattributed £4m non-maintenance capex 'I_Cost (Consolidated)'	Currently there is capital expenditure cost populating this tab. A brief description of what this relates to should be added for clarity prior to final submission.	L
'S_Input' is populated	This tab should not be populated as this does not drive anything within the LTFM and should be cleared before submitting to NHSI.	L
PDC dividend payment showing on cash flow statement in FY21. PDC dividend was payable	PDC dividend payment showing on cash flow statement in FY21. PDC dividend was payable in FY18 and FY19. We recommend that this is reviewed as PDC dividend should not be deferred.	M

Overview of Transaction adjustments

The table below shows the aggregated position of the standalone LTFMs of both HHCT and PSHFT, splitting out the impact for adjustments applied to the Transaction LTFM. There are a number of movements between the aggregated HHCT/PSHFT position and the Transaction LTFM, which are due the alignment of assumptions and adjustments applied in the Transaction LTFM that are explained below.

SOCI - HHCT & PSHFT vs Transaction LTFM					
£m	FY18 Forecast	FY19 Forecast	FY20 Forecast	FY21 Forecast	FY22 Forecast
Clinical Income	0.1	0.1	0.1	0.1	1.2
Other Revenue	0.0	0.0	0.0	-0.1	-0.1
Total Income	**0.1**	**0.1**	**0.1**	**0.0**	**1.1**
Employee benefit expenses	-2.7	6.2	6.9	7.1	7.2
Other expenses	-3.7	-1.4	2.4	2.5	2.5
Total Expenses	**-6.4**	**4.8**	**9.3**	**9.6**	**9.8**
EBITDA	**-6.3**	**4.9**	**9.4**	**9.6**	**10.9**
Net interest expense	-0.1	0.1	0.5	0.4	0.6
Depreciation and Amortisation	0.0	0.0	0.2	0.0	0.0
PDC Dividend	0.0	0.0	0.4	0.3	0.3
Changes from aggregated standalone LTFMs for HHCT and PSHFT	**-6.4**	**4.9**	**10.5**	**10.3**	**11.8**

Source: KPMG working based on: Transaction LTFM, HHCT LTFM and PSHFT LTFM

The main movements in income and expenditure relate to:

- **Income** – an overlay of PSHT inflation assumptions for income categories has led to an increase across tariff based income, particularly in FY22 due to the inflation percentage being omitted in the HHCT standalone LTFM. An overlay of PSHFT inflation assumptions for Education and Training income has led to a minor difference in Other Revenue.
- **Pay expenditure** – a significant increase in expenditure in FY18 in the Transaction LTFM reflects the inclusion of transaction costs, including a large redundancy pot. The subsequent benefit to expenditure in future years is the impact of back-office pay synergies identified from the merger.
- **Other expenses –** similar to pay expenditure there is an increase in expenditure in the first two years compared to the stand alone position, driven by the inclusion of transaction costs. The subsequent benefit to expenditure in future years is the impact of back-office non-pay synergies identified from the merger
- **Net Interest Expense –** reduction in interest expense due to the assumption of funding for the merger being drawn down from long term loans.
- **PDC Dividend** – the merger of HHCT and PSHFT create a position where only the first two years have positive net assets. As a result there is a net saving on PDC Dividend payments created through the merger.

Key assumptions - Transaction LTFM

We set out below the key assumptions that have been applied to the Transaction LTFM, showing where there have been changes to the underlying assumptions in the standalone LTFMs of HHCT and PSHFT or where additional Transaction assumptions have been applied.

Area	Description	KPMG Comment and Recommendation
Alignment of assumptions		
Cost Inflation	■ Cost inflation is in line with NHSI guidance. ■ For areas identified in our previous report where inflation assumptions did not match; HHCT inputs have been overlaid with the PSHFT inflation assumptions in the Transaction LTFM.	■ None.
Sustainability and Transformation Funding ('STF')	■ As per the recommendations in our previous report both PSHFT and HHCT have aligned their assumptions regarding receipt of STF funding, so that it is only available in the FY17 outturn year and is not recurrent thereafter.	■ None
Activity growth	■ Following recommendations made in our previous report, the impact of QIPP on activity growth has been aligned across PSHFT and HHCT – QIPP has now been consistently applied. ■ However, additional activity growth in FY18 and FY19 Elective is being driven by £3.2 million of specific income CIP schemes developed by HHCT based on coding and the other based on STF repatriation of elective activity.	■ We understand that the HHCT income CIP included in FY18 and FY19 has not been agreed with commissioners. The TPB should agree on the level of income CIP (amongst other areas) to be included in the base case of the FBC and also in any downside sensitivity analysis. ■ We also recommend that that further development be made on the detailed plans that underpin any income CIPs for FY18 and FY19 to ensure these are robust. NHSI will scrutinise the level of CIP and robustness of plans in determining their view on the LTFM.
Contingency and Property Rental Increases	■ Both HHCT and PSHFT have built in contingency and property rental increases into their standalone LTFM. ■ For PSHFT the contingency is more explicitly identified from the base line.	■ We recommend that HHCT clearly separate out the contingency and rental increases in the stand alone LTFM to show this in the same way as PSHFT, so that this can be jointly reflected within the transaction LTFM. ■ Within the LTFM this should be labelled and easily identified by NHSI to reflect that the LTFM has been weighted to reflect a prudent forecast.
PFI	■ Following recommendations in our previous report, both HHCT and PSHFT have working papers to demonstrate the PFI calculations of the individual Trusts.	■ We recommend a joint working paper is developed prior to submission to NHSI detailing the merged trust calculation.

Key assumptions - Transaction LTFM (cont.)

Area	Description	KPMG Comment and Recommendation - August
Transaction assumptions		
Synergy savings See pages 23 and 25 with respect to additional detail on clinical and back-office synergies	■ The total value of synergies which are built into the transaction LTFM is £8,961k, relating to back office synergies. ■ Following the population of the transaction LTFM, there have been further developments of the supporting detail for identified areas for synergies – however, there is a current gap to the LTFM figure is £642k. ■ Savings from clinical collaboration are currently under development, with further detailed work in this area planned over the coming months and beyond the proposed transaction date. ■ We understand that the TPB and both Boards wish to present a public message that back-office (non-clinical) synergies will result from the merger and that savings from clinical collaboration will be treated as delivering against forecast CIP targets rather than merger synergies.	■ We would typically expect the clinical benefits from merger (including detailed worked up financial benefits) to be clearly set out in a business case as merger synergies, rather than CIP. ■ In our experience, NHSI's view is that the primary driver for merging NHS Trusts is increased quality of patient care and therefore clinical synergies, with back-office savings as an additional benefit. ■ However, we understand that the TPB has discussed the treatment of clinical savings as CIP with NHSI. ■ We recommend that the Trust continues to work on the detailed financial benefits that will arise from clinical collaboration. ■ We recommend that the Trusts continue to work on the development of additional back-office savings to fill the current gap to the LTFM and that this is reflected in the transaction LTFM prior to submission, as appropriate. ■ We also recommend that further work be completed on the detailed plans for delivery of synergies as part of further development of integration planning, including the likely phasing of benefits.
Transaction costs See page 27 with respect to Transaction costs	■ Estimated costs related to the transaction have been modelled into the LTFM, split into four categories: – Redundancy (£3.4 million) – Internal Transition Costs (£5.1 million) – External Costs (Legal and Due Diligence £1.3 million); and – IT Integration Costs (£4 million).	■ We have been advised that no additional transaction costs have been identified following the internal due diligence process recently undertaken. ■ However, we have not yet been provided with the detail workings supporting the transaction costs. ■ We recommend that the detail continue to be worked up detailing the breakdown of the transaction costs, as well as the phasing of expenditure across the forecast period. ■ We recommend that IT integration costs are aligned with the detail being provided by the TPB's external IM&T advisor. ■ We recommend that IT costs be further analysed between I&E and capital costs and therefore split out in the LTFM, with capital expenditure being capitalised as an asset on the SOFP and treated separately from the I&E.

Key assumptions - Transaction LTFM (cont.)

Area	Description	KPMG Comment and Recommendation - August
Transaction assumptions		
Capital expenditure	■ Capital expenditure in the Transaction LTFM is assumed to be in line with the standalone capital plans of the standalone Trusts. ■ Excluding the 4th floor conversion in PSHFT in FY20, capital expenditure within the Transaction LTFM is less than historical spend. ■ There is currently no separately identified capital expenditure within the transaction costs across the forecast period, despite a significant spend on IT for the merged organisation.	■ We recommend that the merged Trust develop a combined capital programme and estates strategy for the forecast period, to enable the merged Trust to justify the reduction in capital expenditure across the forecast period. ■ It is recommended that any capital expenditure be removed from the SOCI to the SOFP to reflect the increase in assets.
PDC Dividend	■ Following the merger of the two organisations there are forecast dividend payments of £2 million in FY18 and £0.7 million in respectively. ■ The cash payment of PDC is assumed to be deferred until FY21.	■ We recommend that the deferral of the cash payment of PDC dividend to FY21 be re-assessed. We have highlighted this point to the finance team and been advised this will be addressed in the final submission.
Funding	■ The Transaction LTFM assumes that the merged Trust will be financed by the draw down of additional loans to support the Trust's cash position across the forecast period given the operating deficits that are projected. ■ Additional funding from loans has been factored into the LTFM to reflect this view, given no transitional or central funding has yet been agreed for the merger with commissioners, DH or NHSE.	■ We recommend that the TPB continue to progress its conversations and negotiations with commissioners and central bodes regarding transitional or central funding, updating this into the Transaction LTFM when available to assess the impact on both the I&E and cash position. ■ The TPB should consider an additional sensitivity analysis to reflect a potential change in interest rate above forecast and how this will affect the surplus/deficit position of the merged organisation.

Clinical synergies

Savings from clinical collaboration are currently under development, with further detailed work in this area planned over the coming months and beyond the proposed transaction date as the merged Trust's clinical model is worked up in more detail. At the current stage of development of the merger FBC we would typically expect clinical synergies to be have been worked up in further detail, including the financial benefits that would arise from clinical collaboration. At present clinical synergies have been identified but the benefits at present are represented as qualitative rather than quantitative in the draft FBC.

Areas Identified for Clinical Synergies	**Areas Identified** ▪ Reduction in agency spend through improved likelihood of being able to recruit to clinical roles as a consequence of larger teams, more varied case-mix, better peer support, opportunities for sub-specialisation, training etc. ▪ Conversion of one existing Haematology consultant role (vacancy) to a staff grade doctor ▪ Likely reduction in payments for clinical roles as a result of reduced need for duplicated on-call rotas for some specialties (not directly required for acute take e.g. ENT), and in time, clinical leadership payments may be able to come down. ▪ Potential areas for growth in profitable areas where demand is evidenced e.g. radiotherapy, cardiology and thoracic medicine **Further Areas identified for Consideration** ▪ Pharmacy – This workshop is due to take place soon. ▪ Imaging – Potential to bring more reporting back in-house following capital investment in IT. ▪ Pathology – This area is currently on hold due to TPP uncertainty ▪ Research – The track record for being able to recruit to trials at HHCT is understood to be good, so PSHFT stand to benefit from integration. HHCT research has dropped in recent times due to locum teams being unable to maintain this record; an area that would benefit from merged teams.
Assessment of current synergies	Savings from clinical collaboration are currently at a relatively early stage of development, with most being dependant upon the post merger clinical model that is to be worked up and with others dependant upon the impact of the ongoing STP work. A full clinical strategy has not been developed at this stage apart from the identified synergy within Haematology, although this too requires further development. Both Trusts have given the public message that of the £9 million of projected synergies from the merger, these do not include any that arise from integrating clinical services. The merger has been communicated to the public as a way of making back-office savings while ensuring that any clinical savings are reinvested in services; therefore no clinical resources will be reduced. For example, in order to be sustainable, Neurology and Stroke services will need more medical staff in order to provide safe, sustainable services locally even though they will be working as part of a larger team. As such, clinical savings will contribute towards forecast level of CIP included in the Transaction LTFM and have not been identified as clinical synergies within the FBC.
Recommend-ations	To ensure that the plans underpinning the FBC are robust we recommend that: ▪ The TPB confirm its approach to the description and positioning of clinical savings arising from merger. Typically, clinical savings are recognised as merger synergies as opposed to contributing towards the merged organisations future CIP target. In our experience NHSI consider that mergers should not be undertaken purely for back-office synergies, but that there should be a clinical benefit to the patient in terms of better value and better quality of treatment. Recently we have worked on another merger where NHSI required a clear plan of clinical synergies before approving the transaction. ▪ However, we understand that the TPB has discussed the treatment of clinical savings as CIP with NHSI. In addition, we recognise that the draft FBC explains that all financials savings achieved from clinical integration will be used to reinvest in services, and to meet the improvements in efficiency and cost reduction that are required of all services annually to offset the pressure of annual cost inflation.

Clinical synergies (cont.)

Recommend-ations	▪ Clinical pathways need to be developed further into a post merger operating model at a departmental and trust wide level. As well as clinical pathways, additional clinical synergies may be identified from a clear imaging strategy. In our experience synergy opportunities are frequently identified in Pharmacy, Genetics and Pathology through post merger working. ▪ In addition, we would expect to see the opportunity for additional income in areas such as R&D. With the merger the merger Trust's footprint will grow, which may lead to greater opportunities to attract R&D funding. ▪ Where clinical synergies cannot yet be quantified, we recommend that that these are included in the FBC as qualitative clinical synergies. An initiative such as putting best practise in place across both trusts may not yet be quantifiable, but will yield greater quality of care for patients and is therefore still a clinical synergy. ▪ We recommend that both Trusts continue to engage with clinicians in the development of these synergies, as strong clinical engagement is a key factor in developing quality plans and in maximising the chances of a successful implementation.

Back-office synergies

The Trusts are targeting £9.0 million of back-office synergies, with £6.7 million planned from reduction in WTE and which is supported by the production of bottom up merged operating models for the back-office functions. However, there is currently a unidentified savings gap of £642k, predominantly relating to non-pay.

We recommend that if savings cannot be identified to close the gap, this should be reflected in the Transaction LTFM baseline or through sensitivity analysis for delaying or reducing synergies.

We recommend further work to ensure that the identified categories are worked up to thorough detailed implementation plans, which can be enacted post merger.

Back Office Saving (£'000)	HR	Finance	Corporate	CEO	Nursing	Facilities	IM&T	Clinical Support	OPS	Total	Non-Pay
Combined current WTE	117.8	94.0	20.3	21.8	130.2	115.8	154.5	9.6	372.0	**1036.0**	
Combined current Pay budgets (inc agency)	£4,439	£2,980	£342	£3,206	£5,128	£41,239	£4,957	£742	£15,870	**£78,902**	
New WTE	94.3	77.5	13.5	14.0	118.6	17.0	151.9	4.8	333.5	**825.1**	
New Cost	£3,279	£2,762	£448	£1,495	£4,551	£40,565	£4,503	£371	£14,065	**£72,040**	
Saving wte	-23.5	-16.5	-6.8	-7.8	-11.6	-98.8	-2.6	-4.8	-38.5	**-167.6**	
wte reduction %	-20%	-18%	-33%	-36%	-9%	-85%	-2%	-50%	-10%	**-16%**	
Pay reduction %	-26%	-7%	31%	-53%	-11%	-2%	-9%	-50%	-11%	**-9%**	
Current worked up savings	**-£1,160**	**-£218**	**£106**	**-£1,710**	**-£577**	**-£674**	**-£453**	**-£371**	**-£1,805**	**-£6,862**	**-£1,457**
Targeted savings - Recurrent	-£1,163	-£1,081	-£365	-£1,129	-£522	-£1,185	-£509	-£371	-£373	**-£6,698**	**-£2,263**
Variance (Final Savings vs LTFM)	**-£4**	**-£864**	**-£471**	**£581**	**£55**	**-£511**	**-£55**	**£0**	**£1,433**	**£164**	**-£806**

Pay budgets used to calculate savings as opposed to actual cost for FY17. We recommend that any material variance be reflected in these numbers.

Overall 9% recurrent pay reductions.

Planned savings in facilities savings in pay does not match reduction in WTE, due to requirement for increase in non-pay post merger due to planned outsourcing.

Does not include the £874k corporate reductions identified in HHCT CIPs.

Under identification of against synergy target. We recommend that a more prudent view be entered into the LTFM if the gap cannot be closed.

Source: Management Information: FBC Cost Synergies and Sensitivities working paper

- The table above shows the identified categories for the back-office function synergies.

Pay synergies

- At present pay synergies represent 9% of current pay costs despite a drop in WTEs of 16%. In our experience from other mergers we have seen a range of back-office pay savings of between approximately 8% and 20%, but this is dependent on the relevant existing, and target, operating models.

Back-office synergies (cont.)

Pay synergies (cont.)

- The current calculations for pay synergies have been derived from the new operating models for the merged Trust that have been worked up using the Carter review recommendations. The calculations use the midpoint for each band, plus on costs (averaging 26%) less the combined current pay budgets (inc. agency). The assumptions around on costs appears in line with our expectations, but the use of midpoints to calculate pay costs under the future operating model could result in overstatement of the pay synergies.
- We recommend that a workforce review is carried out by both HHCT and PSHFT to determine whether the midpoint assumption is realistic for the bands across the back-office functions.
- A simple sensitivity for a change in assumption for 1 point above or 1 point below the midpoint could result in the value of savings identified being increased or decreased by 10%.

Non-pay synergies

- Non-Pay savings currently identified are £806k below the targeted savings of £2.3 million of recurrent savings, with the majority of savings identified being in estates, contracts and IT/IS costs.
- In our experience we would expect to see potential savings identified from procurement. Procurement spend is an area with potential for significant synergies, but further information and detailed planning would be needed (e.g. on detailed expenditure categories) before an estimation of savings can be made.
- As a estimate, if 1% if savings per year were to be made to non-drugs, non-PFI expenditure beginning in FY18, then this would represent savings of approximately £1.3 million, which could close the current gap in non-pay synergy savings.

Phasing of Back-Office Synergies

- The phasing of the current worked up savings have not yet been worked through as these will be subject to staff consultation.
- The targeted recurrent savings are phased heavily in FY18, with CEO department delivering the full targeted saving in that year. There is a significant risk that synergy savings may not deliver to this profile given the potential complexity of implementing some of these initiatives.
- In our experience we would expect non-pay savings to be phased at an earlier stage than FY20, with specific schemes such as IT and Estates already being developed.

We recommend that the TPB reassess the phasing of both pay and non-pay savings, as well as considering this as part of sensitivity analysis.

	16/17	17/18	18/19	19/20
CEO department	£0.0	£1,129.0	£0.0	£0.0
Corporate Governance	£0.0	£292.2	£73.1	£0.0
Finance	£0.0	£865.2	£216.3	£0.0
HR	£0.0	£930.6	£232.6	£0.0
Nursing	£0.0	£417.5	£104.4	£0.0
Facilities	£0.0	£592.3	£592.3	£0.0
IT/IS	£0.0	£406.9	£101.7	£0.0
Ops	£0.0	£298.0	£74.5	£0.0
Clinical Support	£0.0	£297.0	£74.2	£0.0
Non-pay	£0.0	£0.0	£0.0	£2,263.1
Savings	**£0.0**	**£5,228.6**	**£1,469.1**	**£2,263.1**

Source: Management Info: FBC Cost Synergies and Sensitivities working paper

Transaction Costs

The table below shows the high level summary of the forecast transaction costs assumed within the Transaction LTFM. We understand that the breakdown of these costs has moved on significantly following the population of the Transaction LTFM with redundancy and transaction costs up to the merger date worked up in full.

We recommend that the transaction costs are further developed in detail to determine the quantum and phasing of costs focusing in particular on post merger. In addition, specific workstreams should focus on further developing the robustness of cost assumptions that have been factored into the Transaction LTFM.

	Costs				Total Costs	
Transaction Costs (£000's)	**16/17 Yr0**	**17/18 Yr1**	**18/19 Yr2**	**19/20 Yr3**	**Recurrent £'000**	**One off £'000**
Redundancy	£0	-£2,943	-£486	£0	£0	-£3,429
Internal transition costs	-£1,715	-£3,284	-£116	£0	£0	-£5,115
External costs (legal + due diligence)	-£1,275	£0	£0	£0	£0	-£1,275
IT integration costs	-£1,000	-£1,500	-£1,500	£0	£0	-£4,000
Total Costs	**-£3,990**	**-£7,727**	**-£2,102**	**£0**	**£0**	**-£13,819**

Source: Management Information: FBC Cost Synergies and Sensitivities working paper

- **Redundancy** – The value of the redundancy pot is based upon the back-office post merger operating models which have been developed for the specific areas identified as releasing synergies. These costs have been calculated using midpoint and are subject to consultation around the operating models for each area. It is recommended that workforce models be used to establish whether the assumption of midpoint is correct.
- **Internal Transition Costs** – The internal transition costs include the cost of the transitional team as well as an element for clinical backfill. We understand that at present these costs are worked through based on the 2015/16 OBC.
- **External Costs** – Pre-merger the trusts have incurred transaction expenditure for external consultancy in terms of due diligence, legal arrangements and independent accounting opinions and assurance boards which are part of the work undertaken leading up to the merger.
- **IT Integration Costs** – We understand that at present an IT/IS review is taking place to assess the requirements for the merged organisation. We would expect that some of this IT cost is capital expenditure related to transitioning the two organisations onto one system. We would also expect to see recurrent cost in terms of IT licences for the new system and ongoing maintenance.

At present we understand that the detail of specific workstreams have not been formalised beyond the anticipated transaction date, but that in the lead up to the transaction date these workstreams will be formalised with specific workstream leads.

Risks and sensitivities

The TPB has considered and modelled six key sensitivities to the Transaction LTFM, as set out in the table below. While these are broadly in line with our expectations, we recommend that the TPB reach agreement on the level of the SEP, standalone CIP and income CIP and merger synergies to be included in the base case of the FBC and also in any downside sensitivity analysis.

We understand that the Trusts' mitigations are currently work in progress – we recommend that these are further developed in detail to respond to the downside case if some or all of the risks identified were to materialise.

Downside Modelling of Transaction LTFM	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22
Transaction LTFM Surplus/Deficit	**-20.2**	**-46.7**	**-29.8**	**-21.3**	**-19.2**	**-17.6**
Assume no growth	0.0	-1.3	-4.0	-7.3	-9.6	-13.6
No income CIP's i.e. no cost margin saving on growth	-1.8	-2.0	-2.5	-2.7	-2.7	-2.7
CIPs at minimum 2% requirement	-9.0	-12.5	-14.0	-16.7	-18.9	-20.0
SEP assume only 50% of income and delayed by one year	0.0	0.0	-0.5	-2.2	-3.8	-2.6
Potential transaction cost/ Implementation assume 50% increase	-2.0	-3.9	-1.1	0.0	0.0	0.0
Non achievement of savings by 10% and delayed by one year	0.0	-5.2	-0.5	-0.7	-0.9	-0.9
Adjusted Transaction LTFM Surplus/Deficit	**-33.0**	**-71.6**	**-52.3**	**-50.8**	**-55.1**	**-57.4**

Source: Management Information: FBC Cost Synergies and Sensitivities working paper

Commentary on sensitivities:

Downside Sensitivities	Comments and Recommendations
Assume No growth	▪ The Trusts have modelled a sensitivity whereby all growth and a "flat cash" scenario is assumed. ▪ This is a likely area for NHSI to challenge (i.e. why growth generates a margin) and therefore we believe that it is a good area to sensitise.
No income CIPs i.e. no cost margin saving on growth	▪ The Trusts have modelled a sensitivity whereby income CIPs are removed. ▪ Whilst this is a prudent assumption, the TPB may wish to consider if there are specific income CIPs that are more risky than others (e.g. unconfirmed or not agreed with commissioners) and sensitise these specifically.
CIPs at 2%	▪ The Trusts have modelled a sensitivity whereby CIP are delivered at 2%. ▪ This is a common and reasonable area for sensitivity. However, we recommend that the TPB and Trusts consider the realistic level of CIP to include in the base case across both PSHFT and HHCT, based on the internal due diligence that has been completed and when assessing against the Trusts' historical track record of delivering CIP, the current development of detailed plans underpinning forecast CIP and the financial grip and governance arrangements that are in place. ▪ This is a highly subjective area and NHSI may be more or less severe in their sensitivity. ▪ We understand that the level of HHCT CIP has been updated since the date of the August LTFM to reclassify the marginal rate generated by assumed additional demographic income CIP in the latest HHCT standalone LTFM – previously just the marginal rate was shown as income CIP within the LTFM, while the latest version of the LTFM reclassifies the full amount of additional demographic income as an income CIP. This results in an increase in the level of overall HHCT CIP, taking the percentage range year on year to between 4.6% and 4.9%. ▪ . We recommend that the sensitivities are remodelled to take this into account.

Risks and sensitivities (cont.)

Downside Sensitivities	Comments and Recommendations
SEP assume only 50% of income and delayed by one year	▪ This appears to be a reasonable area for sensitivity given the risks previously highlighted. ▪ However, we recommend that the TPB consider a more prudent position (given it is still uncommitted) to present a downside case that assumes the SEP does not happen at all. This would demonstrate that the TPB and Boards are aware of the risks of delivery and are not relying on this as a fundamental part of making the merger work.
Potential transaction costs/implementation – 50% increase	▪ The Trusts have modelled a sensitivity whereby transaction costs increase by 50%. ▪ This is a typical area of sensitivity and appears to be reasonable, but TPB should continue to monitor this against the detail of the transaction costs and assumptions as these were still under development at the time of our review.
Non achievement of merger savings by 10% and delayed by one year	▪ The Trusts have modelled a sensitivity whereby synergies are underachieved by 10% and delayed by one year. ▪ This is a typical area of sensitivity, with typical sensitivities in this area around post transaction implementation plans delaying the benefits realised. However, this depends on the level of confidence in the merger synergies and the detail available around implementation plans. ▪ In our experience, 10% non-achievement is a mild downside case. We recommend that the TPB consider the possibility of up to a 25% sensitivity, which might provide the TPB and the Boards with a better indication of what underachievement of synergies might look like. ▪ In addition, a more detailed approach would include sensitising specific, more risky elements of the merger synergies at a higher rate, rather than applying a single rate to all.
Upside Sensitivities	**Comments and Recommendations**
Assume QIPP is not achieved	▪ In our experience, NHSI are unlikely to accept this as a upside or a mitigation, but we believe this is reasonable upside case given known pressures and continuing demand in the local health economy. ▪ In addition, we recognise that it is a difficult area to model, but commissioners typically assume that QIPPs are going to improve their financial positions, or at least supress increases in demand that Trusts cannot deliver.
Assume S&T funding is recurrent	▪ In our experience, NHSI are unlikely to accept this as a upside or a mitigation as there is no clarity on such funding, but this appears to be a reasonable scenario to consider. .
Assume receipt of additional £15m PFI support at PSHFT	▪ In our experience, NHSI are unlikely to accept this as a upside or a mitigation, but we understand discussions between PSHFT and NHSE/NHSI are ongoing in this area, so this is a reasonable scenario to consider. ▪ However, it would appear to be more the case that if other savings/income generation fail to deliver then this may be an interim funding mechanism.

Other potential sensitivities to consider:

- **Capital expenditure** – the Trusts have assumed forecast capital expenditure at annual levels that are below historical levels. The TPB should consider whether this should be an area of sensitivity if a detailed capital programme has not been worked up for the merged Trust.
- **Interest rate on borrowings** – the TPB should consider whether interest rates are fixed for existing or planned borrowings, as the risk of rising interest could have a significant impact on the merged Trust. For example, the TPB should undertake scenario analysis as to what would be the impact if new loans obtained were charged at 1% more than existing loans?

Risks and sensitivities Cont.

Mitigations

- We understand that the Trusts' mitigations are currently work in progress, based upon discussions that have taken place at the TPB and at Board level. However, we have not had sight of these as part of our assessment as they are still under development.
- We recommend that mitigations for the downside case are developed in detail to offset the deterioration in both the merged Trusts surplus/deficit and cash position. In our experience, best practices indicate that mitigations should be developed to a similar level of detail as to CIP plans, with supporting detailed financial analysis and implementation plans.
- We also recommend that TPB consider further mitigations. For example, if the SEP did not happen, what other schemes may be developed instead to take advantage of the surplus estate?

An overview of NHSI's high level approach to sensitivity analysis

1. Take the submitted LTFM as the merged Trust's "Base case";
2. Make adjustments to bring in line with national guidance or where there is strong case for applying sensitivities (e.g. non-achievement of CIP, non-delivery of the SEP), as NHSI's "Assessor case"
3. Consider "reasonable downside" sensitivities (i.e. not worst case), present this to the merged Trust to present mitigations. NHSI will then assess which mitigations to accept, producing the "downside case"

A key point to highlight is that there is no consideration of "upside" sensitivities by NHSI. In the sensitivity comments slide we have therefore considered the upside case as potential mitigations on the downside case.

In addition the sensitivity analysis should detail the impact on the net surplus/deficit position and also on the cash position. A key question for NHSI is "how long until they run out of cash in a downside case?".

Alongside NHSI's work on reviewing the financial cases, will be consideration of the governance of the merging Trusts. It will expect the Boards to be aware of what a downside case may look like and what actions it may take to mitigate it. Part of this is done by the finance team's presentation of the downside case, but it is also expected that strong boards will engage with this and challenge this.

NHSI's approach to assessing CIP sensitivities is to review the CIP programme and governance, assessing any analysis of CIPs available and reviewing a sample in detail (e.g. PIDs, QIAs and interviewing CIP leads). Using this as a basis, it will:

1. Fully sensitise out any CIPs identified as unlikely to be achieved; and
2. Based on governance, historical achievement and level of detailed plans and benchmarking, determine a R/A/G rating for the overall programme and sensitise at 15% non-achievement and 5% delay unless high quality plans are in place.

If plans are significantly underdeveloped (principally in year 1) then a greater sensitivity may be applied.

Additional recommendations

- We recommend that the Trusts' sensitivity analysis is further modelled to include the impact on the cash flow position of the downside case; and
- We recommend that that CIP schemes are further developed in detail to give NHSI greater confidence that the schemes can be achieved on time and to the level included in the LTFM.

Appendices

1. **Scope of work**
2. **Sources of information**

Appendix 1 - Part 1 and 2 Scope of work

Scope of work

Part 3 – Combined LTFM

Assess assumptions alignment between HHCT & PSHFT

— Comment on the application of revised assumptions to the HHCT LTFM

— Comment on the application of revised assumptions to the PSHFT LTFM

Assess combined LTFM

— Summarise and comment on the modelled impact of the proposed transaction:

- Clinical and back office operating model changes
- Recurrent costs associated with operating an enlarged Trust
- Non recurrent transaction and integration costs (capital and I&E)
- Capital expenditure requirements
- Due diligence findings
- Funding arrangements

Model the downside scenario – Summarise and comment on the combined Trust downside and mitigated downside scenarios.

Appendix 2 - Sources of information

PSHFT	HHCT
Long Term Financial Model	Long Term Financial Model
PSHFT Forward Plan Financial Return (IFRS) Final - Plan for YE March 2017	2015/16 Financial Monitoring and Accounts
PSHFT Trust Annual Plan FY17	2016/17 Financial Monitoring (Full plan)
Board Reports FY15-FY17	STP Provider workings
Capital Programme for APR	CIP Tracker 2016/17-2017/18
CIPs 2013/14-2015/16	SEP outlying presentation
STP Provider workings	Activity workings
Mini LTFM summary	CIP 3 year opportunities
PFI workings	SEP high level financial forecasts
FBC to OBC reconciliation	Loan workings
Other underlying working papers	

Transaction LTFM
Long Term Financial Model
Sensitivity analysis of modelled downside and upside
Synergies high level workings – clinical and back-office
Synergies working papers for back-office work stream

Peterborough and Stamford NHS Foundation Trust and Hinchingbrooke Health Care Trusts

Infrastructure Review

14 September 2016

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Authors: Michael Bone, Paul Cunningham & Clive Booth

Approvals

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Victoria Hughes	Principal Consultant	14/09/2016	V2.3

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Contents

1. Executive Summary

The purpose of this Infrastructure Review was to examine the IT Infrastructure and an agreed number of supporting services ahead of the proposed merger between Peterborough and Stamford NHS Foundation Trust (PSHT) and Hinchingbrooke Healthcare NHS Trust (HHCT). It is clear that the Infrastructure at PSHT has greatly benefited from the building of the new Peterborough City Hospital and this is best demonstrated by the well-equipped and tidy IT data centres and network hub rooms. The PSHT IT team have a strong senior management group lead by an experienced Head of IT, who has recently taken over responsibility for IT at HHCT also.

Each Trust has a current IT Strategy document that sets out the plans the two Trusts have covering the period 2014 to 2017. The HHCT IT strategy was developed during a time when Circle Health ran the hospital and has not been updated since, whilst the PSHT IT Strategy was refreshed in early 2016. Each is aligned to the National IT Agenda with a focus on local service delivery as directed by their commissioners. However, that is where the similarities end, as PSHT has continued to invest in IT Infrastructure year on year, maintaining a good standard and recognising the value IT has as a key enabler of change. In contrast, the approach at HHCT has been to make only minimal investment often driven by a position where something critical has either already broken or is likely to do so in the near future. Where investment has been made, the IT Team have worked hard to maximise the benefits that the investment can yield, concentrating on critical components at the heart of the network and around the security perimeter.

In summary the areas of concern at HHCT are as follows:

- Primary data centre – not fit for purposes and needs immediate action
- Network hub rooms
    - 5 fail every time power is switched - needs immediate action
    - Remaining 18 hub rooms – very obsolete equipment, needs action soon
- Wired Network
    - 75 network connection devices are very obsolete
        - 10 units need immediate replacement
    - 65 units need replacing over the next 3 years
- Wireless Network
    - Operable but installed to an old standard, needs to be refreshed
- Network Management software
    - Would benefit from merger with more advanced PSHT solution
- Voice Services
    - No fall back if digital system collapses
    - Would benefit from small fall back system to sustain emergency phones
- Computing Devices
    - Only very modest investment in workstations over past three years
    - Need a one off capital investment (£320k) to replace very obsolete workstations
- Server Computing and Storage
    - Modest investment in additional computing provision is needed to sustain the existing service and the known future growth
    - HHCT only part way through upgrade to core storage solution, this needs to be completed quickly to ensure sufficient capacity exists to support the merger, clinical systems consolidation and adequate disaster recovery.

Unified Communications is a fast growing area across Information Technology as businesses, including healthcare organisations, seek to integrate communications technology to deliver easy to use and seamless access to information, resources and people. We noted the recent eComms Project to look at Unified Communications and, given the findings of the Outline Business Case, would suggest that as part the new service model design, IT should be engaged with clinicians and managers to determine how such technologies can be used to improve cross-site working and drive up efficiencies.

One of the core IT Solutions is electronic mail and here the two Trust have a notable difference. PSHT has its own local solution built around the leading commercial solution, whilst HHCT has the NHS national solution. The debate about the way forward for e-mail consumed many hours and to provide assurance, additional views where sought from thought leaders both in the NHS and outside. The conclusion is that the Trust would gain the greatest benefit, as it looks to build more integrated Trust wide collaborative services, from an expansion of the local solution in use at PSHT. Due to the complexity that arises from this debate, a more detailed review of risks and benefits has been included in the review.

In every area that we have reviewed, we have documented risks where these exist, have provided options for partial or full resolution and, have included recommendations covering immediate action, tactical use covering the first 2-3 years of the merger process and, strategic recommendations that extend for five years by which time the merger should be complete. In each area where there is a cost we have, where ever possible, identified where capital (one off) funding will be required and where recurring funds will be needed. We have further divided sectional costs by separating costs for goods or services from the costs for people (Professional Services). A full breakdown of each is included in the report but in summary the costs (incl. VAT) are as follows:

	COSTS	
	Capital (One Off)	Revenue
TOTAL INFRASTRUCTURE COSTS FOR MERGED TRUST	**£2,449,850.03**	**£1,103,850.42**

Whilst we have noted a number of areas of concern above, we would also like to highlight some areas of best practice and indeed exemplary work found during the review. Each Trust has an IT Service Desk which acts as the primary interface for users and we have found very high levels of customer satisfaction, well beyond the NHS norm at both Trusts. In terms of Integration Services, both Trust have selected class leading solutions and the development of e-Track at PSHT is an exemplary example of this being exploited to the full. Finally, we were delighted to find IT Security at PSHT highly compliant with the International Standard (ISO:27001) and would advise that this again is an exemplary model that has been developed for safety of users and as a benefit to the Trust.

2. Introduction

On 24th May 2016 a formal proposal to merge Peterborough and Stamford Hospital NHS Foundation Trust with Hinchingbrooke Healthcare NHS Trust was reported. Both Boards of Directors agreed that an outline business case should be prepared to identify options, risks, benefits and costs, at a high level, for the merger. The basis for this business case is the acceptance that whilst Peterborough & Stamford Hospital NHS Foundation Trust is clinically sustainable, it is not financially sustainable and Hinchingbrooke Healthcare NHS Trust is neither. The outline business case has identified that by merging the two Trusts into one and, by redesigning many of its services, both business and clinical, it should be possible for the new Trust to reach both clinical and financial sustainability.

Also recognised by the business case is the need to streamline and automate many existing manual processes. As Information Technology is the key to technology enabled change, the Trust commissioned two pieces of consultancy work focussed on:

1. Infrastructure
2. Clinical Systems

Methods Advisory was awarded the first lot on Infrastructure and this report is the resulting Review.

2.1 Purpose

The purpose of the review has been to look at an agreed number of areas of Information Technology Infrastructure and to document the current position of each at both Peterborough & Stamford Hospital NHS Foundation Trust and Hinchingbrooke Health Care NHS Trust. The review was to identify:

- what each Trust has in place across the agreed areas
- the risks each area carries
- what needs to be addressed in order to facilitate the successful delivery of services in the merged Trust

For each risk or shortfall found, the review has also identified options to resolve, or at least mitigate, the risk and a cost in terms of capital investment and/ or revenue expenditure to deliver the option.

2.2 Scope

The scope of the Infrastructure work has focussed on the following areas:

- The physical estate including data centres and network hub rooms on both hospital sites
- The wired and wireless network used to deliver data, voice and video across the organisations
- The security of the network perimeter - current external links and what remote access is available, along with the management platforms used to monitor all of these digital communications services

In mind of the future, the review also looked at electronic presence and unified communications as these can greatly help in terms of collaborative working along with voice services, both analogue and digital, as well as paging and the switchboard service. For end users, the review has covered desktop/ laptop computing, all manner of mobile devices and the security required to keep them safe. Behind such technology, the review has also covered all of the server based compute, storage and core database technology across both Trusts including a detailed review of how resilient these services are and what fall back provision is available.

Key to Information Technology is its interface to its users, therefore the Service Desk has also been reviewed along with the electronic directory that binds them all together, including the provision of

electronic mail. The review has also covered security including structures (Governance), standards, policy, procedures and reporting alongside technological resilience including business continuity and disaster recovery planning.

2.3 Exclusions

At the start of the engagement it was agreed that Microsoft licensing would be outside the scope of this review, however where these directly impinge on areas of agreed coverage, such as e-mail, this exclusion has been ignored.

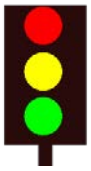
3. Findings

3.1 Glossary of Terms

AD	Active Directory (Microsoft)
AP	Access Point
API	Application Programme Interface
BCI	British Continuity Institute
CCG	Clinical Commissioning Group
DC	Data Centre
EDM	Electronic Document Management
EWA	Enterprise Wide Agreement (Microsoft)
HHCT	Hinchingbrooke Healthcare NHS Trust
HH	Hinchingbrooke Hospital
HSCIC	Health and Social Care Information Centre
IP	Internet Protocol
IVR	Interactive Voice Response
LAN	Local Area Network
LDSD	LANDesk Services Desk
LDMS	LANDesk Management Suite
MDM	Mobile Devices Management
PAS	Patient Administration System
PCH	Peterborough City Hospital
PSHT	Peterborough and Stamford NHS Foundation Trust
PSTN	Public Switched Telephone Network
RFID	Radio Frequency Identification
SNMP	Simple Network Management Protocol
SIRO	Senior Information Risk Officer
SRH	Stamford and Rutland Hospital
TCP	Transmission Control Protocol
TIA	Telecommunications Industry Association
UPS	Uninterruptible Power Supply
VDC	Virtual Data Connection
VDI	Virtual Desktop Infrastructure
VoIP	Voice over IP
WAN	Wide Area Network
UC	Unified Communications

3.2 Physical Estates

3.2.1 Data Centres

	**Immediate**	**Replace DC1 at Hinchingbrooke with Commercially Hosted Data Centre**
	Tactical	**Consider new Data Centre build as part of the Health Campus development**
	Strategic	**Align Data Centre capacity with requirements of the merged Trust's service offerings**

3.2.1.1 Current Position

PSHT

PCH has three data centres (DC), two classified as primary and a third classified as the development DC. Each of the primary data centres would be defined as being close to Tier 2 under the TIA standards document 942-2 (for reference, a summary of the data centre tiers is provided in Appendix A). Although a small number of minor items would complete the Tier 2 level. These include the provision of CCTV, and upgrade to the main lighting (to L3 level) and the provision of formal emergency lighting in particular above the main door. In addition, the provision of a local environmental monitoring station should be considered to provide immediate alerting to the IT Department should the environment change.

Both DC1 and DC2 have a high level of occupancy leaving only a modest amount of space for further development. However, DC3 is only lightly populated and has the advantage of being immediately adjacent to an IT Hub Room making it possible to remove the wall that separates the two to create a larger data centre. A number of modest upgrades around flooring, lighting, air conditioning and fire suppression would be needed to reach full Tier 2 compliance but this would provide space for a further 6 racks of expansion.

Risks

Whilst the Tier 2 standard denotes redundancy, a potential single point of failure exists in DC1 in that the water from both air conditioning units exits the room via a single pipe. Should this pipe be compromised, the air conditioning will cease working leading to thermal overload and equipment shutdown. The Trust is aware of this and so environmental monitoring has been installed to minimise this risk.

All three data centres are lit by standard neon strip lights and none have any formal emergency lighting which means that they are below the standard with regard to light. Ideally the primary lighting should be to L3 level with emergency lighting, in particular above the main door. The Trust has included a re-chargeable torch to address this issue but in time the lighting provision should be considered for upgrade.

Aside from these small items the data centres at PCH provide a very sound base upon which to build future services.

HHCT

HHCT has two data centres, one older DC in the main hospital (DC1) and one newer DC in the Treatment Unit (DC2). DC1 was not purpose built, starting life as the telephone frame room and

being augmented from time to time as demands for data centre space grew. DC2 is more modern, was purpose built and, like the data centres at PCH, would be defined as being close to Tier 2 under the TIA standards document 942-2.

The construction and fitment of DC1 falls someway short of the Tier 2 standard. In terms of occupancy DC1 is already at maximum capacity in terms of computer racks and has only minimal expansion space available. In addition, the power feed to DC1 is operating at its maximum load capacity as is the UPS that provides short term back up power. As a result, DC1 has been on the HHCT risk register for some time and moving forward, should be downgraded to become a network hub room only.

By contrast DC2 carries a modest load and has sufficient capacity for a further 6 racks of expansion. There are a small number of exception issues, most notably, the inclusion of the batteries for the UPS being housed in the DC, the lack of CCTV and the same lighting issues as outlined above for PSHT.

Risks

DC1 presents a series of risks in terms of space, power provision and distribution, water ingress, environmental monitoring, lighting and basic construction. As a result, immediate action is required to address these risks and so options with costs are below:

3.2.1.2 Options

There are four options open to the Trust with regard to DC1 as follows:

1	**Do Nothing**
The Trust could choose to do nothing and accept the risk. However, the Trust has already experienced a number of major outages across both its network and computer storage solutions and the continued use of DC1 does nothing to address this risk. In a post Trust merger configuration, the impact of losing DC1 would only increase the scale of the loss and the resulting impact on business and clinical services. **On this basis the Do Nothing option is rejected**	
2	**Purpose Build a Data Centre on Site**
Identify a suitable space within the hospital campus and build a fully compliant Tier 2 data centre. Whilst this would resolve the issues with DC1, space on site is at a premium and the cost of such a build (based on a 120 Sq. M footprint) would come close to £1,000,000 by the time dual power feeds and communications ducts are included. **On this basis the Purpose Build option is rejected**	
3	**Build a Data Centre as part of the Proposed Health Campus**
As part of the wider development of health services across Cambridgeshire a scheme has already been commissioned to develop the HHCT site into a multi-service Health Campus. As part of this development there is room within the scheme to include the construction of a data centre compliant with the Tier 2 standard. However, the timeline for any data centre development within the Health Campus is a minimum of 18 months away. Allowing time for construction and commissioning, live use would not commence for 2 years. In addition, the exact needs of the data centre would be difficult to specify as the business needs of the Health Campus will take some time to emerge. It is therefore highly difficult to generate a cost of the Health Campus option at this time. **On this basis the Health Campus option is noted for possible future development**	
4	**Use a Commercial Data Centre for Hosting**
The use of commercial hosting would see HHCT use a third party data centre built to at least the Tier 2	

standard (but likely Tier 3) linked to the Trust network by dual resilient external links. The Trust would move a selected number of data racks into the hosting centre and continue to manage the delivery of computing services remotely. This model is already widely in use by healthcare organisations and is usually a highly cost effective way of providing high quality data centre capacity rather than building something on site.

It should also be noted that the use of a commercial hosting centre contract can be highly agile, allowing the Trust to scale up or down as its business needs change. As the new service model for the merged Trust is agreed and as the needs of the Health Campus emerge, the Trust would be able to exit the commercial hosting agreement and move into its own data centre, if this is agreed as part of the Health Campus. This flexibility allows the Commercial Hosting option to be used either as a tactical solution or to grow from being tactical to strategic as the nascent organisation grows.

On this basis the Commercial Hosting option is recommended

3.2.1.3 Costs

The costs associated with options 1-4 above are as follows:

Option	Title	Capital	Revenue
1	Do Nothing	£0.00	£0.00
2	Purpose build Data Centre (Note 1)	£1,200,000.00	£67,000.00
3	Build Data Centre as part of Health Campus (Note 2)	£750,000.00	£32,500.00
4	Use Commercial Data Centre for Hosting (Note 3)	£26,785.00	£302,504.23

Note 1: The capital and revenue costs of a full compliant Tier 2 data centre including dual routed duct work is an estimate based upon our experience of such work in new hospital builds elsewhere. Please note Tier 2 assumes this development to be part of an existing hospital building as a standalone data centre would cost considerably more.

Note 2: The capital and revenue costs of a full compliant Tier 2 data centre including dual routed duct work is an estimate based upon our experience of such work in new hospital builds elsewhere. They have been reduced by 25% as we assumed building structure costs has been included in the work already proposed for the health campus.

Note 3: The capital and revenue costs are based upon a non-competitive quotation and we believe that a lower revenue cost would be achieved through a competitive procurement.

3.2.1.4 Recommendations

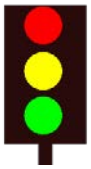
Immediate: Downgrade DC1 from a data centre to a hub room, removing servers and storage to a Tier 2 or better compliant data centre. Retain the core network switch at this location and ensure that the environment, mechanical and electrical service are sufficient to mitigate all identified risks.

Identify a suitable commercial data centre provider and engage, by way of a hosting contract, a compliant data centre service to house the servers and storage migrated out of DC1. Ensure hosting contract is flexible and agile such that it can be amended as the nascent merged Trust service model takes shape.

Tactical: Review options for a data centre as part of the proposed Health Campus. If the option offers value for money and meets Tier 2 or above compliance, include new data centre as part of the Health Campus development.

Strategic: Review data centre options as the merge Trust develops, ensure data centres remain compliant and that capacity is aligned with the merged Trust service model.

3.2.2 Hub Rooms

		
	Immediate	**Replace UPS equipment at 5 highlighted hub rooms at HH. Review need for fire suppression in key hub rooms**
	Tactical	**Initiate UPS equipment replacement programme at remaining 23 to mitigate down time risk**
	Strategic	**Ensure hub room equipment is maintained to minimise loss of service risks.**

3.2.2.1 Current Position

PSHT

Alongside the 3 Data Centres, PCH has a further 34 hub rooms that house more local IT equipment. Each room is equipped with a local UPS and one or more air conditioning units. The standard hospital fire detection system is included in the room and each room is secured by a physical key lock and/ or a card swipe. At this time, automatic fire suppression is not provided as standard in hospital hub rooms. However, there are occasions when a hub may grow to house sufficient technology to elevate its function to one that is considered business or even mission critical. This is most often found in key diagnostic areas like radiology or pathology. In such circumstances a local fire suppression solution may become a sound solution. Appendix B contains details of such a solution should the Trust deem it necessary.

In our opinion all of the hub rooms at PCH are suitable for continued use as part of a merged Trust.

HHCT

HH has some 23 hub rooms that house more local IT equipment. Each room is equipped with a local UPS and a small number have air flow or air conditioning units. The standard hospital fire detection system is included in the room and each room is secured by a physical key lock and/ or a card swipe. It should be noted that all 23 hub rooms either already have UPS equipment that is obsolete and has failed, or is end of life and likely to fail in the future.

None of the hub rooms have automatic fire suppression; however, there are occasions when a hub may grow to house sufficient technology to elevate its function to one that is considered business or even mission critical. Appendix B contains details of such a solution should the Trust deem it necessary.

Risks

At this time 5 hub rooms have been identified as having UPS equipment that is obsolete and so no longer provides short term power in the event of a failure. The outcome is a minimum period of 15 minutes IT and Telephone down time whenever power is lost or cycled. This includes all routine generator tests and all forms of planned/ unplanned electrical work in such locations. As a result, staff who work in such areas have to be aware of any routine or planned electrical work so that data is not lost and alternative means of communications are utilised; if users are unaware or forget, data can be lost.

The remaining 18 hub rooms also have UPS equipment that has reached end of life and have deteriorating battery life issues. If left unattended, in time these 18 units will fail and the impact outlined above will become hospital wide with far greater potential for lost data and equipment damage across the hub rooms.

3.2.2.2 Options

There is only one practical option and that is to commence a programme of planned replacement for obsolete and end of life UPS equipment. The need to start with the 5 failed units is urgent and so should start without delay, progress then needs to continue through the remaining 18 hub rooms until all UPS equipment is fully operational and capable of providing short term power for a period of not less than 30 minutes.

3.2.2.3 Costs

HHCT Estates Department have provided costs as follows:

Work Package	Capital	Revenue
Replace failed UPS in 5 hub rooms @ £4,000 each	£20,000.00	£2,000.00
Replace end of life UPS in 18 hub rooms @ £4,000 each	£72,000.00	£7,200.00
Total UPS Replacement Costs over 4 financial years	**£92,000.00**	**£23,600.00**

3.2.2.4 Recommendations

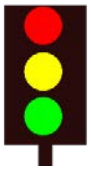
Immediate: Replace the 5 failed UPS units with new equipment and mitigate the impact of planned/ unplanned down time on IT systems, Telephone and end users across the hospital.

Tactical: Over Financial Years 17/18, 18/19 and 19/20 replace a further 6 UPS units per annum based upon a priority plan agreed with IT to mitigate the potential impact of planned/ unplanned down time on IT systems, Telephone and end users across the hospital.

Strategic: Review developing infrastructure needs at HHCT in-line with Trust IM&T Strategy 2014 – 2017 and direct infrastructure investment as needed to sustain a modern technology enabled health service.

3.3 Digital Communications

3.3.1 Wired Network

	Immediate	Replace 10 most obsolete Cisco Edge Network switches at HHCT
	Tactical	HHCT & PSHT - Continue to replace end of support Cisco [redacted] switches part of the rolling investment in infrastructure
	Tactical	Based on the Libretti Health report on Clinical Systems, deploy aggregation switch technology
	Strategic	Continue regular investment in network infrastructure Plan for upgrade to Cisco Core Switches at PSHT

Appendix C includes a schematic showing a full four layered campus network with separate layers for: Data Centre, Core, Distribution and Edge networks. It is provided only as an exemplar of what makes up a full four-layer network design and so is used to put the descriptions provided of the various Trust networks into context for the reader.

3.3.1.1 Current Position

PSHT CORE

PCH comprises a classic 2-layer network build around high speed cores with a single core node located in each of the two data centres for performance and resilience [redacted] operating with a single supervisor card and an integrated wireless services module that acts as a controller for the Trust's wireless network. Each core switch is fitted with dual power supply modules and is fed from the data centre UPS. The two core switches are joined using two separately routed 10Gb network links that form the core network. A further single 1Gb network link connects the core network to a third smaller [redacted] core network switch at SRH. All of the core network equipment is underpinned by a full maintenance and support contract that operates 24 x 7.

All three core network nodes are also connected directly to a local [redacted] for security (see perimeter for details) as well as having local network links at each site to the BT voice network (PSTN) and the NHS N3 network. Access to the Internet is by router over the NHS N3 network via the NHS Network Internet Relay. In the event that the single 1Gb link to SRH fails, voice and data traffic can continue to reach SRH over the PSTN and NHS N3 network.

At this time all servers are directly connected to one of the core switches based upon the DC in which they are located. There are no aggregation switches in use and none of the servers are dual homed. As a result, a single point of failure exists in terms of server connectivity.

Risks

Although the Trust has two core network switches, one in each DC, the use of a single direct connection from servers to the core means that there is a single point of failure should such a connection fail.

3.3.1.2 Options

There are two options open to the Trust with regard to this single point of failure as follows:

1	Do Nothing
The Trust could choose to do nothing and accept the risk. However, this would leave the Trust open to a potentially significant outage should either the link or local core switch fail. **On this basis the Do Nothing option is rejected**	
2	**Deploy Aggregation Switches**
Deploy a number of aggregation switches into each data centre. In normal network design aggregation switches come in pairs, the first switch connects over a high speed link to the core switch within the local DC and the second (also over a high speed link) to the core switch in the second DC. All servers are then connected using two separate connections, one to each aggregation switch ensuring that the servers remain present on the network even in the event of a total core switch failure. **The use of Aggregation Switches option is recommended as both a tactical and/ or strategic option**	

3.3.1.3 Costs

The costs associated with options 1 and 2 above are as follows:

Option	Title	Capital	Revenue
1	Do Nothing	£0.00	£0.00
2	Deploy Aggregation Switches at PSHT	£80,142.98	£7,270.00

Total cost for both PSHT and HHCT is below

HHCT CORE

HH comprises a classic 2-layer network build around high speed cores with a single core node located in each of the two data centres for performance and resilience. Each core switch is a [redacted] operating with dual supervisor cards each supporting two switch fabric extensions known as virtual data connections (VDC). Each core switch is fitted with dual power supply modules, both of which are fed from the data centre UPS. The two core switches are joined over dual 10Gb network links that share the core load, providing a 20Gb backbone that forms the core network.

At this time, the two VDC in each switch are split, with one dedicated to user connections and one to server connections. As with PSHT all servers are directly connected to one core switch via the dedicated server VDC available from the [redacted] sited in the DC where the servers are located. There are no aggregation switches in use and none of the servers are dual homed. As a result, a single point of failure exists in terms of server connectivity.

Risks

Although the Trust has two core network switches, one in each DC, the use of a single direct connection from servers to the core means that there is a single point of failure should such a connection fail.

3.3.1.4 Options

There are two options open to the Trust with regard to this single point of failure as follows:

1	Do Nothing
The Trust could choose to do nothing and accept the risk. However, this would leave the Trust open to a potentially significant outage should either the link or local core switch fail.	

On this basis the Do Nothing option is rejected	
2	**Deploy Aggregation Switches**
Deploy a number of aggregation switches into each data centre. In normal network design aggregation switches come in pairs, the first switch connects over a high speed link to the core switch within the local DC and the second (also over a high speed link) to the core switch in the second DC. All servers are then connected using two separate connections, one to each aggregation switch ensuring that the servers remain present on the network even in the event of a total core switch failure. **The use of Aggregation Switches option is recommended as both a tactical and/ or strategic option**	

3.3.1.5 Costs

The costs associated with options 1 and 2 above are as follows:

Option	Title	Capital	Revenue
1	Do Nothing	£0.00	£0.00
2	Deploy Aggregation Switches at HHCT	£30,557.52	£3,018.15
	TOTAL Cost for Server Aggregation Switches Trust Wide	**£110,700.50**	**£10,288.15**

PSHT EDGE

As noted above PCH has 34 hub rooms housing one or more edge network switches. This technology comprises a mix of [redacted] switches. The older [redacted] switches reached end of support in November 2015 but are already part of the Trust infrastructure replacement programme. The [redacted] range is current but has an end of support date of October 2019 whilst the [redacted] range, also current, will remain supported until January 2021. Whilst none of the edge network equipment is subject to a maintenance and support contract the Trust holds a range of spare units and parts that is sufficient to sustain the required level of service.

In our opinion the PSHT wired edge network is suitable for continued use as part of a merged Trust.

HHCT EDGE

As noted above HH has 23 hub rooms housing one or more edge network switches. This technology comprises a mix of [redacted] switches from the [redacted] switches have now reached end of support and have been obsolete for some time. As noted above, the older [redacted] switches reached end of support in November 2015, which means that only the [redacted] range are current.

Risks

At this time only 25% of the total edge network switch technology in the Trust is from a currently supported range. All of the [redacted] switches have already reached end of support [redacted]. Access to replacement hardware components (spares) will also be in very limited supply and given this reliability is also likely to be less than optimum.

3.3.1.6 Options

There are two options open to the Trust with regard to edge network equipment as follows:

1	Do Nothing
The Trust could choose to do nothing and accept the risk. However, as noted above the majority of edge network technology is now fully obsolete and so the risk of failure increases the longer this technology remains in use. The switch software is built on functionality from more than 10 years ago, is not maintained [redacted]. Hardware manufacture ceased some years ago making replacement hardware components (spares) hard to come by. The only option is to commence a rolling programme of replacement as outlined in the HHCT IT Strategy 2014 – 2017. **On this basis the Do Nothing option is rejected**	
2	**Initiate a rolling programme of Edge Switch replacement**
Based upon the age and priority utilisation of the whole edge network, generate and initiate a rolling programme of switch replacement. At this time a total of 75 switches, including new fibre optic modules, is required. Given the scale of this work, this will be categorised as both an immediate task for the most pressing locations (10 Switches across Network Rooms MAN and WPL) and a tactical task for the remaining areas. For optimisation the [redacted] switches have been selected as this is the primary switch in use at PSHT and so, this investment brings the two networks into alignment. **The initiation of a rolling programme of Edge Switch replacement is recommended as both an immediate and tactical option**	

3.3.1.7 Costs

The costs associated with options 1 and 2 above are as follows:

Option	Title	Capital	Revenue
1	Do Nothing	£0.00	£0.00
2	Replace 10 most urgent network switches in Network Rooms MAN & WPL @ £3,794.66 per unit	£37,946.60	See Note 1
	Replace 67 remaining obsolete network switches over a period of 4 years. Review annually as part of Trust merger and plans for the new Health Campus.	£254,242.22	See Note 2
	Total Cost for Edge Switch Replacement	**£292,188.82**	**£0.00**

Note 1: The unit price includes the cost of the switch plus the SPF Fibre modules. There are no associated Professional Services as the Trust IT Department will undertake the decommissioning of old switches and the installation and commissioning of the new units.

Note 2: At this time HHCT holds a small number of legacy switches as maintenance spares. As part of this upgrade two additional switches have been included as services spares rather than engaging in a formal maintenance contract.

3.3.1.8 Recommendations

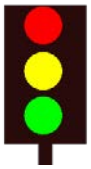
Immediate: Replace the ten most obsolete edge network switches at HHCT in network rooms MAN and WPL.

Tactical: Over Financial Years 17/18, 18/19, 19/20 and 20/21 replace a further 65 obsolete edge network switches at HHCT, based upon an aged priority plan agreed with IT to mitigate the potential impact of planned/ unplanned down time on IT systems, Telephone and end users across the hospital. Review the plan annually as part of merged Trust requirements and plans for the new Health Campus.

Based upon the Libretti Health review of clinical systems, deploy aggregation switch technology to maximise the availability of both business and clinical systems to meet the organisational needs of the merged Trust.

Strategic: Review developing infrastructure needs at HHCT in-line with Trust IM&T Strategy 2014 – 2017 and direct infrastructure investment as needed, to sustain a modern technology enabled health service.

3.3.2 Wireless Network

	**Immediate**	**Undertake full wireless survey at HHCT**
	Tactical	**Reset or Upgrade wireless network at HHCT based on the outcome of the wireless survey.**
	Strategic	**Continue to invest in network infrastructure as the demand for mobile working will be a major growth area in the merged Trust**

3.3.2.1 Current Position

PSHT

The wireless network at PCH extends across the whole hospital and comprises almost 450 [redacted]. These include AP's from the [redacted] ranges with only the older [redacted] range having an end of support date in July 2018. The wireless network has been installed using the -68dB signal strength making it fit for data, video and voice services over four wireless protocols, these being 802.11a, b, g and n. The Trust also has a smaller wireless network at SRH built to the same standard deployed over 25 [redacted]. Control of the wireless network, as noted above, is managed by [redacted], with one deployed in each of two core network switches. Although technically the standard for Radio Frequency Identification (RFID) is -65dB as this produces a detection accuracy of around 3 metres, the PCH network can provide RFID but with a reduced detection accuracy of around 5 metres.

In our opinion the PSHT wireless network is well designed and suitable for continued use as part of a merged Trust.

HHCT

The wireless network at HH extends across the whole hospital and comprises more than 200 [redacted] These include AP's from [redacted] range with only the [redacted] range having an end of support date in December 2021. It has been installed using the -70dB signal strength which is fit for data and voice services. Control of the wireless network is managed by two [redacted] controllers that are capable of managing up to 1000 AP's and over 12,000 client connections, with one deployed in each of two data centres. Given the -70dB signal strength, it is not possible to operate RFID over the existing HH wireless network.

> Risks
> Although the HHCT wireless network was designed for both voice and data, IT staff have reported that the delivery of voice services is variable, depending on the location. This is most likely caused by changes to the structure of the hospital and/ or use of the equipment across the hospital.

In our opinion the HHCT wireless network was well designed when first installed but is likely to struggle to deliver voice services in its current state. We would therefore recommend that a wireless network survey is undertaken to confirm what changes are required to resolve service issues. Given that change is going to be required we would suggest that the Trust undertake the survey using the newer -68dB standard (in-line with PSHT) and undertake the change as an upgrade to the HHCT wireless network.

3.3.2.2 Options

There are three options open to the Trust with regard to wireless network equipment as follows:

1	**Do Nothing**
The Trust could choose to do nothing and accept the risk. However, as noted above, video and voice services are key components in a modern digital hospital and highly likely to be required in the merged Trust. **On this basis the Do Nothing option is rejected**	
2	**Undertake wireless survey at -70dB and reset existing network**
The Trust could choose to undertake a wireless survey using the original -70dB and then re-site and add new wireless AP's to reset the network back to its original standard. Whilst this will restore voice as an operable service it would exclude video as the signal strength would remain too low. **This option is acceptable but excludes wireless video going forward**	
3	**Undertake wireless survey at -68dB and upgrade existing network**
The Trust could choose to undertake a wireless survey using the -68dB (in line with the standard used at PSHT) and then re-site and add new wireless AP's to upgrade the network to the higher standard. **This option is recommended as it aligns the two wireless networks**	

3.3.2.3 Costs

Whilst both options 2 and 3 are acceptable each requires a full wireless survey which will result in changes to the network. The resulting work will include moving some of the existing wireless AP's and most likely, adding new ones where gaps are identified. At this time, it is impossible to accurately predict the cost of either option as the amount of work and number of new AP's will not be known until such time as the wireless survey is complete. Therefore, we have allocated a provisional sum of £20,000 to cover the cost of a full wireless survey.

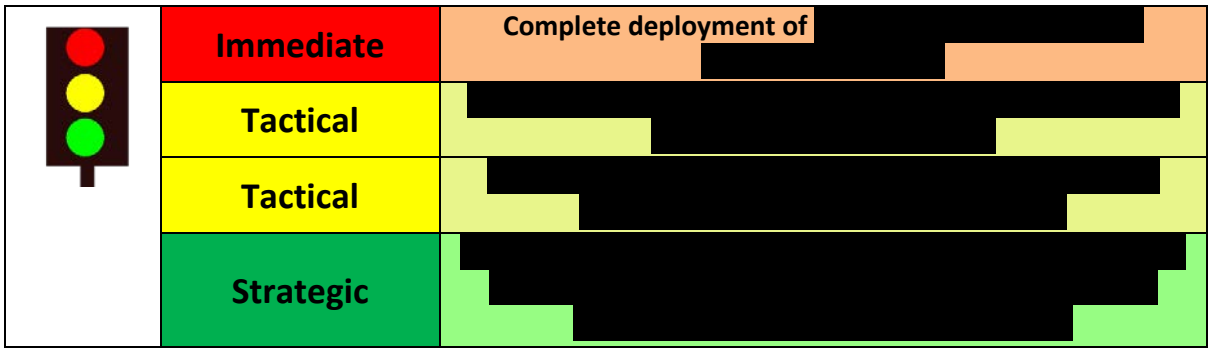
3.3.2.4 Recommendations

Immediate: Undertake a full wireless network survey at HHCT.

Tactical: Based upon the outcome of the wireless network survey, agree network reset or upgrade to ensure wireless meets the services needs of the merged Trust going forward. Factor in the likely needs of the proposed Health Campus as part of the decision making process.

Strategic: Continue to invest in network infrastructure and in particular, the wireless networks as the demand for mobile/ bed side working is already increasing across healthcare and will continue to grow substantially during the next five years.

3.3.3 Network Perimeter



3.3.3.1 Current Position

PSHT

The PSHT network has a secure perimeter that includes a range of network firewalls, intrusion detection and prevention, e-mail and web filters coupled with other security controls and, an expansive network management platform all overseen by a full time IT Security Officer. At its heart are two primary , one located in each data centre with each connected to the NHS N3 network. Access to the Internet is provided over the NHS N3 network through the NHS N3 Internet relay. A smaller is deployed in the same role at SRH with all three having access to the internet and the secure WAN link that connects the two sites internally (further resilience). All of the network perimeter devices report using a mix of electronic traps (SNMP) and log files to the network management platform which includes an alert module that will immediately notify senior IT staff should a security event occur.

In our opinion the PSHT network perimeter is well designed and suitable for continued use as part of a merged Trust subject to the changes proposed in 3.3.4.

HHCT

The HHCT network has a secure perimeter that includes , intrusion detection and prevention, e-mail and web filters coupled with other security controls and three local network management platforms. The primary units, both located in DC1 and connected to a single core network switch over a single network link. HHCT has two NHS N3 network links with one operating at 50Mb/s and the second at 25Mb/s with each connected to separate primary firewalls. There is also a direct Internet connection that goes out through the secondary firewall in line with the NHS Security Code of Connection. There is a third connection via a secure external zone, known as a DMZ, created as part of the primary firewall configuration.

At this time, work is underway to complete the deployment and the IT team are receiving assistance from

Risks

[redacted]

3.3.3.2 Options

[redacted]

[redacted]

1	**Do Nothing**
[redacted]	
On this basis the Do Nothing option is rejected	
2	**Utilise the Aggregation Switches proposed in 3.3.1**
[redacted]	
This option is acceptable as a short term tactical solution	
3	[redacted]
[redacted]	
This option is recommended as both a tactical and strategic solution.	

3.3.3.3 Costs

The cost for option 1 is zero and for option 2 is detailed in section 3.3.1.3 above. The cost for option 3 requires a site survey before a price can be reached and so a provisional sum of £25,000 has been included.

3.3.3.4 Recommendations

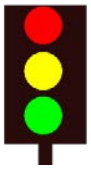
Immediate: [redacted]

Tactical: [redacted]

[redacted]

Strategic: [redacted]

3.3.4 External Links/ WAN Provision

	**Immediate**	**Consider the early procurement and deployment of a high speed link between PCH and HH.**
	Tactical	**Deploy high speed link between PCH and HH and backup link between SRH and HH using diverse routing.**
	Strategic	**Review links as part of the Trust merger, confirm those to retain, consolidate where possible, add new as required**

3.3.4.1 Current Position

PSHT

The PSHT network has a wide range of external links as shown in the diagram below. These include links to [redacted] for voice services to the NHS N3 network and then onto the Internet, as well as more local links to [redacted] accommodation.

DIAGRAM REMOVED

[redacted] However, it is not envisaged that the remaining links will change, although one or more may be upgraded to provide greater capacity.

HHCT

The HHCT network also has a range of external links, these also include a link to [redacted]

Risks

[redacted]

3.3.4.2 New External Links

As part of the Trust merger there will be a clear need to provide new external links to join the new organisations together. This process will also include additional links to sustain network resilience and, this will likely see a tactical solution emerging early on and then being updated as the new service requirements of the merged organisation become known.

3.3.4.3 Options

The options for links are as follows:

1	Do Nothing
The Trust merger clearly proposes bringing the two organisations together and in the digital age, this will mandate the provision of external links between the two merging organisations. As a result, there is no option to Do Nothing as without the links the organisations will be unable to work together. **On this basis the Do Nothing option is rejected**	
2	**Create a high speed link between PCH and HH**
As PCH and HH represent the two main locations for business and clinical activity the ability to pass data, connect voice services, share images and so assure clinical records is key to the Trust operating both an efficient and safe service. **This option is recommended as both a tactical and strategic solution.**	
3	**Create a backup link between SRH and HH**
As noted above a primary link between PCH and HH is a key requirement for Trust wide service provision. Given this, such a link must be resilient and have a fall-back position should the primary link fail. As SRH is already linked to PCH, classic design would see a third link between SRH and HH complete the loop. This provision also means that any network traffic that has to pass between SRH and HH would have a dedicated link, further improving performance and capacity across the Trust network. **This option is recommended as both a tactical and strategic solution.**	

3.3.4.4 Costs

The costs associated with options above are as follows:

Option	Title	Capital	Revenue
1	Do Nothing	£0.00	£0.00
2	Provide a high speed 10Gb link between PCH and HH based upon a five-year contract [redacted]	£42,100.00	£30,000.00
3	Provide a backup 1Gb link between HH and SRH based upon a five-year contract [redacted]	£16,800.00	£30,000.00

3.3.4.5 Assumptions

The costs presented above are on the basis that [redacted] are all capable of handling the routing function required for each link. In the event that separate routing equipment is required, cost information for these routers is with the Head of IT.

3.3.4.6 Recommendations

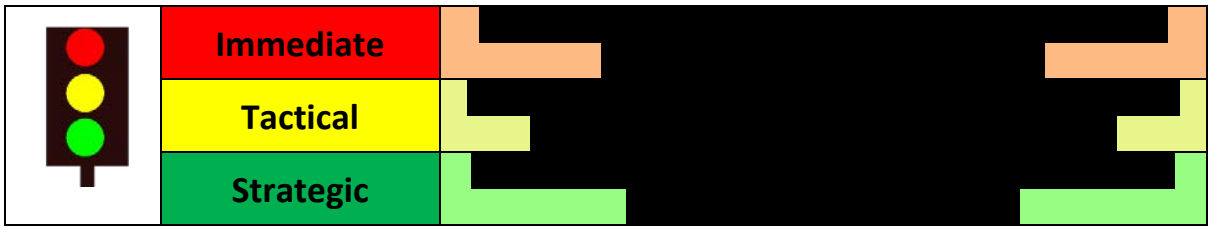
Immediate: Consider the early procurement and deployment of a high speed link between PCH and HH.

Tactical: If not done as an immediate task, procure and deploy a high speed link between PCH and HH as well as a backup link between SRH and HH. Ensure links are, as far as is possible, diversely routed on/ off each hospital campus and in the routes taken between sites.

Strategic: As part of the Trust merger review external links with a view to confirming those

that must be retained, consolidate those that provide unnecessary duplication and provide new links to meet the operational requirements of the merged Trust.

3.3.5 Remote Access



3.3.5.1 Current Position

PSHT

Remote Access services at PSHT are built around a matrix of the user and device attempting to gain access to the PSHT network as shown in the table below:

DIAGRAM REMOVED

The secure connections into the PSHT network are provided using [redacted] product for Trusted devices and the [redacted]. This approach provides a well-defined and very well controlled means of delivering secure remote access to those users who are authorised to connect from outside.

In our opinion the PSHT approach to Remote Access is exemplary and is very suitable for continued use in the merged Trust.

HHCT

Remote Access services at HHCT [redacted] as is used at PHST to provide a secure virtual private network (VPN) for both Trust Employees and authorised third parties. Trust employees are only able to gain remote access using a Trust device and, HHCT does not permit Trust employees to connect using non Trust or mobile devices (See Note 1). Whilst authorised third parties use the same secure virtual private network (VPN) this is processed through an access list on which the third party must have a registered device. The access list also limits which systems or network services the third party can access. In addition, the access list default setting is closed and so third parties wishing to gain access are only able to do so by making a request via the service desk, at which time an agreed access period is then approved.

Note 1: Whilst the Trust does not provide Remote Access for mobile devices, its adoption of NHSMail2 means that Trust users are able to access their e-mail from outside the Trust over the Internet.

This approach is secure, in particular for authorised 3rd parties, and so safe to continue in the short to medium term. [redacted]

Risks

[redacted]

[redacted]

[redacted]

3.3.5.2 Options

As the number of remote devices that do not attach directly to the HHCT network are few in number and each case is unique, we have chosen not to provide options for review, as we believe that the policy governing remote access should be updated to provide a uniform approach, which is then approved by senior management.

In terms of remote access for mobile devices, HHCT already has a small deployment of a mobile devices management (MDM) package [redacted]. However, this differs from PSHT in that it is a hosted service rather than an on premise solution. In order that future mobile device needs are met, this small scale deployment will need to be considerably expanded.

3.3.5.3 Costs

The costs of expanding the use of the [redacted] comprises the addition of permanent licenses for HHCT which is then offset by the reduction in revenue by moving to on premise as follows:

Title	Capital	Revenue
[redacted]	£15,000.00	£3,300.00
[redacted]	£4,925.00	£1,000.00
[redacted]		-£20,217.60
[redacted]	**£19,925.00**	**-£15,917.60**

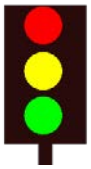
3.3.5.4 Recommendations

Immediate: [redacted]

Tactical: As the use of mobile technology is a key enabler for change, develop an approach to remote access at HHCT that facilitates connectivity for authorised mobile devices. Upscale the use of the [redacted] to ensure that NHS encryption and security requirements are met.

Strategic: As part of the Trust merger, review external links with a view to confirming those that must be retained, consolidate those that provide unnecessary duplication and provide new links to meet the operational requirements of the merged Trust.

3.3.6 Management Platform

	**Immediate**	**There are no immediate issues in respect of IT Management Platforms**
	Tactical	**Resolve network addressing, deploy external links and extend the [redacted]**
	Strategic	**Develop the use of management platforms, in particular the [redacted] to optimise IT service delivery**

3.3.6.1 Current Position

PSHT

There are two management platforms deployed at PSHT, these being [redacted] The [redacted] and management of the wireless network in particular. It is a broad management tool with considerable functionality and sound reporting capabilities[redacted] is a leading third party management platform that is modular in design covering not only networks, but almost all areas of IT Management. It is widely used in health care and across the NHS and is deployed across many areas of IT at PSHT including Digital Communications. The combination of these two management platforms gives PSHT extensive control over not only its Digital Communications but many other areas of IT Service provision. In addition, PSHT has invested in the [redacted], which allows the IT team to set thresholds and traps resulting in electronic alerts should a threshold be exceeded or trap activated.

In our opinion the management platforms deployed by PSHT are suitable for continued use as part of a merged Trust. In addition, we believe that further development of the [redacted] will extend the pro-active approach already adopted by the PSHT IT team and so sustain the high level of IT services as the merged Trust moves forward.

HHCT

There are two management platforms deployed at HHCT, these [redacted] It is a broad management tool with considerable functionality and sound reporting capabilities. The [redacted] is configured to monitor all Trust network equipment through a series of SNMP traps and so will report on any such trap when activated. The combination of these two management platforms gives HHCT adequate control over its Digital Communications.

[redacted]

[redacted]

3.3.6.2 Costs

The costs of extending [redacted]

Title	Capital	Revenue
[redacted]	£12,470.00	£1,248.00
[redacted]	**£12,470.00**	**£1,248.00**

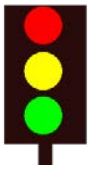
3.3.6.3 Recommendations

Immediate: There are no immediate requirements in respect of the management platform.

Tactical: Once network addressing issues are resolved and the necessary external links are in place between PCH and HH, generate a project plan to deploy the existing [redacted]

Strategic: [redacted]

3.3.7 Presence/ Unified Communications

	**Immediate**	**There are no immediate requirements in respect of Presence or Unified Communications.**
	Tactical	**The Trust should review Unified Communications to improve both business and clinical collaboration**
	Strategic	**The Trust should examine Presence to drive up operational efficiencies and enhance the patient journey**

3.3.7.1 Current Position

Presence

Neither PSHT nor HHCT have much in the way of formal Presence technology at this time. However, the Trust merger OBC was clear in its need for the Trust to adopt more efficient ways of working and to use technology to enable change. Presence is an effective tool that allows hospital staff to locate people, equipment and resources using technology. A classic example of this would be for porters to locate the nearest available wheelchair knowing that it is not in use. This is undertaken by fitting each wheelchair with a unique network tag that would confirm its location on a map of the hospital and whether or not it is occupied. For people this can be done by adding a tag to their Trust ID card or by assigning them a [redacted] as these have Presence built in.

It is recognised that for this to work fully, an upgrade to the Trust wireless network (as outlined in section 3.3.2) would be needed at both hospitals. However, an upgrade at HHCT is already proposed and so developing a business case for Presence in its widest sense, could see considerable savings made, as the efficiencies that it drives deliver potential savings.

Unified Communications

At this time both Trusts have a mixed range of personal communications technology including [redacted], Trust mobile phone, a personal mobile phone and perhaps a mobile tablet device as well. On top of this, access to video conferencing, electronic documents, ward observation systems and one or more personal computers can see busy clinical staff jumping from one technology platform to the next.

Unified Communications (UC) provide the ability to reduce the number of devices required to provide access to existing services as well as providing a platform for future access to information and resources whilst on the move. As with Presence, this is also an area where the adoption of Unified Communications, in particular for busy clinicians, can improve the clinician experience, deliver operational efficiencies and so enhance the patient journey.

PSHT E-Com Project

In respect of Unified Communications, PSHT has already had an initial look at some options for Unified Communications without reaching a final conclusion due to the announcement of a potential Trust merger. What the project did conclude was that there is no one UC product for every staff group, but that the selection of a small number of key UC products, working in harmony, is very capable of delivering the benefits that UC has to offer as outlined above. As a result, it is likely that the Trust would adopt one UC platform for Clinical staff and a variant for business and/ or back office users.

Digital Infrastructure

Both Trusts have the considerable benefit of having the vast majority of their digital infrastructure provided by the same suppliers. This position greatly improves the chances of the Trust reaching sound conclusions without having to worry if what is selected by one organisation, will work at the other following the merger.

3.3.7.2 Recommendations

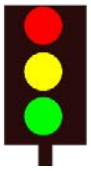
Immediate: There are no immediate requirements in respect of Presence and Unified Communications

Tactical: As part of the Trust merger and as a means of driving up efficiencies by improving process and enabling change through the use of technology, the Trust should include a further examination of Unified Communications, in particular for clinical staff. Key products to review include [redacted]

Strategic: As part of the Trust merger and as a means of driving up efficiencies by improving process and enabling change through the use of technology, the Trust should examine the use of Presence. It is recognised that one or more upgrades to digital infrastructure are a pre-cursor and so this is set as a Strategic objective.

3.4 Voice Services

3.4.1 Voice over IP (VoIP)



Immediate	Procure and install an Analogue PABX at HHCT to provide a fall back solution in the event of a failure of the [redacted] VoIP Telephone System
Tactical	[redacted]
Strategic	Review the use of both VoIP services as the Trust develops and in particular the proposed Health campus takes shape.

3.4.1.1 Current Position

PSHT

The delivery of voice over IP is the primary voice service in operation at PSHT. The VoIP solution deployed at PSHT is the [redacted] with two parallel instances, one of which is housed in each DC. This dual instance configuration provides resilience for VoIP users and also facilitates new software testing and system upgrades. Digital Telephone services are delivered to users over the Trust [redacted] utilising both core and edge layers (see section 3.3.1 for further details) and the Trust wireless network (see section 3.3.2 for further details). Voice calls are made and received though a range of desktop handsets that connect to the wired network and walkabout handsets that connect over the wireless network. A directory of VoIP users is maintained within [redacted] and is integrated with Microsoft AD to ensure directory consistency. In the event of a complete collapse of the VoIP system, a reduced telephone service is provided through an analogue PABX (see section 3.4.2 for further details). PSHT also provides a digital voice mail solution using [redacted]

In our opinion the PSHT VoIP solution is robust and resilient, so suitable for continued use in the merged Trust.

HHCT

The delivery of voice over IP is the only voice service in operation at HHCT. It too uses the [redacted]. Unlike PSHT, HHCT do not have an analogue PABX and so are not able to offer a reduced telephone service in the event of a VoIP failure. A directory of VoIP users is maintained within [redacted] and is integrated with Microsoft AD to ensure directory consistency. HHCT also has the same digital voice mail solution as PSHT using the same [redacted]

Risks

The lack of a second instance or any analogue PABX as a fall-back position is a notable risk to the Trust. As noted above, loss of [redacted] system would result in no landline voice services with only mobile phones ([redacted]) being operable but only where there is a usable signal. In mitigation of this risk a suitable maintenance contract has been placed with [redacted] and who would respond quickly should the [redacted]. However, this would still leave the Trust exposed for a period during which telephone services would be seriously compromised.

3.4.1.2 Options

The options to address the VoIP issues are as follows:

1	**Do Nothing**
[redacted] **On this basis the Do Nothing option is rejected**	
2	**Procure and install a** [redacted]
The Trust could choose to procure and install [redacted]. Whilst use of the spare instance is dependent on the external links, there are two routes planned between HH and PCH (one via SRH). **On this basis this option is not recommended at this time.**	
3	**Procure and install an analogue PABX**
An alternative to deploying a second [redacted] would be to install a small analogue PABX. This would provide a long term fall back solution that could be deployed quickly with the resultant reduction (rather than full mitigation) of the risk. However, the cost of installing an analogue PABX is exacerbated by the need to lay significant copper cabling between the PABX frame room and every network hub room to facilitate hospital wide connection. This will take some time to complete and assumes that every hub room has the capacity to accommodate additional technology. The fall back analogue PABX will include an E1 card, an interface for a single ISDN30 and connectivity for up to 100 extensions over the new copper cable. **This option is recommended as an immediate and tactical solution.**	
4	**Consolidate existing** [redacted]
As part of the Trust merger process it will be possible to consolidate the [redacted] such that, the Trust reaches a point where three instances are installed in the Trust, with two physically located at PCH and one at HH. Failure of any one should have minimal impact on landline voice services as calls would be re-routed to sustain voice services. **This option is recommended as both a tactical and strategic solution.**	

3.4.1.3 Costs

The costs of addressing the VoIP issues is as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Procure and install a [redacted]	£7,890.00	£1,100
Procure and install an Analogue PABX (estimated cost)	£12,000	£2,400

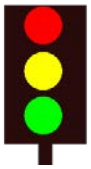
3.4.1.4 Recommendations

Immediate: Procure and install an Analogue PABX at HHCT to provide a fall back solution in the event of a failure of [redacted].

Tactical: [redacted]

Strategic: Review the use of both VoIP and analogue voice services as the Trust develops and in particular, as the proposed Health campus takes shape.

3.4.2 Analogue Telecommunications

	
Immediate	**Procure and install an Analogue PABX at HHCT to provide a fall back solution in the event of a** [redacted]
Tactical	[redacted]
Strategic	**Review the future use of analogue telecommunications in particular around the proposed Health Campus development**

3.4.2.1 Current Position

PSHT

As noted in 3.4.1 above, PSHT has an analogue telephone system as a fall back to its primary VoIP voice solutions. The analogue PABX includes an E1 card that provides a linked to the [redacted] enabling IP calls to be routed to the analogue extensions during normal operations. These fall back extensions connect to analogue telephones in key locations including wards, clinical departments and senior management offices. In the event of a collapse of [redacted], the E1 card is reconfigured to handle calls over the BT ISDN 30 (link to outside world). Three dedicated extensions have been provided, to which incoming calls are directed and, from which the switchboard operators can transfer calls. The remaining lines on the BT ISDN30 are then available for outgoing calls.

In our opinion analogue telecommunications at PSHT are suitable for continued use in the merged Trust.

HHCT

Again as noted in 3.4.1, HHCT does not have any fall back analogue PABX as all analogue lines are fed through analogue to digital convertors and then processed by the [redacted] instance. [redacted]

The lack of any fall back analogue telecommunications is a significant risk as outlined in 3.4.1 above.

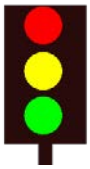
3.4.2.2 Recommendations

Immediate: Procure and install an Analogue PABX at HHCT to [redacted]

Tactical: [redacted]

Strategic: Review the future use of analogue voice services as the Trust develops and in particular, the proposed Health campus takes shape.

3.4.3 Paging

	**Immediate**	**There are no immediate actions required**
	Tactical	**Test and Deploy [redacted] on mobile phone for those users who work across sites and require paging**
	Strategic	**Review use of [redacted] as part of Unified Communications Project**

3.4.3.1 Current Position

PSHT

As part of the PFI, PSHT has deployed the [redacted] radio paging system right across the Trust. There are six local antenna sites at the [redacted]. The paging platform is managed by the PFI contractor with paging devices being managed by IT. Alongside the [redacted] radio pagers the Trust also has Long Range pagers from [redacted] that need to be kept due to the rural nature of the location. Access to the paging system is through the [redacted] (see section 3.4.4 for further details).

In our opinion the paging systems at PSHT are suitable for continued use in the merged Trust.

HHCT

At HHCT [redacted] is also the radio paging supplier but utilising the newer [redacted] platform. This platform supports the newer pager units as well as a pager application for mobile phones. For radio paging there are two antennas on the roof of separate buildings for resilience. The Trust also has Long Range pagers from [redacted] that need to be kept due to the rural nature of the location. Access to the paging system is via [redacted] on the switchboard which has two separate circuits for resilience.

In our opinion the paging systems at HHCT are suitable for continued use in the merged Trust.

3.4.3.2 Options

As noted above, both pager systems are suitable for continued use in merged Trust and the majority of users will only carry a pager for one site. However, there will clearly be some staff who will work across both sites and as the new clinical services model emerges, this number is likely to increase. In terms of paging services, it will be possible to activate the local paging service via the switchboard from any telephone within the merged Trust. For any user that needs cross site paging, we would recommend the use of the [redacted] paging application on a mobile phone as this provides the optimum service and is also in-line with recommendations around Unified Communications (see section 3.3.7 for further details).

3.4.3.3 Costs

The costs of addressing the Pager issue is as follows:

Title	Capital	Revenue
Total Paging Update Costs	£101,220	£10,000 (est.)

NOTE 1: The paging system at PSHT is provided under the PFI and so the cost information above (which comes directly from [redacted]) does NOT include the PFI uplift and so we believe that the figure should be doubled for budgetary purposes.

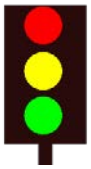
3.4.3.4 Recommendations

Immediate: In terms of paging there are no recommendations that require immediate action.

Tactical: Consolidate paging systems such that pages to all users can be initiated from any Trust location. Test and review the use of the [redacted] Paging app for cross site users.

Strategic: Review use of [redacted] Paging App as part of Unified Communications Project.

3.4.4 Switchboard



Immediate	There are no immediate actions required
Tactical	[redacted]
Tactical	Consider extending the IVR solution at HHCT to become a Trust wide service.
Strategic	[redacted]

3.4.4.1 Current Position

PSHT

The switchboard at PSHT operates through an [redacted] Console System that provides four operator consoles, one supervisor console and one management station; this is augmented by a dual circuit pager console. [redacted]

In our opinion the switchboard at PSHT is suitable for continued use in the merged Trust.

HHCT

The switchboard at HHCT has a total of four telephone consoles plus a further two pager consoles. As noted above, the telephone directory is based upon AD but is augmented by a local spreadsheet that records salient information such as consultant/ secretary relationships. The telephone system is fronted by an Interactive Voice Response (IVR) system that significantly reduces the number of calls handled by the switchboard. However, the IVR platform is very obsolete and needs to be upgraded. There is also a voice link to a local healthnet that includes direct access to local Clinical Commissioning Groups (CCG), Addenbrookes Hospital and many local GP surgeries. The switchboard staff also monitor alarms including cardiac arrest, fire, medical, pharmacy and estates devices, including hospital gases.

In our opinion the switchboard at HHCT is suitable for continued use in the merged Trust.

3.4.4.2 Options

Whilst it is proposed that we consolidate the [redacted] and integrate the paging systems, major technical change to the switchboard is currently unlikely given the monitoring and safety role undertaken. However, as part of the consolidation process, some additional training will be required as operators learn to manage call activity from both sites. Additional resource will also be required to build a new combined electronic directory and to integrate it into the updated switchboard service.

The Trust should also consider extending the IVR deployed at HHCT and this will further automate call handling across the merged Trust and reduce the load on the switchboard service.

As part of the merger process switchboard activity across the two locations should be reviewed as following consolidation, it will be possible to route calls through either switchboard using software.

As a result, the total number of staff on duty at specific times across the working week may be less in a single integrated organisation that in the two current ones.

3.4.4.3 Costs

The costs of extending the IVR service Trust wide is as follows:

Title	Capital	Revenue
Upgrade HHCT IVR Platform to Windows 2012	£21,000.00	£0.00
Procure 4 Virtual Operator licenses for PSHT (see note 1)	£40,000.00	£0.00
Procure 8 Hot Standby licenses	£5,440.00	£0.00
Total Cost of resilient Trust wide IVR solution	**£66,440.00**	**£0.00**

Note 1: PSHT have a new Windows 2012 [redacted] Server installed in August 2016 upon which the virtual operators can run.

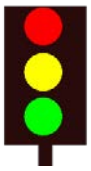
3.4.4.4 Recommendations

Immediate: Review the work required to align both IVR systems such that there are consistent messages and options available on 1st April 2017.

Tactical: Consolidate IVR solution such that failure on one site can fall back to the second instance, with the minimum of human interaction. Ensure any fall back is alerted so that appropriate IT staff are notified.

Strategic: Continue to update the IVR as the Trust merger progress in order to optimise the load on switchboard staff.

3.5 Network Addressing

	**Immediate**	**Approach NHS Digital and apply for additional network address numbers within the existing PSHT address range.**
	Tactical	**Identify all existing network numbers in use across the merged Trust. Engage subject matter expertise to support the planning, testing and migration process.**
	Strategic	**Monitor announcements from NHS Digital and the HSCIC in respect of the new HSCN and take action as required.**

3.5.1.1 Current Position

All modern day hospitals use the internationally recognised Transmission Control Protocol (**TCP**) and the Internet Protocol (**IP**) for digital networking. TCP/ IP networks use a numerical network numbering system based upon three classes these being Class A for very large networks, Class B for large networks and Class C for smaller networks.

PSHT

The network at PSHT is a TCP/ IP digital network and uses a portion of Class A addresses adopted by the NHS with the exact number ranges being issued to PSHT by NHS Digital.

HHCT

The network at HHCT is also a TCP/ IP digital network but unlike PSHT, uses a smaller Class B network address.

3.5.1.2 HSCN Network

NHS Digital (formally The Health and Social Care Information Centre) has already announced the creation of a new Health and Social Care Network (HSCN) as the existing NHS N3 Network contract only to remains in force until April 2020. The new HSCN Network is designed to:

- Establish network arrangements that support the integration of health and social care, regional collaboration and flexible work patterns.
- Establish a marketplace of assured network services that drives competition amongst suppliers, improves consumer choice, supports innovation and delivers value for money.
- Reduce duplication by enabling health and social care organisations to reuse and share existing network infrastructure and services to access the information they need.
- Reduce reliance on a centrally managed, national, private network.

HSCN is designed to support the aspirations set out by the Department of Health and NHS England through the National Information Board – Personalised Care 2020 and NHS England Five Year Forward View. It aims to establish a standards-based approach to network services that will better enable interoperability between health and care organisations and, create a competitive marketplace for the supply and consumption of network services.

These strategies and related national 'pioneer' and 'vanguard' projects cite increased levels of collaboration and integration between health and social care providers as essential to driving improvements and efficiencies. Improved information sharing and the ability to work flexibly to deliver joined up health and social care services to citizens and patients are common features across

all these initiatives. It seems almost inconceivable that such ambition could be realised affordably and effectively without providing the underlying standards, infrastructure and services that the HSCN programme will put in place.

Although not known at this time, the provision of HSCN could lead to further changes to NHS Network Addressing, including the possible adoption of IPv6.

3.5.1.3 Options

As part of a merged Trust the optimum operation of the digital network services requires the Trust to operate a single class of network using a range of network addresses from within the same class. However, that is not to say that two networks will not communicate using their existing numbers, but in order to do so, it will be necessary to deploy some routing technology so that resources on the PSHT network know how to reach resources on the HHCT network and vice versa.

It is therefore recommended that such routing technology be deployed and, over time, all network devices currently running on the HHCT network address number range, migrate onto new numbers within the PSHT network number range. In order for this to happen the Trust will need to apply to NHS Digital for additional numbers within the PSHT range, to be allocated to the Trust.

Once done, engage subject matter expertise and generate a detailed plan for network address migration on a stage by stage basis. Agree where numbers or groups of numbers can be migrated using automation (i.e. DHCP ranges) and what will need to be moved manually. Test migration at each stage before executing the next. Work with suppliers and external 3rd parties (i.e [redacted]) to ensure that changes in network address do not result in a loss of connectivity. Ensure that external services such as Remote Access and Web services continue to work as expected throughout the migration. Maintain a fall-back position for each stage of the plan.

3.5.1.4 Costs

There are no infrastructure costs to amend the network addressing schema other than additional resource, details of which are included in section 3.14 on Professional Services.

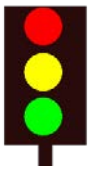
3.5.1.5 Recommendations

Immediate: Approach NHS Digital and apply for additional network address numbers within the existing PSHT network address range.

Tactical: Identify all existing network numbers in use across the merged Trust. Engage subject matter expertise to support the planning, testing and migration process.

Strategic: Monitor announcements from NHS Digital in respect of the new HSCN and take action as required.

3.6 Computing Devices

	**Immediate**	**There are no immediate actions required for computing devices**
	Tactical	**Identify failing or fault-prone Desktop and Laptop PCs from Service Desk reports and replace as soon as possible. Initiate major PC rollout programme at HHCT.**
	Strategic	**Continue the rolling programme of PC replacement based on age, reliability, functionality, and upgradability.**

3.6.1 Desktop/ Laptop

3.6.1.1 Current Position

PSHT

There are approximately 3,000 Desktop and Laptop PCs in use, the vast majority having been updated to Windows 7. There are still a few PCs and items of medical equipment with embedded PCs that cannot be upgraded due to equipment suppliers not supporting up-to-date operating systems. The risks around these are being managed by the IT teams and user departments.

As part of the PSHT annual IT budget, a sum of £167,000 is provided to replace workstations and supporting peripherals that have reached end of life. This is important as it allows the IT department to identify equipment that fails repeatedly (via the service desk) and those that make up the oldest tranche still in use, and schedule these for replacement.

HHCT

There are approximately 1,900 Desktop and Laptop PCs in use, the vast majority having been updated to Windows 7. There are still a few PCs and items of medical equipment with embedded PCs that cannot be upgraded due to equipment suppliers not supporting up-to-date operating systems. The risks around these are being managed by the IT teams and user departments.

Identified in the HHCT IT Strategy is a priority need for a rolling replacement of aging workstations with the aim that there should be no operational workstations that exceed four years of age. The strategy sets out a time line and an approach, however, due to funding constraints, only around 400 new workstations have been deployed over the past three years.

3.6.1.2 Options

The options to address this issue are as follows:

1	**Do Nothing**
The Trust could choose to take no action and continue to let the personal computer estate continue to age. It is a high risk strategy as the longer the estate is left the greater the risk of failure or incompatibility becomes. As this was identified as a Strategic aim in 2014 and little has been done to date, some workstations at HHCT are now approaching 8 years of age and so this issue must be addressed. **On this basis the Do Nothing option is rejected**	
2	**Utilise the existing budget only for replacement**
As part of the Trust merger the total number of workstations will exceed 3500 with a notable disparity between those at PSHT and those at HHCT. At present the current budget allows for a maximum of 400	

new units per annum, however with the increase in workstation number this would see the replacement cycle set at 8 years. **On this basis this option is also rejected**	
3	**Increase the existing budget to £300,000**
As part of the Trust merger, technology will be a key enabler supporting change. The proposed increase in budget is proportional to the scale of additional workstations but does not take account of the impact of an already ageing estate at HHCT. As a result, it will take 5 years to reach parity during which the risk of failure and/ or incompatibility is reduced but not mitigated. **This option should only be considered as a position of last resort**	
4	**Invest a capital sum and increase the existing budget to £300,000**
In recognition of the key role technology has to play in enabling change and the aging estate of workstations at HHCT, the Trust could choose to invest a capital sum (estimated to be around £320,00) to replace all workstations over four years of age and increase the IT replacement budget to £300,000 per annum. This option would see the merged Trust move forward to a six-year cycle for workstations including a mid-point upgrade to memory and solid state disks where appropriate. **This option is recommended as the optimum tactical solution.**	
5	**Virtualise the desktop**
An increasing number of organisations globally, are seeking to virtualise the desktop. Whilst this does not completely remove the need for workstations it does significantly reduce the number. In the place of a workstation a virtual terminal is deployed at a lower unit cost and with a longer life cycle. This virtual terminal allows a user to login after which his/ her virtual desktop is downloaded to the virtual terminal. Whilst there are many benefits in the longer term, there is also a need to make moderate investment in technology in the data centre up front to deliver the virtual desktop infrastructure (VDI). **On this basis this option is recommended only as a strategic solution.**	

3.6.1.3 Costs

The costs of addressing the Desktop/ Laptop issues are as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Utilise existing budget for replacement	£0.00	£167,000.00
Increase existing budget to £300k	£0.00	£300,000.00
Invest Capital and increase existing budget to £300k	£320,000.00	£300,000.00
Virtualise the Desktop	See Note 1	

Note 1: Whist it would have been possible to generate an estimated cost for a VDI, the greatest benefit is when VDI is combined with mobility for Clinical Applications. This gives Clinicians the ability to access patient data on the move almost regardless of the device they are using. To reach a price with any meaning, it is necessary to know which clinical systems need to be included. At this time work is being undertaken by Libretti Health around the consolidation of Clinical Applications for the merged Trust and until this is complete it is not possible to generate a cost.

3.6.2 Mobile Phones and Tablets

3.6.2.1 Current Position

PSHT
There are approximately 600 tablets in use, mainly iPads and iPods and some 270 phones.

HHCT
There are approximately 400 tablets in use, mainly iPads and some 200 phones.

3.6.3 Security Suite

3.6.3.1 Current Position

PSHT
PSHT have deployed [redacted] to provide protection for all its computing devices. It is an advanced agent based solution that operates on all forms of workstation, file servers and mobile devices. The agent software includes encryption, e-mail security and a range of Internet protection tools. It is managed through a central management console and can be fine-tuned to better meet the cyber security needs of the Trust.

HHCT
HHCT utilises [redacted] which covers all of its workstations and file servers. It is an advanced agent based solution providing encryption, anti-virus and malware protection, desktop host intrusion and firewall, web security and e-mail security all of which is delivered through a single management console.

3.6.3.2 Options

Each of the Security Suite products are advanced technical solutions and each provides a high level of device protection. However, the scope of the [redacted] is wider, including protection for mobile devices and this combined with the granular nature of the agent which permit fine tuning means that we believe this to be the better solution for the merged Trust.

3.6.3.3 Costs

Title	Capital	Revenue
[redacted] across the merged Trust (see Note 1)	£30,000.00	£0.00

The [redacted] for PSHT is based upon a 2-year deal paid for from Capital.

3.6.4 Recommendations

Infrastructure requires constant review and rolling systems of upgrade/ replacement in order to support existing and new services and applications. As such, an annual budget for this rolling replacement is required to avoid unnecessary downtime due to device failure. Given the base number of almost 5,000 units in the merged Trust and a replacement cost of approximately £400 each, it is suggested that 20% are replaced annually at a cost of £400,000 per annum.

Immediate: No immediate actions required.

Tactical: Identify failing or fault-prone Desktop and Laptop PCs from Service Desk reports and replace as soon as possible. Initiate major PC rollout programme at HHCT.

Strategic: Continue the rolling programme of PC replacement based on age, reliability, functionality, and upgradability.

3.6.5 Single Sign-on

3.6.5.1 Current Position

PSHT have some 500 single sign on licenses and for clinical staff in particular, the advantages are clear. One login, entered once and then secure access to all systems for which authorised access has been provided. However, the primary benefit lies in the fast access to clinical systems avoiding the need to login/ logout every time access to patient information is needed. Yet in parallel with this Infrastructure review, the Trust has also commissioned a review of its clinical systems. As part of this, it is understood that PSHT needs to introduce a new Patient Administration System (PAS) quickly and so these items combined will lead to a delay in the start to any single sign on project. Once the choice of systems to go forward is known, the Trust should then be able to move forward quickly.

3.6.5.2 Costs

Below are the costs for single sign on for the merged Trust:

Title	Capital	Revenue
Single Sign on appliances and software	Unknown at time of issue	Unknown at time of issue

3.6.6 Recommendations

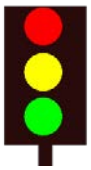
As noted above, the use of single sign produces many benefits, in particular for clinical staff, in terms of speed of access, no repeated ID and password entry and when combined with context the ability to take a single patient ID across multiple systems. We would therefore recommend as follows:

Immediate: No immediate actions required.

Tactical: Monitor the progress of clinical systems consolidation and as key systems are merged and come on line, commence testing single sign on for live use. Once critical mass is reached, rollout single sign on for clinical users.

Strategic: Continue to ascertain where single sign on be beneficial, consider using for mobile computing and multi-system non clinical users.

3.7 Compute and Storage



Immediate	Upgrade the existing SAN and procure a send instance. Establish data replication to facilitate fast recovery and sustain data backup.
Tactical	Implement Disk to Disk to Tape Backup process at Hinchingbrooke with Disk and Tape backup devices housed in the empty DC1 (see section 3.2.1)
Strategic	In light of clinical system review establish funding for a rolling replacement programme of servers and storage devices based on age/warranty/reliability.

3.7.1 Current Position

PSHT

The server base of 100 machines is mainly Dell with a small number of non-Dell machines used for managed services.

Administration Tools

Monitoring

SQL

VM

Storage

3.7.1.1 Options – PSHT Compute

The options to address this issue are as follows:

1	Do Nothing
The Trust could choose to take no action but this would impact the current programme and/ or delay the progress of the merged Trust. Whilst the compute platform at PSHT is sufficient for the current workload, there is limited head room to grow and work is already planned that will utilise the head room that is left. **On this basis the Do Nothing option is rejected**	
2	**Provide additional compute**
The Trust may choose to provide additional compute capacity to ensure that PSHT has sufficient performance, capacity and headroom to meet the needs of the merged Trust. **This option is recommended as a tactical solution.**	

3.7.1.2 Costs – PSHT Compute

The costs of addressing the PSHT compute requirements are as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Provide new ESXi Compute platform	£55,236.21	£5,590.17
Total cost for recommended option	**£55,236.21**	**£5,590.17**

3.7.1.3 Options – PSHT Storage

The options to address this issue are as follows:

1	Do Nothing
The Trust could choose to take no action but this would impact the current programme and/ or delay the progress of the merged Trust. As of today there is sufficient storage to meet the Trust needs but not those of the merged Trust. **On this basis the Do Nothing option is rejected**	
2	**Upgrade the SAN at PSHT**
The Trust may choose to upgrade the SAN at PSHT as this would provide the additional storage required to support the merged Trust. **On this basis this option is recommended**	

3.7.1.4 Costs – PSHT Storage

The costs of addressing the PSHT SAN requirements are as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Upgrade SAN	£56,187.57	£6,019.27
Total cost for recommended option	**£56,187.57**	**£6,019.27**

HHCT

The server base of 70 machines is mainly HP with a small number of non-HP machines used for third party services.

Servers

DIAGRAM REMOVED

3.7.1.5 Storage

3.7.1.6 VM

3.7.1.7 Backup and Maintenance

3.7.1.8 Options – SQL Server – Trust Wide

The options to address this issue are as follows:

1	**Do Nothing**
The Trust could choose to take no action but this would leave the primary database technology at risk, in particular at HHCT. At this time many of the instances of SQL Server at HHCT are obsolete [redacted]	

On this basis the Do Nothing option is rejected	
2	**Provide additional compute**
The Trust may choose to upgrade its SQL Server Cluster to the newer 2012 release which is still supported by Microsoft, is known to work with the business and clinical databases in use at the Trust thereby removing the risk. **This option is recommended as a tactical solution.**	

3.7.1.9 Costs – SQL Server

The costs of addressing the HHCT compute requirements are as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Upgrade SQL Cluster to SQL Server 2012	****	£162,000
Total cost for recommended option	****	**£162,000**

3.7.1.10 Options - Compute

The options to address this issue are as follows:

1	Do Nothing
The Trust could choose to take no action but this would leave the primary compute function at risk. At this time there is barely sufficient processing capacity with very little head room for growth. In addition, some elements of the compute are already legacy in terms of age and function. **On this basis the Do Nothing option is rejected**	
2	**Provide additional compute**
The Trust may choose to provide additional compute capacity to ensure that HHCT has sufficient performance, capacity and headroom to meet the needs of the merged Trust. **This option is recommended as a tactical solution.**	

3.7.1.11 Costs - Compute

The costs of addressing the HHCT compute requirements are as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Provide new ESXi Compute platform	£55,236.21	£5,590.17
Total cost for recommended option	**£55,236.21**	**£5,590.17**

3.7.1.12 Options - Storage

The options to address this issue are as follows:

1	Do Nothing
The Trust could choose to take no action but this would leave the primary compute and storage function at risk. There is insufficient storage, in particular at HHCT, to meet the needs of the merged Trust and part of this is already legacy in terms of age and function. **On this basis the Do Nothing option is rejected**	
2	**Upgrade single SAN at HHCT**

The Trust may choose to only upgrade the single SAN at HHCT. This would provide the additional storage required to support the merged Trust but the data would not be replicated meaning any failure would require a manual restore with many hours of system down time. **On this basis this option is also rejected**
3 **Upgrade single SAN at HHCT and provide second instance**
The Trust may choose to not only upgrade the single SAN at HHCT but also to provide a second instance. This would provide the additional storage required to support the merged Trust and the data would be replicated onto the second SAN allowing IT to immediately recover any lost data with either minimal or no system down time. **This option is recommended as an immediate and tactical solution.**

3.7.1.13 Costs

The costs of addressing the HHCT SAN requirements are as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Upgrade single SAN	£28,174.73	£3,110.17
Upgrade single SAN and provide 2nd Instance	£324,432.38	£29,197.23
Total cost for recommended option	**£324,432.38**	**£29,197.23**
4 Node SAN Uplift (See consideration below)	**£30,000.00**	**£2,716.00**

3.7.1.14 Consideration

Whilst the sections above address the storage needs of PSHT and HHCT the result will be a two node SAN at PSHT and a two node SAN at HHCT. The proposed changes could go further by using the opportunity to build a single four node SAN that covers both sites. The advantage of the four node SAN is twofold: firstly, the technology used would provide additional headroom allowing storage growth by only adding more disks and shelves (as opposed to the more expensive enclosures with fibre channel links). Secondly, the management platform would see it as a single source making management tasks (including data replication, data movements between tiers – even across campus) easier and greatly more visible. The cost of the uplift to a four node SAN is shown above.

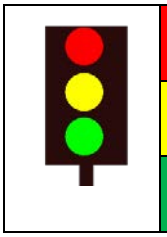
3.7.1.15 Recommendations

Immediate: Upgrade the existing SAN and commission a second instance. Establish data replication to facilitate fast recovery and sustain data backup.

Tactical: Implement Disk to Disk to Tape Backup process at Hinchingbrooke with Disk and Tape backup devices housed in the empty DC1 (see section 3.2.1)

Strategic: In light of clinical system review establish funding for a rolling replacement programme of servers and storage devices based on age/ warranty/ reliability.

3.8 Service Desk



Immediate	Recruit to fill existing vacancies in Service Desk teams
Tactical	[redacted] Service Desk software Hinchingbrooke, retain on-site teams at each location
Strategic	Align Service Desk capacity with requirements of the merged Trust's service offerings

The Service Desk teams at Peterborough and Hinchingbrooke have experienced, knowledgeable and diligent people within them who achieve remarkably high User Satisfaction scores in regular surveys. They are to be congratulated and valued for their work. The detailed review findings are listed below followed by our conclusions.

3.8.1 Peterborough – Current Situation

3.8.1.1 Tools and Resources

- The Service Desk at Peterborough is led by [redacted]
- The Service Desk provides a non-technical call logging service, along with password resets and basic advice
- Calls are passed to technical support teams for infrastructure support, and to the Informatics and Training Support team for application specific training and support. Access to applications is managed through the Security Access Manager (SAM)
- SAM is built on the [redacted] functionality and provides a mechanism for users to request access to applications and functions with a detailed audit trail of requestors and approvers
- A third line technical team carry out infrastructure monitoring and provide in depth technical backup for the other Infrastructure support teams
- The teams use [redacted] for call-logging, process support, monitoring, alerts and reporting. There is also a self-service portal on [redacted] currently used for approximately 65% of all incidents [redacted]
- The IT Service Catalogue data/ queries held within the Service Desk details current services provided by the IT department along with applications which are supported.

3.8.1.2 LANDesk Management Suite

[redacted]

- Discovery and Inventory of networked assets
- Software license management
- Operating software provisioning and migration based upon template-driven processes to deploy operating systems using hardware-independent imaging, driver management, and integrated software delivery
- Software Distribution and Packing allowing IT to distribute software across the Trust to multiple platforms and devices in minutes using minimal infrastructure and network traffic. It can also be used or provide an app store experience for self-service app deployments

- Alerting and Monitoring - allowing alerts to be set for end user devices and/ or servers either singularly or as part of a more complex workflow
- Remote Control allowing technical staff to take over the remote machine and quickly remedy the reported fault
- Dashboards and Reporting - providing senior management with dashboards on their mobile devices and detailed reports to improve IT decision-making.

[redacted] Suite is a high valuable addition to the base [redacted] application and is key to the management of computing devices.

3.8.1.3 User base

- There are approximately 7,500 users, 5,500 of which come through the ESR interface. Others include students, trainees, visiting consultants etc.
- There are around 3,000 PCs on the system plus 600 tablets including iPads and iPods
- Also on the inventory are 270 active phones and some non-Microsoft software

3.8.1.4 Training

- One-to-one training given on induction and some Customer Services courses planned
- [redacted] administration course scheduled for October

3.8.1.5 Prioritisation

- Calls are assigned a Priority level based on a matrix of Severity and Criticality. These criteria are defined as follows:

  Criticality

  Each Specific Service Description listed in the IT Service Catalogue is defined (and agreed with Trust Management) as falling into one of the following three groups of 'Service/ System importance' or Criticality which are:

  - Critical
  - Important
  - Complimentary

  These 3 levels are defined by the effect that their ***complete prolonged unavailability*** would have on the Trust's business.

  Critical

  Core business functions would cease to function effectively with a detrimental impact on:

  - safety
  - patient care
  - finances
  - the Trust's reputation

  Important

  A severe impact on the patient experience or functioning of the Trust or department, but would not stop the Trust from carrying out its core business.

Complimentary

System used departmentally that would only have impact in one area of the organisation; or systems used Trust-wide to compliment the running of the organisation. Includes end-user developed or commissioned applications about which the I.T. department has very limited knowledge or expertise.

N.B. It should be noted that whilst some systems are very important to their departmental or Trust-wide users, they might not severely impact the core business of patient care.

Severity

Five levels of Incident Severity are defined. These are determined by the nature of the incident, the potential consequences of the incident and numbers of people affected:

Severity 1

Immediate threat to safety or systems security
Complete unavailability of critical service/ system

Severity 2

Serious impact on patient experience
Partial unavailability of service
Partial loss (or serious degradation of) the functionality of a system

Severity 3

Moderate impact on patient experience
System/ service functionality/ performance is degraded such that effectiveness of a group of users is reduced
Complete loss of individual access to or use of a system or service.

Severity 4

System/ service functionality/ performance is degraded such that effectiveness of a single user is reduced
Inconvenience to multiple users

Severity 5

Inconvenience to single user
'How do I' type queries

The matrix defines the Priority level assigned.

	1 - Critical	2 - Important	3 - Complimentary
Severity 1	P1	P2	P3
Severity 2	P2	P3	P4
Severity 3	P3	P3	P4
Severity 4	P4	P4	P5
Severity 5	P5	P5	P5

- The [redacted] software contains built-in alerts for monitoring and escalating an incident based on its Priority rating

3.8.1.6 Monitoring and Reporting

- The teams monitor the progress of incident resolution using the functions of the [redacted] program to provide automatic alerts at each stage of the process
- Monthly reports are created and published at the start of each month. Query data is exported allowing the Service Desk to create seven spreadsheets in total, with multiple charts per spreadsheet:
    - Incident by Asset (x1)
    - Used to identify rogue PC's or printers. Used by Infrastructure Support Manager and Senior Analysts
    - Incidents by source (x2)
    - Reporting on source breakdown, showing gradual increase of Self-Service and SAM (Service Catalogue) calls. Both for the previous month and trend over time. Used by Infrastructure Support Manager/ Team Leader to drive move towards Self Service.
    - Incidents by time to resolve (x3)
    - Broken down by support team (drill down available to individual analyst) and by call priority. Breaches by team. Used by team managers to monitor performance, work load sharing etc.
    - Incidents by response time (x1)
    - Detailing proportion of calls by priority vs response time targets as per SLA document (see point 3 above). This was produced at Jon Peate's request. It is a contractual deliverable for the Pathology department to support their certification.
- The above are published by emailing a shortcut primarily to the IT Managers. A subset of information is sent to Health Records (EDM – Electronic Document Management), Data Quality, and ERostering managers also by email.
- [redacted] reports on PC Virus calls stats and incidents logged relating to Security. These are simple list in format and go to the Head of IT and the IT Security Advisor.
- Real time dashboards are used to show outstanding call volumes by team and site and warning of calls to breach within the next 4 hours. The performance dashboard also shows calls logged and resolved that day. Three dashboards in all are used by the Infrastructure Support Manager to monitor daily workload.
- [redacted] has a forthcoming add-on called "Extraction" which could enhance and simplify the data extraction and reporting process.

3.8.1.7 Reviewing

- Queries and comments on the monthly reports issued to IT Managers are regularly received and there is regular discussion within the Service Desk about incidents from which they can learn.
- Knowledge sharing within the team is ongoing and actively encouraged.

3.8.1.8 Escalation

- There is a well-defined escalation process documented in the SLA mentioned earlier. Breaches are closely watched to understand why the breach occurred and examine what could have been done if anything, to prevent it.

3.8.1.9 Change Management

- The I.T. Department operates a Change Management process on behalf of the Trust. If any support incident results in a "Change", the person managing the incident will submit the change to the *Change Manager* (I.T. Infrastructure Service Manager) for consideration by the *Change Advisory Panel* (CAP).
- There are different classes of change, including "standard" and Emergency" to cope with different support scenarios. Any decision by the CAP which would expose the Trust to a risk graded as *Significant* or *High* will be reviewed by the Head of I.T.

3.8.1.10 Problem Management

- A Problem Management process is defined within [redacted]. The process is new and will be used adhoc, when a specific issue is identified which requires special focus. (An example in the past was 'slow logon') The Problem Management process provides a framework to identify, investigate and test possible root causes, until the problem is deemed to be brought under control.
- The Problem Management team is similar in structure and membership to the Change Management team, and is also lead by the I.T. Infrastructure Support Manager.

3.8.1.11 Stock Control

- The Service Desk team maintain the recommended hardware options published on the IT department website.
- Users raise orders for items described on the website directly with Purchasing and Supplies (P&S); P&S email the Service Desk for authorisation before placing any IT order. This allows them to ensure that what is being ordered is either 'standard' equipment, or if non-standard, can be assessed for compatibility before an order is placed.
- At the time an order is 'authorised', it is recorded on Service Desk enabling it to be tracked.
- The Service Desk record is updated on delivery, at which time the equipment will normally be added to the inventory, before a member of the support team delivers it to the user and undertakes the install.

3.8.1.12 Challenges

- Should the merger be approved, there will be challenges surrounding Active Directory; the optimum would be to create a new AD and transfer existing records on a planned basis. The Inventory could probably be imported to the new AD quite easily with work done on the Location field. User records could be imported but would require de-duplication across the sites.
- Servicing of external clients (CCGs etc.) would ideally be achieved by extending [redacted] to them; this requires further investigation.

3.8.2 Hinchingbrooke Current Situation

3.8.2.1 Tools and Resources

- The Service Desk at Hinchingbrooke is led by [redacted]
- The Service Desk team use [redacted] software for logging, managing and reporting calls to the Help Desk, this is run on a hosted Cloud platform.

- The hours covered are 8am – 5pm Monday - Friday using 4 junior operators and 2 Technical operators, although one of the Technical operator position is vacant at present. Out of Hours cover is provided for emergencies only but is often abused.
- In addition, Danwood support the Managed Print service

3.8.2.2 Asset Management

Alongside [redacted] management application. The [redacted] application is able to identify and record any new device when it joins the network. If the device uses recognised operating software, such as Windows, [redacted] is then able to take an inventory of all the software loaded on the device including any software serial numbers. These are then matched against an internal database to provide a human readable list of software held against the device.

3.8.2.3 User Base

[redacted] As well as supporting HHCT (1,900 users), the Team also provide desktop support to CCG GP Sites, Cambridge Community Services and Cambridge Mental Health Trust (1,000 users), a total of approximately [redacted]

- The number of calls varies between 75 - 130 per day.

3.8.2.4 Training

- There is almost no formal training due to budgetary constraints. Staff are trained 'on the job' by their colleagues.

3.8.2.5 Prioritisation

- There are four levels of priority: Low, Normal, High and Urgent. All calls are logged as Low initially, Normal and Urgent are hardly used, High is used when the user states that the issue is a high impact problem or when the senior team members view it as high impact.

3.8.2.6 Service Levels

- There is no formal Service Level Agreement in place.

3.8.2.7 Monitoring

- Senior Desktop Agent monitors activity and [redacted] provides alerts based on priority and time, e.g. email alert if the call has not been updated in 5 days.
- [redacted] provide regular reports of Help Desk activity including notifying the IT Operations Manager [redacted], of any issues ongoing for more than 90 days.

3.8.2.8 Reviewing

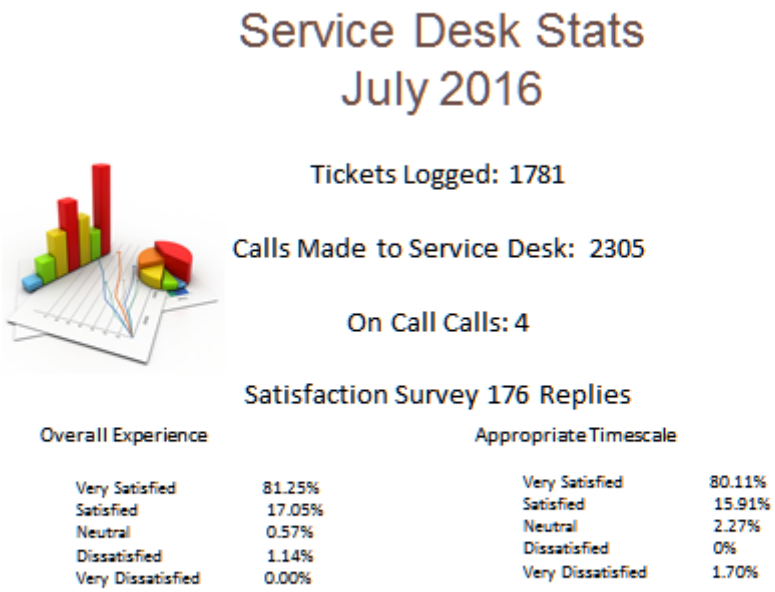
- A fortnightly review of calls reported is discussed at the Operations team meeting.

3.8.2.9 Change Management

- All changes are assessed by the Change Board, which has Operations and Clinical representation. The process operates well with the exception of some changes introduced by third-party software suppliers which have been agreed with the clinicians, but not always notified to Operations.

3.8.2.10 User Satisfaction

- User satisfaction is very high as shown in the report for July 2016 illustrated below.
- Zendesk sends an automated email following closure of an incident where the user is asked to rate the service they received; an example of the report on user satisfaction is shown below:



3.8.2.11 Team Spirit

- Adam is a very positive leader and his team are usually animated, sharing and positive about the work they do.
- The potential merger is seen as an opportunity to strengthen the Help Desk team with knowledge-sharing and extended hours.

3.8.2.12 Challenges

- Should the merger proceed, the challenges will be taking advantage of the combined pool of Help Desk resources to achieve both knowledge sharing and maintain an on-site presence.

3.8.3 Options

In considering the Service Desk options, the issue are as follows:

1	**Do Nothing**
The Trust could choose to take no action but this would leave each hospital running its own local Service Desk solution without any visibility of service desk call and incidents across the merged Trust. **On this basis the Do Nothing option is rejected**	
2	**Deploy [redacted] Trust Wide**
The Trust may choose to replace the HHCT Service desk by extending the PSHT [redacted] Service Desk [redacted]) to become a Trust wide solution. This option would then provide users, regardless of location, the ability to log calls into a single service desk. It would also allow technical staff to share their experience when resolving faults as well as building single links to all third party support services	

including any relevant external Service Level Agreements. This option would also see a small revenue savings from the cessation of [redacted] **On this basis this option is a sound tactical and strategic solution**	
3	**Deploy [redacted] and the Management Suite Trust wide.**
The Trust may choose to not only deploy the [redacted] Trust wide by also to extend the use of the [redacted] across the whole merged Trust. Many of the tools including in LDMS support fault resolution, save considerable time or provide alerts and warnings, often a part of a complex workflow. These are invaluable to the service desk in delivering a high quality service which is reflected in the satisfactions scores achieved. This option would see [redacted] **This option is recommended as an immediate and tactical solution.**	

3.8.4 Costs

The cost of addressing the Service Desk issues are as follows:

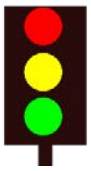
Option	Title	Capital	Revenue
1	Do Nothing	£0.00	£0.00
2	[redacted]	£5,250.00	£1,000.00
		£0.00	£14,100.00
3		£5,250.00	£1,000.00
		£0.00	£14,100.00
		£51,250.00	£9,250.00
		£56,500.00	**£24,350.00**
		£0.00	-£8,814.28
		£0.00	-£18,600.00
	Total cost for recommended option	**£56,500.00**	**-£4,064.28**

3.8.5 Service Desk Recommendations

The levels of staffing of the Service Desk at each location are cost-effective and excellent value-for-money especially when viewing the high user satisfaction results. During the merger there will be increased problem/ incident activity as a consequence of change even though that change will be very well planned. It is therefore recommended that vacancies on the Service Desk teams are filled prior to merger activity to allow time for staff training. The performance of the Service Desk teams during merger activity will have a strong impact on the success of changes and the perception of the quality of the merger process by all users; it is therefore important to resource and support these teams in the critical role which they will play.

In light of this, the recommended option is that the [redacted] software including the Management Suite with its attendant processes, is implemented at Hinchingbrooke so that a complete view of activity can be monitored and reported across the merged Trust. In taking this option the Trust will also generate a small revenue saving from a highly upgraded and now fully integrated Service Desk across the merged Trust.

3.9 Active Directory

		
	Immediate	**Split the Flexible Single Master Operation roles across the DCs at Hinchingbrooke with the PDC emulator going on the server with the lightest load**
	Tactical	**Set up a transitive forest trust relationship between the Peterborough and Hinchingbrooke instances of Active Directory. This will allow resources on one domain to be made available to the other and vice-versa.**
	Strategic	**Define a single schema, two-tree, two-domain, single forest for the merged NHS Trusts. Migrate the existing AD domains to the new forest over time.**

Both sites have a very straightforward Active Directory with single forest, single tree and single domain structures. This makes for easier maintenance and support.

3.9.1 Peterborough - Current Situation

The AD topology shows:

DIAGRAM REMOVED

The topology shows an efficient spread of the Flexible Single Master Operation roles (FSMOs) with the PDC emulator being on a separate DC. Amongst other things, the PDC Master acts as the final authority on password authentication and needs to be immediately available for password changes and arbitration. The Infrastructure Master is not used in a single domain environment so its placement is irrelevant in this scenario. Microsoft recommend that the Schema Master and Domain Naming Master, both lightly used, are held on the same DC. Finally, the RID Master is used to supply Relative IDs to the Domain Controllers; it does so in blocks so immediate response is not critical except when adding large numbers of new users.

3.9.2 Hinchingbrooke – Current Situation

The AD topology shows:

DIAGRAM REMOVED

At Hinchingbrooke, all the FSMOs are held on the one Domain Controller which can become a bottleneck on larger domains with high levels of change activity.

3.9.3 Recommendations

Immediate: Split the Flexible Single Master Operation roles across the DCs at Hinchingbrooke with the PDC emulator going on the server with the lightest load.

Tactical: Set up a transitive forest trust relationship between the Peterborough and Hinchingbrooke instances of Active Directory. This will allow resources on one domain to be made available to the other and vice-versa.

Strategic: Define a single schema, two-tree, two-domain, single forest for the merged NHS Trusts. Migrate the existing AD domains to the new forest over time.

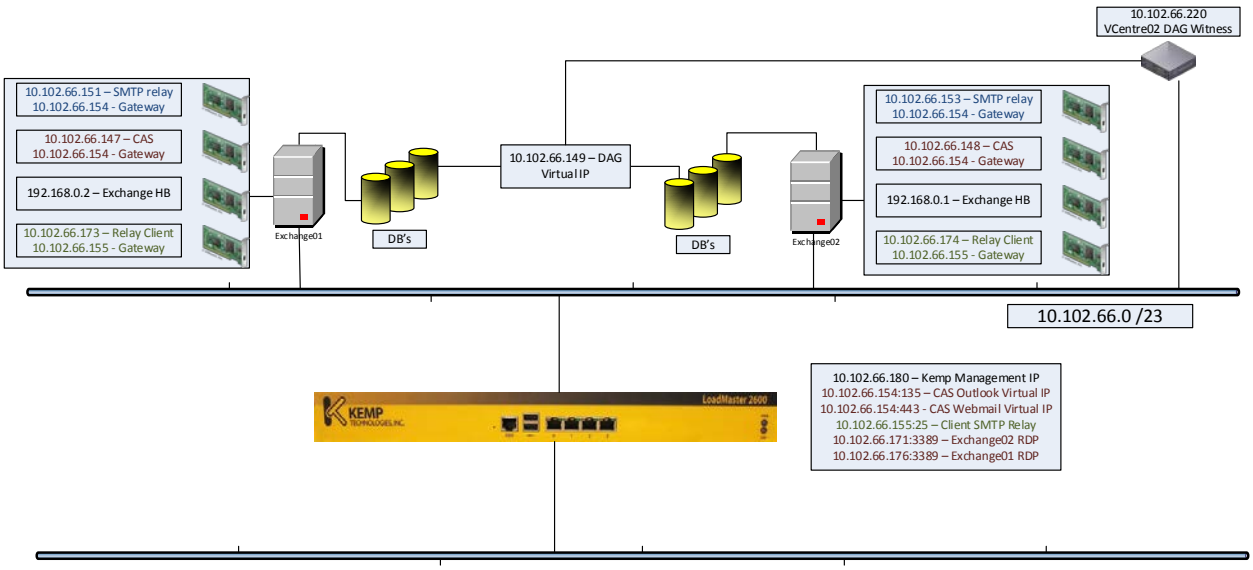
3.10 Electronic Mail

Immediate	**Achieve ISB1596 certification for current Exchange 2010 e-mail service. Commence the planning work required to enable the delivery of a Trust wide local MS Exchange 2013 e-mail service.**
Tactical	**Upgrade Exchange 2010 to Exchange 2013, test and validate before ingesting HHCT users into the new solution.**
Strategic	**Review the use of MS Exchange in conjunction with other designated software applications to maximise the benefits available from Exchange as part of the design of merged Trust service model.**

3.10.1.1 Current Position

PSHT

The e-mail solution at PSHT comprises an on premise Microsoft Exchange 2010 e-mail system that runs on virtualised servers deployed across DC1 and DC2 at PCH. This configuration ensures that the e-mail system is resilient and has no single point of failure, as shown in the diagram below. The e-mail traffic load is shared across both instances using a third party (Kemp) load balancer to optimise system performance and end user experience.



Users who require remote access to their e-mail solution can be provided with a mobile device running [redacted] MDM which uses the new [redacted] secure e-mail client that connects back via the [redacted] secure e-mail gateway. The alternative is to use the Microsoft Outlook Web Access client over a secure remote access link through a standard Internet browser.

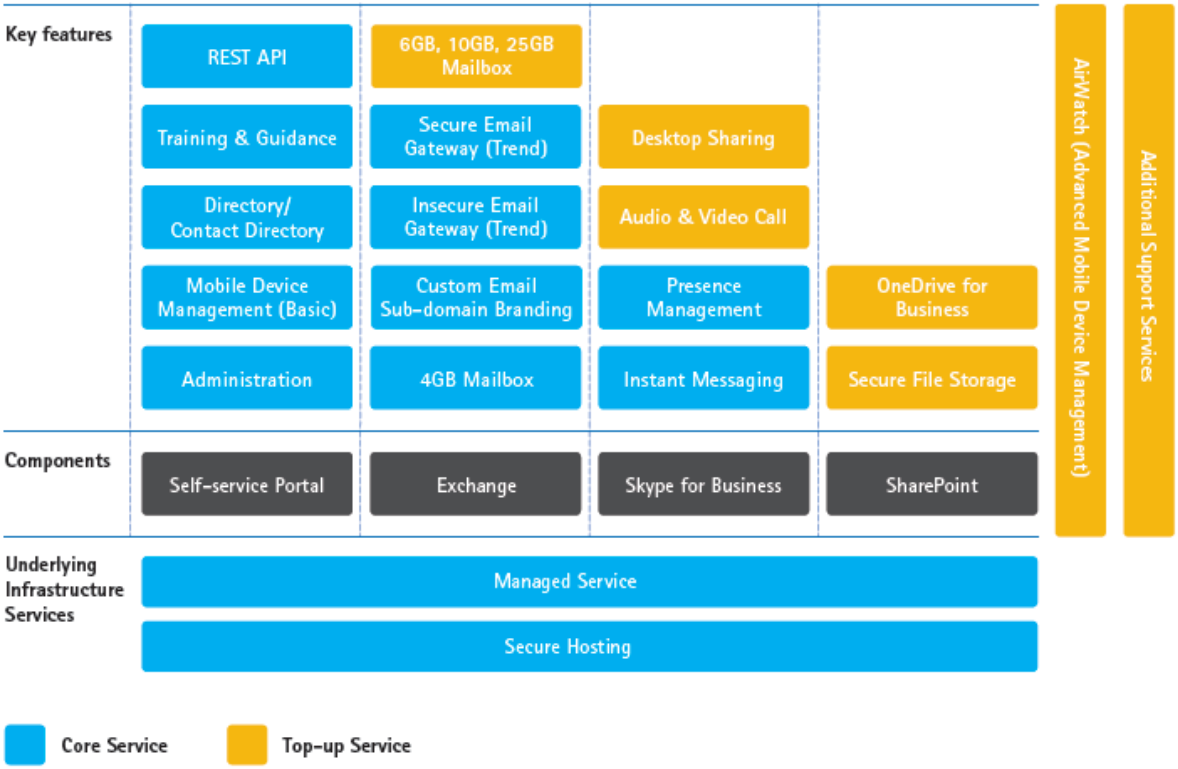
The e-mail system at PSHT not only manages the vast majority of the Trust e-mail it also provides diary (calendar) management for all users including room and resource booking functionality. As part of the upgrade to Microsoft Exchange 2010 the Trust have ingested all of the old e-mail archive (.PST) files so that every user's e-mail archive is online. Additional work has been done to optimise e-mail storage by positioning e-mail onto the right tiers of the Storage Area Network (SAN) placing

mailboxes, pagefiles and public folders on fast disk and other less used items such as leavers and archive, on slower disk.

Whilst Microsoft Exchange is the primary e-mail solution at PSHT it is not yet classified as a secure e-mail solution and so a modest number of Trust users also have an NHSmail account. All NHS Trusts are required to have secure e-mail that is compliant with ISB1596 in place by no later than June 2017. At this time work is underway for PSHT to achieve this certification with an expected certification date of November 2016.

HHCT

The e-mail solution at HHCT is the centrally provided NHSMail2 service provided by Accenture PLC under contract to the Health and Social Care Information Centre (now NHS Digital). NHSMail2 is a hosted service that operates from two commercial data centres in order to provide resilience and is accessed over the NHS N3 network. HHCT has around 2000 e-mail users, supports over 2500 mailboxes and maintains around 260 distribution lists. NHSMail2 offers a range of services as shown below, those services in the blue boxes form part of the centrally funded service whilst those in orange boxes are extras that users need to pay for directly.



3.10.2 Risks and Benefits

Reaching a conclusion on which e-mail solution to adopt for the merged Trust is a highly complex issue. Each solution offers a number of benefits and each comes with some risks and so the table below attempts to summarise these and show why the recommendation reached was chosen

On Premise Exchange Mail		NHS Digital NHSMail2	
Benefits	Risks	Benefits	Risks
Governance The on premise mail solution is managed by the Trust IT department and so FOI requests for mailbox content from both internal sources (e.g. HR/ TMB) and external source (Police/ FOI) can be initiated quickly as often in such cases time is of the essence.	**Funding** The cost of providing a Trust wide secure e-mail service is known to be around £20,000 per annum allowing for depreciation of hardware and on-going support of the application.	**Funding** At this time the basic NHSmail2 (as shown in the blue boxes above) is funded centrally. However, this was also the case of the Microsoft Enterprise License agreement that was funded centrally until 2012 at which time the full cost of Microsoft licensing was handed to the source organisations	**Governance** Access to the content of NHSMail2 mailboxes requires a request to be made to the NHSMail2 service desk after which the information can then be provided. At this time there is no published service level agreement on how long such requests will take to complete potentially causing significant delays.
Absence Experience shows that on many occasions access to a user mailbox, calendar or task is required at a time when the mailbox owner is absent. Trust IT can provide temporary access to such mailboxes and advise the mailbox owner when he/ she returns from the period of absence.	**Instant Messaging** As part of the Trust merger a new Microsoft EWA will be needed. At present, included in the PSNT EWA is Skype for Business which if carried forward into the new EWA would also provide Trust-wide Instant Messaging	**Instant Messaging** NHSMail2 includes the provision of Instant messaging as part of the core system. This allows on-line users to exchange text messages in real-time as if chatting on-line.	**Absence** Whilst NHSMail2 does allow mailbox users to authorise other registered users to have access to their mailbox there is no process at this time to override this for temporary access. Only the mailbox owner can change access rights.
Mailbox Sizes The on premise e-mail solution stores mailboxes on the Trust SAN and so mailbox size is only limited by the amount of storage available. Whilst managing mailbox growth is a function undertaken by IT there are users who genuinely need larger mailboxes.	**Mailbox Administration** In the merged Trust there will potentially over 5000 mailbox users and up to 8000 mailboxes in use. All these mailboxes need to be managed and all the associated changes administered in house. Whilst this work is a standard part of the current PSHT workload it is not performed at HHCT and so would need to be resourced.	**Mailbox Administration** Whilst in the merged Trust there will potentially over 5000 mailbox users and up to 8000 mailboxes in use, the primary role around mailbox administration will be fulfilled by the NHSMail2 service provider.	**Mailbox Sizes** NHSMail2 provide a maximum of 4Gb of mailbox storage within the core solution. Using the top up service NHSMail2 mailboxes can be increased in size however this is chargeable and the scale of charge has not yet been published. At this time there are around 135 e-mail users with a mailbox that is larger than the 4Gb allowance.
Patient Records In 2014 a coroners ruling was published advising that any e-mail concerning any clinical activity for one or more specific patients must be included in their patient record. Using the on premise e-mail solution and textual analysis it is possible for	**Service Risk** The provision of a high resilient e-mail service to over 5000 users with a high level of uptime requires investment in both IT staff and technology. The risk associated with the service therefore remains with the Trust.	**Service Risk** Whilst a third party hosted solution is not free from service risk, the investment made by NHS Digital around NHSMail2 is known to be significant. The advantage therefore to the Trust is that the service risk is transferred.	**Patient Records** At this time NHSmail2 does not offer any Application Programme Interfaces and so it is not possible to identify e-mail that relates to the patient record. In addition, there is no way to link NHSMail2 to the Trust EDM making it impossible to include NHSMail2 e-Mail in the patient record.

the Trust to identify such e-mail and forward for ingestion into the Trust EDM solution for inclusion in the patient record.			
Local Integration One of the key tasks facing the new Trust is the need to redesign services and to engender far greater collaborative working. As there are many functions with Microsoft Exchange that can be used to support this agenda there is discernible benefit to be gained from integration with local systems.	**Secure E-mail (NHS)** The Trust is required by NHS Digital to adopt a secure e-mail system that is compliant with ISB1596 by no later than June 2017. Whilst PSHT is well on the way to achieving this, the required standard has not yet been reached. At part of a merged Trust, it will also be necessary to have the new mail system certified as compliant with the secure e-mail standard.	**Secure E-mail (NHS)** NHSMail2 provides level 2 secure e-mail that is fully compliant with ISB1596 as a core part of their service offering.	**Local Integration** Unfortunately, NHSMail2 only offers integration into existing Microsoft products such as SharePoint and Skype for Business. There is no means to integrate NHSMail2 into any Trust clinical or business systems.
Collaborative Working As noted above far greater collaborative working is a key requirement outlined in the merger OBC. At this time there are a number of sophisticated collaboration tools such as Cisco Jabber that enable this in a health context. Benefits from a product such as Jabber include: Far greater control over telephone call routing in particular for clinical staff; can be deployed Trust wide on one or more mobile devices providing anytime and place real time communications; can enhance the electronic patient record in events such as MDT; can be used for remote patient video conference up to and including remote OP appointments. Currently this is only available on a local copy of Microsoft Exchange.	**Secure E-mail (Non NHS)** It is clear that secure e-mail to non NHS recipients such as patients will be required in the merged Trust. Local Microsoft Exchange can be integrated with 3rd party software that provide this functionality at a cost.	**Secure E-mail (Non NHS)** NHSMail2 provides tools to enable the transmission of secure e-mail to non NHS recipients such as patients as a core part of their service offering.	**Collaborative Working** At this time NHSMail2 only offers integration into two Collaboration tools these being SharePoint and Skype for Business. Whilst these both have some value there are a number of other third party tools that offer far greater functionality in a complex environment such as healthcare.
E-Mail Archiving PSHT has already invested in technology to provide a local e-mail archive and as part of the merged Trust this would be expanded. This approach to arching means that Trust staff can recall e-mail from the previous moth or year both quickly and easily without the need for IT staff		**Presence** One useful feature of the new NHSMail2 is its national directory and the ability to display those users who are signed into the system. Knowing that a colleague in another health or social care organisation is on-line facilities quick communication using either Instant Messaging or	**E-Mail Archiving** A review of NHSMail2 has failed to find any reference to long term e-mail archive. It is clear that users can keep e-mail on-line for as long as they wish subject to the size of their mailbox. Any mailbox over 4Gb in size is subject to a charge and deleted e-mail is only retained for 180 days as

intervention. For all but the most basic of e-mail users accessing archived e-mail is a fairly routine task.		Video Conferencing.	standard. On this basis we feel that NHSMail2 has not provided a long terms solution for the archiving of older e-mails.

In creating this risk/ benefits table and in reaching a decision of the optimum option for the merged Trust to adopt, input has been received from additional consultants outside the immediate PSHT and HHCT engagement. These include:

Michael Bone, former Director of ICT at Great Ormond Street Hospital
Jon Reed, former Director of IM&T at the Royal Marsden NHS Trust
Ian Hall, former Chief Technology Officer at BMI Hospitals
Matthew Douglas, former NHS IT Operations Manager and now IT Director at Rayner
Clive Booth, former IT Operations Manager at Royal Sun Alliance Insurance and a Microsoft MCSE

Whilst every effort has been made to be comprehensive around the identification of risks and benefits, it is acknowledged that a risk and/ or benefit that is unknown to the Methods team or did not arise during the discovery phase, may exist and so may not be included in the table.

3.10.2.1 Options

The options to address this issue are as follows:

1	**Do Nothing**
At this time the two Trusts have to very different e-mail solutions deployed. As e-mail is a key collaboration suite moving forward the Trust must move to a single integrated solution in order to maintain operational capability. In addition, as part of any post-merger service re-design the successful use of collaboration tools will be central to the supporting services that will underpin the revised clinical service model. **On this basis the Do Nothing option is rejected**	
2	**Adopt NHSMail2 Trust Wide**
The Trust could choose to adopt NHSMail2 Trust wide and this would provide a fully operational e-mail based collaboration service. However, there is a number of key issues, in particular around the integration of NHSMail2 with unified communications, mobile device security and most notable clinical systems (such as EDM) that are more difficult or simple not achievable at this time. Whilst the central funding of NHSMail2 is a strong driver, the need for the Trust to significantly redesign operational and clinical services to drive up efficiencies, optimise back office and reduce unit costs are less easy to achieve with NHSMail2. **On this basis this option is not recommended.**	
3	**Secure on premise MS Exchange Trust Wide**
The Trust could choose to extend secure on premise MS Exchange Trust wide as this would provide a fully operational e-mail based collaboration service. However, moving forward, the Trust need to significantly redesign operational and clinical services to drive up efficiencies, optimise back office and reduce unit costs. The ability to integrate MS Exchange with unified communications, mobile device security and most notable clinical systems (such as EDM) are key enablers to achieving this aim. In addition, the improved agility and governance provided by an on premise solution further enhance this option. **This option is recommended as both a tactical and strategic solution.**	

3.10.2.2 Costs

The costs of addressing the e-mail issues is as follows:

Title	Capital	Revenue
Do Nothing	£0.00	£0.00
Adopt NHSMail2	£53,000.00	£33,000.00
Secure on premise MS Exchange Trust Wide (See Note 1)	£13,750.25	See Note 2

A detailed statement of work for the extension of MS Exchange is provided in a separate document held by the Head of IT.

Note 1: The cost data provided against option 3 is based upon an upgrade of the existing PSHT Exchange 2010 solution to a Trust wide Exchange 2013 solution. Upon review it was agreed that system resilience, e-mail archive management and some functionality already provided by NHSMail2 would be far better served by moving to Exchange 2013 as part of the Trust merger.

Note 2: There will be a revenue cost for these licenses however, as these will form part of the merged Trust Microsoft Enterprise Wide Agreement (EWA), we are unable to provide a meaningful figure as part of this review.

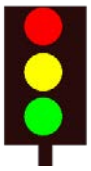
3.10.2.3 Recommendations

Immediate: Achieve ISB1596 certification for current Exchange 2010 e-mail service. Commence the planning work required to enable the delivery of a Trust wide local MS Exchange 2013 e-mail service.

Tactical: Upgrade Exchange 2010 to Exchange 2013, test and validate before ingesting HHCT users into the new solution.

Strategic: Review the use of MS Exchange in conjunction with other designated software applications to maximise the benefits available from Exchange as part of the design of the merged Trust service model.

3.11 Integration Services

	**Immediate**	**There are no immediate infrastructure requirements for Integration Services**
	Tactical	**In line with the Clinical System consolidation plan, review all existing system interfaces at HHCT and commence planning for migration to Ensemble. (Note dependencies)**
	Strategic	**Assess options for expanding the use of the Ensemble Integration Engine. Review possible addition of InterSystems Healthshare as a portal in-line with NHS Digital 2020.**

3.11.1.1 Current Position

PSHT

The integration engine at PSHT is an enterprise grade solution called Ensemble from InterSystems Corporation and is one of the leading integration engines in use today. The Ensemble engine sits on the PSHT Microsoft SQL Server cluster and supports some 18 electronic interfaces linking business and clinical systems together so that data flows where it is needed when it is needed. The use of a SQL Cluster platform for the Ensemble database combined with a virtual server for the application provides a high level of resilience, keeping the integration engine running at all times. There are four members of the Information Management team who are proficient with Ensemble and PSHT have utilised its extensive functionality to support healthcare delivery across the Trust.

The most obvious example of this is the PSHT in-house e-Track application that is a clinical workstation application providing near real-time data to clinical teams in primary care areas such as A&E, Hospital Wards and Outpatients along with a myriad of other clinical spaces. It is well liked by clinical staff and PSHT have plans to continue it development going forward.

In our opinion Ensemble is a world class integration engine deployed by PSHT in an exemplary manner and exploited to the best of its abilities and so very suitable for continued use in the merger Trust.

HHCT

The integration engine at HHCT is also an enterprise grade solution called Rhapsody from Orion Healthcare. It too is one of the leading integration engines in use today and there are many examples across the NHS in daily use. Rhapsody like Ensemble, uses Microsoft SQL server for its message database with the application running on a virtual server. HHCT have one member of staff who is proficient with Rhapsody and to date, have developed some six electronic interfaces linking key clinical systems together and supporting the timely provision of clinical data to operational teams.

> Risks
> The reliance on a single member of staff with the proficiency to manage a key technological component is a modest risk to the Trust. This risk is mitigated in part through support and maintenance contract but provision of a second skilled resource would significantly reduce this risk.

In our opinion Orion Rhapsody is also a world class integration engine which, from an infrastructure perspective, has been well deployed and so suitable for continued use in the merged Trust.

3.11.1.2 Options

Each Trust is in a strong position, each having a world class integration engine, each of which would be more than capable of providing Trust wide systems interfacing in the merged Trust. However, the larger team of staff proficient in its use and the level to which Ensemble has been developed at PSHT makes a stronger case to retain Ensemble in the medium to long term. By taking this approach, there is also an opportunity to strengthen the emerging team further, by adding the SQL Server Database and Integration engine skills of the member of staff at HHCT into an enlarged and combined team as part of the merger. Whilst some cross training will be required, the principles of systems interface development are consistent across both integration engines. In addition, the HHCT member of staff also has considerable SQL Server Database skills that would be a welcome addition to the nascent team.

3.11.1.3 Costs

There are no infrastructure costs to deploy Ensemble across the merged Trust. Work will be required to redevelop the existing Orion Rhapsody interfaces currently in use at HHCT. However, the nature of this work and any costs should be reported in the clinical systems review also being undertaken at this time.

The annual Orion Rhapsody support and maintenance contract runs from 20th October each year for 12 months with an annual revenue value of £18,810.00. It should be possible to cease this from October 2018 with the resulting revenue saving.

3.11.1.4 Recommendations

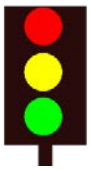
Immediate: There are no immediate infrastructure requirements for Integration Services

Tactical: Once new external links are in place and in-line with the Clinical System consolidation plan, review all existing system interfaces at HHCT and commence planning for migration to Ensemble.

Strategic: Assess options for expanding the use of the Ensemble Integration Engine. Review possible addition of InterSystems Healthshare as a portal in-line with NHS Digital 2020.

Note: Lincoln CCG have adopted Healthshare as a health community portal within there STP. This therefore presents an opportunity for the merged Trust who receive approximately 40% of the business at Peterborough and Stamford Hospital from Lincolnshire to improve the electronic exchange of clinical information across this health community and with this important CCG.

3.12 Resilience

	**Immediate**	**Procure and commission technology component upgrades to deliver improved infrastructure resilience.**
	Tactical	**Once the new structure of IT has been confirmed develop updated Business Continuity plans. Focus on how IT services would be delivered in the face of business interruption.**
	Strategic	**When the new service model for the merged Trust is known undertake a full Business Impact Analysis and developed updated Disaster Recovery plans, in particular for priority one systems or services.**

3.12.1.1 Current Position

PSHT

The team at PSHT have taken a practical approach to resilience with the result that, where ever possible, appropriate technology has been deployed to minimise the risk of failure arising from the loss of a single instance of technology. Examples include devices with multiple power supplies, network interfaces, controllers and key components; the provision of UPS, air handling, fire detection and environmental monitoring in network hub rooms; and N+1 approach to all key data centre components; a network built around two cores each of which is linked to every hub room and the wide spread use of data replication across its storage area networks.

Therefore, with the exception of Trust servers only being connected to one core switch (see section 3.3.1 for further details) it is our opinion that PSHT has a satisfactory level of resilience across its IT service.

HHCT

The team at HHCT have implemented resilience in high risk areas where the IT funding envelope has allowed. The challenge around resilience at HHCT comes in two parts: the first where resilient components do exist but are no longer fit for purpose (for example hub room UPS); the second, where resilience is needed but has not been provided (for example SAN data replication). Clearly there are some areas of good practice, for a network built around two cores each of which is linked to every hub room but this is not consistent across the IT service.

This infrastructure review contains a number of recommendations around investment in technology upgrades which will, if implemented, address these concerns. However, at this time it is our opinion that HHCT lacks the necessary level of resilience required in a complex environment such as a hospital and so the IT service is running at risk.

3.12.2 Business Continuity

3.12.2.1 Current Position

PSHT

PSHT has a well-defined and detailed BCP plan that includes some of the political, social and human issues that have impact on the continued delivery of IT services. Key locations are clearly identified and a sound command structure has been included. However, the aim of a Business Continuity plan is to outline how the IT Department would continue to provide the services that operate from its key locations should these no longer be operable.

For example: if the IM&T Ground Floor workshop is no longer operable what services are provided out of the workshop? How business critical is each service? Can some or all of these services be provided from an alternative location? In particular, those that are most business critical. If they can be provided where and how?

Whilst the plan has many good features, it needs to focus more on how IT services would continue as a business function with one or more service locations inoperable. However, care needs to be taken as clearly a large business interruption may see IT focus more heavily on the recovery of technology services than the continued provision of the normal IT service.

HHCT

No specific Business Continuity documentation was assessed by the Methods team as part of this Infrastructure review.

3.12.3 Disaster Recovery

3.12.3.1 Current Position

PSHT

PSHT has a well-defined and detailed "Serious IM&T Incident Procedure" that sits alongside the IT Recovery Plan. The former clearly defines what constitutes an incident and this is coupled to a flow chart that shows the steps and escalation points. The document shows the incident command structure including the definition of roles and responsibilities. However, the team comprises all the senior managers within IT with the risk that should the recovery take more than 12 hours there is no second team to come in and continue the recovery at the point where the starting team are due to be relieved. The plan continues with reference to recovery red boxes aligned to the BCI standard containing information and material that are germane to the recovery. There are also good sections on Management Considerations and Communication which cover much of what is needed.

What is missing is information on staff call out, an index of supplier information, any reference to backup media in terms of location, access and secondary technology and any detail on how the recovery itself would be achieved.

HHCT

HHCT has an up to date IT Disaster Recovery plan with a good opening section on risk that includes a master list of systems and suppliers. However, this is provided as an electronic link to an XL sheet rather than as a hard copy (e.g. Appendix) with the risk that should the SharePoint system be down there would be no access to the data. Objectives and Responsibilities are also included but only at very high level.

3.12.4 Summary

RESILIENCE

All of the resilience issues are covered in detail in the body of this Infrastructure Review including recommended options and the associated costs. If the proposed investment in technology is undertaken, the merged Trust will be very well placed to deliver high class, technology enabled healthcare services, underpinned by high performance and resilient IT infrastructure.

BUSINESS CONTINUITY

Once the new service delivery model for the merged Trust is known it would be a good time to revisit the IT Business Continuity plan. Aligned to the new service model and cognisant of the new structure of IT services Trust wide, a new BC plan can be made, building on the good work already done for the PSHT plan. The new BC plan should be built around the BCI PAS56 model and be focussed on the continued delivery of IM&T services in the event of business disruption.

DISASTER RECOVERY

This IT infrastructure review includes a number of proposals that will significantly change the topology of IT in the merged Trust. Alongside this, Libretti Health have been reviewing the future of clinical applications with recommendations as to what should be deployed across the merged Trust. Once these are known the Trust would greatly benefit from a formal Business Impact Analysis, as this will not only aid the formation of Business Continuity plans across the Trust but will also drive the order in which key IT systems are recovered. As part of this development, the Trust may wish to consider creating specific system and/ or service recovery plans for all of its priority one systems.

3.12.4.1 Options

As both BC and DR plans are mandated for NHS organisations as part of the annual compliance audit, there is no option but to create new plans once the shape of the merged Trust is known. However, given the significant role played by IT in the delivery of healthcare services, we would recommend that the Trust engage a BCI qualified professional to ensure the coverage and content of the new plans comply with published standards.

3.12.4.2 Costs

The cost of Professional Services to support the development of Business Continuity and Disaster recovery plans are included in section 3.15 on Professional Services.

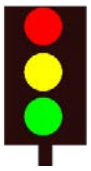
3.12.4.3 Recommendations

Immediate: Procure and commission technology component upgrades to deliver improved infrastructure resilience.

Tactical: Once the new structure of IT has been confirmed develop updated Business Continuity plans. Focus on how IT services would be delivered in the face of business interruption.

Strategic: When the new service model for the merged Trust is known undertake a full Business Impact Analysis and developed updated Disaster Recovery plans, in particular for priority one systems or services.

3.13 Security and Governance

	**Immediate**	**Recruit Information Security Support Officer**
	Tactical	**Build new Information Security model aligned to ISO: 27001 for merged Trust. Update policies, controls, procedures and reporting against the new model. Mandate annual staff Security and Governance training.**
	Strategic	**Review security threats as data flow across the Trust electronic borders increases in line with NHS Digital 2020.**

3.13.1 Structure

PSHT

The security structure at PSHT is largely modelled on the International Security standard ISO: 27001. The Trust has an Information Security Forum that formulates Information Security Policy and Controls which in turn reports through an Integrated Governance Committee to the senior team. Alongside the Information Security Forum, the Trust also has a Health Records and Governance Committee which manages all of its Information Governance issues with good representation from both Information Management and Technology. The delivery of Information Security on the ground is overseen by a dedicated Information Security Officer who reports directly to the Head of Information Technology.

HHCT

Information Security at HHCT largely falls to the IT Operations Manager with support from the Network and Data Centre Managers. Information Governance is managed within Health Records who have allocated resource; both are overseen by the Information Governance Committee. The IT Operations Manager and the EPR Programme Manager have seats on the IG Committee covering technical security and security for Clinical Systems.

3.13.2 Standards

Both Trusts follow the Information standards set out in the NHS Information Governance toolkit and each has reached level 2 in terms of its compliance. Formal change control exists at each Trust and both Trusts operate varying levels of information security audits. Security Incident Management procedures are in place at both Trusts and are integrated with the IT Service Desk.

3.13.3 Policy

PSHT

There is a formal Information Security Policy at PSHT that is well structured, it is compromised of strategic security policy statements in the body of the document, supported by more policy instruction and compliance measures in a series of appendices. The appendices also breakout into a series of detailed user Code of Practice documents that provide practical guidance on a wide range of Information Security Issues. All of these documents have an assigned author and a policy expiry date which is policed by the Information Security manager and the Trust's Compliance Manager.

HHCT

HHCT also has an Information Security policy that sets out objectives, responsibilities, legal compliance and lists some 12 related policies that cover a mixture of Information Governance and Information Security topics. However, the document lacks any strategic security policy statements and was last reviewed almost two years ago. Seven of the related policies were reviewed and all provide basic guidance in the topic area, with several being detailed and comprehensive and some being more general. The overall size of the HHCT team and the lack of a dedicated Security Officer are reflected in what the team has been able to achieve in terms of policy documentation.

3.13.4 Procedure

PSHT

There is a comprehensive range of Information Technology procedures at PSHT many of which include reference to Information Security where this is appropriate. All of those that were reviewed were found to be well structured and detailed with suitable cross reference where required. Those procedure documents that were reviewed have an assigned author and a policy expiry date which is policed by the appropriate Senior Manager within IT and subject to review by the Head of IT.

HHCT

HHCT has a number of Information Technology procedures that are documented. Where procedure documents have been generated they are generally fit for purpose but again the overall size of the HHCT team is reflected in what the team has been able to generate in terms of Information Security within IT procedure documentation.

3.13.5 Reporting

PSHT

There is a well-defined Information Security reporting process that incorporates the Trust Security Incident Management procedure. All risks are reported via the IT Security Officer and any reported security risk with a value of 12 or above (as defined with the Trust Risk Management policy) is immediately alerted to the Head of IT. Any high risk items with a risk score of 20 or more is immediately escalated to the Trust Management Board via the Director of Finance. Routine security reporting is reviewed by the Information Security Forum and a summary report is also routinely presented to the Integrated Governance committee.

HHCT

At HHCT routine security reporting is reviewed by the Network Manager and IT Operations Manager with a summary report being presented to the Information Governance committee for review by the Senior Information Risk Officer (SIRO). Security Incident reporting is also reviewed initially by the Network Manager with first stage escalation to the IT Operations Manager and second stage to the Trust Board via the Director of Finance.

3.13.6 Summary

The security model used at PSHT is closely aligned to ISO: 27001 and one of the best we have seen across the NHS. There are examples of best practice across each area of Information Security management and it is clearly seen as being a key function for the safe delivery of healthcare services. Whilst the security at HHCT is satisfactory, the lack of a dedicated security officer and the

modest size of the IT team has limited what can be achieved. There are also examples of good practice within the security domain at HHCT.

The demands of NHS Digital 2020 will see an ever increasing use of electronic information both across and outside the electronic borders of the Trust. As the NHS introduces patient portals holding ever more complex clinical data, and as the exchange of such data across Health and Social care centres is driven forward, the need for advanced security will only continue to grow,

Changes in such electronic borders increase the risk of attack and these days, reports of cybercrime are almost a daily occurrence. Indeed, there are frequent reports of phishing, social engineering and ransomware attacks occurring right across the public sector. As a result, a clear information security governance structure, strong information security policy, advanced security controls, regular testing and mandatory staff training (at least annual) are key to a secure future.

3.13.6.1 Options

In the merged Trust we would strongly recommend the provision of a Security Support Officer to work under the existing Security Officer as part of the merged Trust. We believe that a Trust of the size to emerge from the merger will be unable to sustain the required level of Information Security with just the existing resource. We have therefore included this in section 3.14 on Staff Resources and Structure.

3.13.6.2 Recommendations

Immediate: Recruit Information Security Support Officer.

Tactical: Build new Information Security model aligned to ISO: 27001 for merged Trust. Update policies, controls, procedures and reporting against the new model. Mandate annual staff Security and Governance training.

Strategic: Review security threats as data flow across the Trust electronic borders increases in line with NHS Digital 2020.

3.14 Staff Resources

3.14.1.1 Current Position

PSHT

The Information Technology team at PSHT (as shown in the diagram below) is based upon a sound structure and has sufficient staff to safely deliver Information Technology services across the Trust. The number of staff is sufficient to provide cover for all forms of absence and has enough depth to ensure that there is no complete reliance on individual members of staff.

DIAGRAM REMOVED

The organisational structure of the team provides a strong senior management layer with the only observation being that the structure does not include a designated Deputy Head of IT role. Whilst this may not be perceived as a risk currently, we feel that it may require a further review as the shape of the merged Trust takes place.

Under the senior management layer services are provided by teams of staff aligned to the Information Technology Infrastructure Library, which is a recognised set of best practice guidance for IT service management (ITSM) that focuses on aligning IT services with the needs of business.

HHCT

The Information Technology team at HHCT (as shown in the diagram below) is the minimum structure that is required to deliver Information Technology services across the Trust. The number of staff is small and in our view struggles to provide cover for all forms of absence. In the three key areas of Database & Integration, Network and Data Centre there is heavy reliance on individual members of staff to sustain the service.

DIAGRAM REMOVED

3.14.1.2 Future Structure

A proposed structure for the newly merged Trust fully integrated IT department is shown below.

DIAGRAM REMOVED

The design of the new structure provides strong leadership with a senior manager heading each of the cores teams. These in turn are then broken down into smaller operational teams and where these teams warrant it, there is a Team Leader role included. On this basis we feel that the proposed structure provides sufficient personnel in the teams to deliver a safe and functional IT service with one exception.

In the structure above there is only one member of staff assigned to the role of ICT Security. The process of merging two NHS Trust organisations together generates a very substantial amount of change, in particular for ICT disruption of the security perimeter. On top of this, each organisation has attained different standards and operating procedures in respect of security and these need to be harmonised. In addition, the new organisation will include two acute hospitals and so it is our opinion that ICT security should comprise two roles. An ICT Security Manager at Band [redacted] (as shown above) and an ICT Security Officer at Band [redacted] to support the manager and deliver the security agenda across multiple sites.

3.15 Professional Services

As noted throughout the document the process of merging two NHS Acute Trusts into one fully operational organisation is a very substantial and complex process that spawns significant work under the change agenda. However, during this change period, the nascent organisation needs to continue with its primary mission – to deliver high quality and safe healthcare services to its patients. It is therefore necessary to engage additional resource to enable the change whilst minimising the impact on the operational service. The table below includes all of the professional services that we believe will be required to achieve this:

Area	Resource	Time	Cost
Data Centre	Consultant to build commercial hosting output based specification	30 days @ £750 per day	£22,500
Wired Network	[redacted] Engineer to install and commission aggregation switches at PSHT and HHCT	10 days @ £850 per day	£8,500
Remote Access	Migrate HHCT users to [redacted] & introduce PSHT Remote Access model (see note 1)	NHS Band 6 for 1 Year	£30,357
Management Platform	[redacted] Consultant to configure system across merged Trust	3 days @ £1,150 per day	£3,450
Unified Communications	Network Engineer support for Unified Communications Project	Shared Resource with Remote Access above	
Voice Services	Cabling Company to install 20 pair copper cables from frame to 23 hub rooms	£1200 per hub room	£27,600
	PABX Engineer to install analogue PABX and operator consoles plus link to network	5 days @ £750 per day	£3,750
	[redacted]	30 days @ £1000 per day	£30,000
	[redacted]	15 days @ £850 per day	£12,750
[redacted]	[redacted]		
	Professional Services to build and configure IVR for merged Trust	Fixed Price Package	£15,000
Network Addressing	Network Engineering Support for changes to Trust Network Addressing	Shared Resource with Remote Access above	
Desktop	Contract Resource to handle rollout of 700 new personal computers at HHCT	NHS Band [redacted] for 2 Years	£42,104
	Contract Resource to migrate 1400 users onto [redacted] PC Protection Suite	Shared Resource with Desk PC rollout above	
Compute	Systems Engineer to install 4 Node ESXi VM platform at PSNT	3 days @ £850 per day	£2,550
	Systems Engineer to install 4 Node ESXi VM platform at HHCT	3 days @ £850 per day	£2,550
	Contract Resource to implement consistent server management processes Trust wide	NHS Band [redacted] for 2 Years	£48,608
Storage	Storage Area Network Engineer to upgrade [redacted] SAN at PSHT	3 days @ £850 per day	£2,550
	Storage Area Network Engineer to upgrade [redacted] SAN at HHCT	3 days @ £850 per day	£2,550
	Storage Area Network Engineer to install new [redacted] SAN at HHCT	7 days @ £850 per day	£5,950

Service Desk	Contract Resource to migrate service desk into out of [redacted]	NHS Band [redacted] for 6 months	£9,076
Active Directory	Microsoft Engineering Support for AD migrate in particular new schema design and user migration tools	20 days @ £1000 per day	£20,000
E-Mail	Microsoft Engineering Support for e-mail Upgrade and expansion to HHCT	20 days @ £1000 per day	£20,000
Resilience	Consultancy Services to build IM&T Business Continuity Plan	20 days @ £750 per day	£15,000
	Consultancy Services to deliver a post-merger Trust wide Business Impact Analysis	32 Days @ £750 per day	£24,000
	Consultancy Services to build IM&T Disaster Recovery Framework and one example plan	20 days @ £750 per day	£15,000
Security and Governance	Contract resource to consolidate Trust Information Security Policies and Procedures	NHS Band [redacted] for 1 year	£35,225
			£494,720
	VAT/On costs for NHS Staff @ 20%		£98,944
	TOTAL COST OF PROFESSIONAL SERVICES		**£593,664**

4. Infrastructure Cost Summary

The table below brings together all of the costs in terms of technology investment and professional services to generate an Infrastructure Cost Summary. The table is presented in the same order as the body of the Infrastructure Review with a total cost for the Trust merger from an Infrastructure cost perspective at the base. Where there are options resulting in a range of costs the recommended option is the one included in the cost summary. The table presents the cost information in two columns labelled Capital and Revenue. Capital is defined as any cost that is a one off cost and in NHS accounting terms include onetime revenue. Revenue is defined as a cost that is recurrent, usually on an annual basis without a declared termination date. Where this is not the case and a termination date is known this will be noted as a footnote to the table.

Index	Title	Capital	Revenue
3.2.1	Data Centre – Commercial Hosting Centre	£26,785.00	£302,504.23
	Professional Services	£22,500.00	£0.00
3.2.2	Hub Rooms – HHCT UPS Refresh	£92,000.00	£23,600.00
3.3.1	Wired Network Core – Aggregation Switches	£110,700.50	£10,288.15
	Professional Services	£8,500	£0.00
	Wired Network Edge – Edge Switch Refresh	£292,188.82	£0.00
3.3.2	Wireless Network	£20,000.00[1]	£0.00[1]
3.3.3	Network Perimeter	£25,000.00[2]	£0.00[2]
3.3.4	External Links – 10Gb link PCH to HH (5 Years)	£42,100.00	£30,000.00
	External Links – 1Gb link SRH to HH (5 Years)	£16,800.00	£30,000.00
3.3.5	Remote Access – [redacted] Package	£19.925.00	-£15,197.60
3.3.6	Management Platform – [redacted]	£12,470.00	£1,248.00
	Professional Services – System Configuration	£3,450.00	£0.00
3.4.1	VoIP – 2nd [redacted]	£7,890.00	£1,100.00
	Consultancy to plan merger [redacted]	£30,000.00	£0.00
	[redacted]	£12,750.00	£0.00
	VoIP – Install Analogue PABX	£12,000	£2,400
	Cabling Services to install 20 pair copper cables	£27,600.00	£0.00
3.4.3	Paging	£101,220	£10,000
3.4.4	Switchboard – Extend IVR Trust Wide	£66,440.00	£0.00
	Professional Services for IVR	£15,000.00	£0.00
3.6.1	Desktop/Laptop – Capital Sum and budget uplift	£320,000.00	£300,000.00[3]
	Contract Resource to rollout 700 new PC's	£42,104.00	£0.00
3.6.3	Security Suite – [redacted]	£30,000	
3.7	Compute – ESXi compute platform for PSHT	£55,236.21	£5,590.17
	System Engineer to install 4 Node ESXi	£2,550.00	£0.00
	Compute – ESXi compute platform for HHCT	£55,236.21	£5,590.17
	System Engineer to install 4 Node ESXi	£2,550.00	£0.00
	Storage – SAN Upgrade for PSHT	£56,187.57	£6,019.27
	Storage Engineer to upgrade [redacted] SAN	£2,550.00	£0.00
	Storage – SAN Upgrade for HHCT	£324,432.38	£29,197.23
	Storage Engineer to upgrade [redacted] SAN	£2,550.00	£0.00
	Storage Engineer to install new [redacted] SAN	£5,950.00	£0.00

	Database – SQL Server Upgrade	£0.00	£162,000.00
3.8	Service Desk – Extend [redacted] to HHCT	£56,500.00	£15,535.72
	Contract Resource to migrate onto [redacted]	£9,076.00	£0.00
3.9	Active Directory		
	Microsoft Engineer to support new AD	£20,000.00	£0.00
3.10	Electronic Mail		
	Microsoft Engineer to support E-Mail Migration	£20,000.00	
3.11	Integration Services – [redacted]	£2,000	
3.12	Resilience - Consultancy Services - IM&T BC Plan	£15,000.00	£0.00
	Consultancy Services – Full BIA	£24,000.00	£0.00
	Consultancy Services – IM&T DR Framework	£15,000.00	£0.00
3.13	Security & Governance		
	Contract Resource – to build new Security Policies & Procedures	£35,225.00	£0.00
	Total Infrastructure Net Costs for merged Trust	£2,041,541.69	£919,875.35
	VAT/Staff on Costs @ 20%	£408,308.34	£183,975.07
	TOTAL INFRASTRUCTURE COSTS FOR MERGED TRUST	**£2,449,850.03**	**£1,103,850.42**

1. We have included a provisional sum of £20,000 as a wireless network survey is required before any wireless network upgrade can take place.
2. A site survey by WAN providers is required before a meaningful price can be reached and so a provisional sum of £25,000 has been included
3. Contract Resource for PC rollout is based upon IM&T receiving both the capital and revenue sums proposed.

Appendix A

Data Centre Tier Standards

The data centre review for all locations has been undertaken against the Telecommunications Industry Association standard number 924 entitled "Telecommunications Infrastructure Standard for Data Centres" issued originally in May 1998 and updated recently to version 2 as issued in March 2010. This widely recognised standard provides data centre models in four tiers which in summary are as follows:

Tier One: Basic Site Infrastructure

A tier one data centre has non-redundant capacity components and a single, non-redundant distribution path serving communications and computing equipment. Tier one sites are susceptible to disruption from both planned and unplanned activities including human error that will cause a loss of service. The unplanned outage or failure of any single component will impact communications and/ or computing equipment. The whole site infrastructure has to be shutdown to perform safety checks, undertake maintenance or install new components.

Tier Two: Redundant Site Infrastructure

A tier two data centre has redundant capacity components combined with a single, non-redundant distribution path serving communications and computing equipment. Tier two sites are able to have redundant capacity components removed from service without causing a service disruption. However, they remain susceptible to disruption from both planned and unplanned activities that will cause a loss of service. An unplanned outage or failure of any single component may impact communications and/ or computing equipment and like tier one sites the whole site infrastructure has to be shutdown to perform safety checks, undertake maintenance or install new components.

Tier Three: Concurrently Maintainable Site Infrastructure

A tier three data centre has redundant capacity components and multiple independent distribution paths serving communications and computing equipment. All equipment has dual power feeds and power supply units that can be switched seamlessly without affecting the service provision. Any capacity component and/or element in the distribution path may be removed from service on a planned basis without impacting any communications and computing equipment. Tier three sites are however susceptible to disruption from unplanned activities including human and operational error. As a result, unplanned outage or failure of either capacity components or elements of the distribution path will impact the service provision. However, planned site infrastructure safety checks, maintenance or installation of new components can be undertaken safely using the redundant components to support communications and computing equipment.

Tier Four: Faults Tolerance Site Infrastructure

A tier four data centre has multiple, independent, physically isolated systems that provide redundant capacity components and multiple, independent, diverse and active distribution paths serving all communications and computing equipment. In a tier four data centre, a single failure of any capacity component or any element of the distribution path will not impact the communications and computing equipment. In addition, the equipment that provides capacity and distribution is configured to automatically respond (deemed as self-healing) to any failure by bringing additional capacity, where required, on-line. Finally, tier four data centres have sufficient capacity to meets the needs of the site even when redundant components or distribution paths are removed from service.

Appendix B

AQ900

Automatic fire protection system
for hazardous areas and other special risks.

Description

The AQ900 is a fully automatic fire suppression and protection system.

The unique design of the AQ900 allows the storage cylinder to be specified for either vertical or horizontal installation.

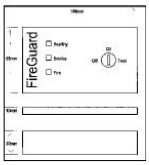
Features

"compact and effective"

Cylinder storage up to 100 litres.
Water misting, with optional additives.
Fully automatic or remote operation
Easy to install

Technical

A range of nozzle types is available including air aspirated foam nozzles as pictured here.



Smoke, heat, flame detectors, heat trace cable, or manual push button or break glass to operate.

Applications

Hazardous locations within buildings where the risk of fire is high.
Electrical rooms, transformer stations.
Engine compartments, test cells, hazardous stores, machine centers.

Fact file
Confined spaces, storage areas, engine rooms and special risk applications

Costs
Low

Further information
Tel.
+44 (0)121 693 6888
Fax
+44 (0)121 430 6007
E-mail
mail@autoquench.co.uk

Internet sites
www.autoquench.co.uk

STOP THAT FIRE

AQ900-1b

We have a policy of continuous improvement and reserve the right to change the specification at any time.
Autoquench Ltd, Priory House, 132 Priory Road, Hall Green, Birmingham, B28 0TB, England
www.autoquench.co.uk

Appendix C

Four Layer Campus Network Schematic

DIAGRAM REMOVED

Picture Courtesy of Enterasys Limited

Appendix D

Options for dual homing servers using Aggregation Switches

See attached .PDF entitled “”

QUOTE REMOVED, PART NO AND DESCRIPTION REMOVED

Cost breakdown and equipment make up is as follows:

HHCT		
QTY	Unit Sale Price	Total Sale price
4	£3,800.17	£15,200.68
4	£187.39	£749.56
8	£1,825.91	£14,607.28
		£30,557.52

PSHT		
QTY	Unit Sale Price	Total Sale price
4	£8,913.02	£35,652.08
4	£3,800.17	£15,200.68
4	£187.39	£749.56
8	£1,825.91	£14,607.28
2	£712.97	£1,425.94
4	£178.24	£712.96
8	£506.71	£4,053.68
8	£967.60	£7,740.80
		£80,142.98

Clinical Systems
High-Level Position Report

for

Hinchingbrooke Health Care NHS
NHS Trust

Peterborough and Stamford Hospitals NHS
NHS Foundation Trust

Libretti Health 7 Stratford Place, London W1C 1AY
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Contents

Executive Summary

This report is the first of three reports into the approach recommended to rationalise systems supporting the clinical processes across the organisation created from the proposed merger of Peterborough and Stamford Hospitals NHS Foundation Trust (PSHFT) and Hinchingbrooke Health Care NHS Trust (HHCT). The report details the findings to date and acts as an early indicator as to the direction of the recommendations and costs to be developed in the subsequent reports.

Libretti Health wish to extend their thanks for the time offered by a significant number of contributors (listed at Appendix 1) whose considered views and input forms the basis for our analysis and recommendations.

System Relationship

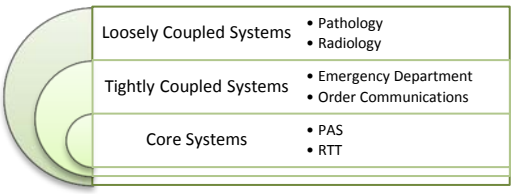
Key amongst the systems supporting the clinical processes are those maintaining the single register of patients (the Patient Master Index - PMI) and core movements of patients; notably:

- Admissions, Discharges and Transfers (ADT);
- Outpatient activity; and
- Waiting lists and waiting times, including Referral to Treatment (RTT) management.

These functions are primarily managed within the Patient Administration System (PAS).

It is inconceivable that these functions would be managed, over any reasonable timeframe, via disparate systems within a single organisation; and impractical to maintain synchronisation of two systems to provide a 'virtual' single system.

All other clinical systems are related, to a greater or lesser extent, to the core PAS/PMI. Therefore, any decisions taken on the future provision of PAS functionality will impact and inform the decisions required for the other clinical systems; especially the 'tightly coupled' systems with high degrees of integration (e.g. Emergency Department).



Recommendations for PAS

REDACTED FOR BEING COMMERCIALLY SENSITIVE

[redacted]

Recommendations for Other Systems

Quick Wins

Implementation of the unified PAS is a non-trivial project which will consume considerable clinical and IM&T resource. However, if project bandwidth allows, there is the potential for some early quick wins from system amalgamation. Those identified to date are:

- Maternity [redacted];
- Order Communications – [redacted]
- Further roll out of Nervecentre should include Hinchingbrooke locations in the plan.

eTrack

eTrack is an in-house developed portal that has become a strategic system for Peterborough with tight integration to the PAS and exceptionally high level of acceptance and use by clinical staff. Historically there has been concern about the Trust's reliance on a system which itself relied on a single key member of staff. Additional development resource has been taken on to lessen that reliance on a single resource and the associated risk.

However, if there is to be continued reliance on eTrack as this report recommends, there is a need to 'industrialise' the processes used to manage the development and ongoing support of the eTrack 'product'. While this has cost implications, those costs are considerably less than those associated with redeveloping the functionality with a commercial partner.

A further option that may be worth considering is to investigate whether a commercial partner, with whom the merged Trust is likely to have a long-term relationship, may be prepared to 'adopt' eTrack, taking full responsibility for its future development in return for rights to market the software on the open market. [redacted]

Change Roadmap and Clinical Direction

The outline Change Roadmap indicates that the integration of clinical systems across the merged organisation will be a programme extending across a minimum of five years, with the notable milestone of the PAS Go-Live in April 2018, given as noted previously a good level of clinical integration. This programme of work will need careful management to ensure momentum is maintained and benefits driven out.

There is an expressed concern in some quarters that a "PAS Plus" approach to integrating systems misses (or even blocks) the opportunity to integrate and develop clinical services; and restricts the ability to further develop the use of information to support new models of care. This concern is addressed in this report.

As part of this report, a set of Critical Success Factors (what needs to happen to ensure success) and Key Performance Indicators (how we will know when we have achieved success) have been developed. Notable amongst these is the recommendation for the appointment of a Chief Clinical Information Officer (CCIO) role to ensure the clinical input to the direction of the programme and assure the clinical outcomes of the programme. The Trust may wish to consider fulfilling this role via a shared appointment covering each site.

The Change Budget

The review has not considered the costs of infrastructure required to support the clinical systems; nor the cost of redesigning and integrating clinical processes.

The review has identified the following outline costs associated with rationalising clinical systems:

- [redacted]

However, it is assumed that the [redacted] revenue costs will be offset over time by the cessation of system licences as systems are rationalised. This will be further tested in the subsequent reports.

Introduction

The Boards of both PSHFT and HHCT have approved an Outline Business Case, recommending merger of the two Trusts on 1 April 2017.

Libretti Health has been appointed by the two Trusts to advise on options, costs, risks and approaches to support production of the Full Business Case (FBC) for the merger of information systems for both Trusts.

There are three key outputs for this assignment:

1) An initial high-level position report with indicative cost and risk findings;
2) A detailed report on options and recommendations, costings, approaches and risks with regards the PAS/EPR and Emergency Department systems for the merged organisation; and
3) A report, similar to (2) but relating to other clinical and patient-related systems.

This report addresses the first of these outputs (1).

Guiding Principles for Merged Systems

The analysis has taken a risk-based approach to driving our recommendations. The risks are set out independently in a section below and draw us to a set of guiding principles. The following sets out those guiding principles (and the rationale for these principles) applied when analysing the scenario of the merged organisation.

The core of the information systems architecture for any trust is the PAS as this will manage the single administrative record of a patient including their demographics, main clinical relationships (GP, responsible Consultant(s) etc.)) and key movements (referrals, appointments, attendances, admissions/discharges, etc.). It is inconceivable that these functions would be managed, over any reasonable timeframe, via disparate systems within a single organisation as the clinical and operational risk of incomplete data at the point of care is very high. Additionally, it is impractical to maintain synchronisation of two systems to provide a 'virtual' single system. Whilst this has been attempted in other organisations it has led to high management costs without eliminating the risk of duplicate or missing core personal, administrative or clinical information.

Principle 1) There needs to be a single cross-site system on which the master patient index resides.

The clinical strategy for the merged organisation is still under consideration. However, it is known that the services at each site will be maintained with clinical efficiencies and standardisation of service coming from the sharing of clinical staff across the sites. In some instances, individual clinical staff will be working frequently at each site undertaking similar processes.

To use different systems at each site to support these similar processes would represent a clinical risk and management overhead as individuals would need to be conversant with different, site-based, systems. Additionally, it is likely that individual patients will be treated at each of the sites at different points of their pathway. If disparate systems were maintained this would represent further risk to patient safety and/or the patient experience, where information is held in two (or more) different systems at each of the sites.

Principle 2) Similar clinical departments should have similar information systems (or a similar presentation layer such that the clinician has a common interface experience).

It is self-evident that the integration of systems across the two sites cannot be completed prior to the merger (assumed to be April 2017). Indeed, the full programme of work to integrate clinical systems is likely to be a minimum of five years. Therefore, it is not sufficient to nominate whichever system from each site is 'the best' but, rather, find the approach to transition of systems over time that is achievable, compatible and delivers the earliest benefit.

Principle 3) Recommendations will be based on the management of risk over the five-year transition timeframe.

Building on the previous statement, any programme of the length that the integration of clinical systems will take risks losing momentum or focus. As such, early engagement of clinical staff with associated early benefits will be imperative for the reduction of this risk.

Principle 4) Opportunities for 'quick wins' should be identified where possible.

The merger offers opportunities for the development of new models of care and the development of new, improved, clinical services. The IM&T architecture should enable these future services; and certainly not block such development.

Principle 5) The transition path should support the merged trust into the future and not just achieve stability in the short term.

While this assignment is firmly focussed on the rationalisation of clinical systems in the merged organisation, the recommended actions must be compatible with local and national initiatives. Notably pertinent amongst these are the Sustainability and Transformation Plans (STP) and the Local Digital Roadmaps; not least as they may be a source of funding in the future. In the longer term, initiatives such as 'Citizen Access' to their records will place additional demands on the information architecture.

Principle 6) The transition path should demonstrate support the STP and LDR.

Stakeholder Consultation

Introduction

The importance of getting input from the various stakeholders across the two Trusts was recognised as a key basis of this work. A first step was thus to arrange to meet as many relevant stakeholders as possible as early as possible in the assignment, within the timeframes available.

With significant help from the IT departments in each Trust we set up a full diary of meetings, spending the first week in PSHFT and the second week in HHCT.

We targeted the key individuals in four main areas:

- Executives;
- Senior Clinicians;
- Heads and senior staff in clinical departments; and
- Informatics staff.

A full list of the stakeholders met during this exercise is given in Appendix 1.

As part of this stakeholder consultation exercise we met with the two main suppliers with regard to the core PAS and associated systems: with System C, for PSHFT and EMIS, for HHCT.

A listing of the current clinical systems used at each organisation, provided by the Trusts as input to this review, is given in Appendix 2. The clinical systems have been assessed and reviewed in three main categories:

1. The core PAS and PMI;
2. Tightly integrated clinical systems, e.g. Order Communications, A&E and Theatres; and
3. More loosely integrated clinical systems, such as Pathology and Maternity.

Detail of these will be given in the subsequent two reports. Here we provide some summary information on the core systems only.

Views from Stakeholders

The full review of the stakeholder views will be delivered in the subsequent reports but in summary the findings were as follows:

In general terms there was felt to be little in the way of existing flows between PSHFT and HHCT, but there was a general willingness to collaborate in both Trusts. The logic and value of working together is generally understood in terms of reducing clinical risk and improving clinical and financial efficiency. However, there are those who question the logic and speed of the proposed merger, especially at HHCT where there is a widely held feeling that they are more naturally aligned with Addenbrookes than with Peterborough.

There was strong support in both Trusts for the formalisation of a CCIO role. It was especially welcomed in the form of having one in each Trust working jointly up to, and through the merger. Some clinical stakeholders mentioned that a 'joint CCIO' would help to ensure equality of emphasis and cultural alignment.

A clear message that came across in both Trusts was that there should be more resource and focus put in to training in terms of clinical systems.

Peterborough and Stamford Hospitals NHS Foundation Trust

Patient Administration System

The current PAS is at end of life. Clinicom (now supplied through CSC) will not be developed further and will only be supported after March 2017 on a limited and individually agreed maintenance contract. PSHFT has run a procurement and has selected Medway from System C as their preferred replacement system. [redacted]

[redacted]

eTrack

Clinicom is significantly enhanced by the in-house developed portal, eTrack. eTrack has a major beneficial impact on the way clinical systems and information is used in the Trust and enjoys a high level of clinical support at Peterborough. The selection of the Medway PAS has been predicated on the integration and continued use of eTrack.

Hardly any of the staff talked about the Clinicom PAS because so many of them use eTrack as their daily tool. Thus the PAS, as with several other systems, is effectively hidden behind eTrack.

There is a general agreement on the importance of installing the Medway system as soon as possible. However, the key eTrack application, has a major positive impact on the way clinical systems and information are used in the Trust. It was widely recognised that this will need to be tied in with the new Medway system.

eTrack has strong clinical and management support and is heavily used on a daily basis. In fact, many staff comment that they could not operate without it. There have been recent occasions when it has been down for 10 minutes or less and clinicians have felt seriously inconvenienced. eTrack effectively masks the shortcomings of several of the systems underneath it.

There is broad praise for Alec Dearden and his skills and knowledge in designing and continuing to develop eTrack.

Overall the benefits of eTrack are clearly seen. It is highly tailored, flexible and dynamic, has great clinical alerts and good functionality. The general feeling is that eTrack should be kept and expanded. The disadvantage is that the expertise and management of the product is effectively a ‘one-man band’ even though there is now a small team delivering it.

While the speed of implementation of changes to eTrack is highly appreciated by clinicians, what is not so apparent to most users is that there are some significant shortcomings in the way eTrack is tested and rolled out.

Order Communications

The Trust has ICE as the core of its Order Communications. Whilst the system is quite mature and a little “clunky”, it does deliver what it is required to do, simply and efficiently and clinicians use ICE

every day. It, like eTrack, is seen as an essential core of clinical activity. However, there is a general frustration that it does not interface to Nervecentre.

Maternity

The Trust uses the K2 Maternity system. The system is well thought of and the staff feel like they have a close relationship with the supplier. It is easy to use and to extract information and is continuing to be developed (both by the supplier and, in its use, by the Trust).

Electronic Document Management

The Electronic Document Management system (Evolve from Kainos) got off to an unsatisfactory start because of poor implementation planning and execution and lack of clinical involvement. However, the system is now seen as improving and is beginning to regain some credibility. The improvements in the indexing has been a big step forward. Unfortunately, the scanning service has been (as more than one interviewee put it) "a catastrophe". The service from Recall UK has not delivered what was required and its slow turnaround and lack of accuracy and completeness is continuing to cause real problems.

ePrescribing

Several staff noted the lack of an ePrescribing capability. There had been an outline scoping exercise and a Tech Fund bid put together two years ago but the decision was made to hold the project until after the PAS had been deployed. The current Pharmacy system, from Ascribe, is old and was felt should be replaced at the same time ePrescribing was procured.

Pharmacy

Pharmacy have had the Ascribe system in since 1994. The contract for this is up for renewal in 12-18 months. The software is not the most up to date version and the servers currently supporting it need upgrading. It is clearly acknowledged by Pharmacy and widely throughout the Trust that ePrescribing is a key requirement. Given this need, it is felt that the Trust should be looking at an integrated Pharmacy and ePrescribing system, although this may need a full OJEU procurement.

Observation Management

Nervecentre is a well-regarded application used for recording and communicating Nursing observations and handover. However, it is not yet fully implemented across all wards.

Diagnostic Imaging

In Imaging the Trust uses HSS CRIS and a PACS from Agfa (IMPAX). IMPAX is felt to be good although the contract is up fairly soon. HSS CRIS does what it is supposed to do and is widely used.

Pathology

The Pathology system is Telepath, which is dated. There is recognition that the Trust needs to deploy a new clinical system but there is a broader decision that needs to be taken first on whether to join one of the developing aggregated pathology organisations such as The Pathology Partnership (TPP) or empath.

Theatres

Theatres use Theatreman which is felt to be a reasonable system but there is a lot more that they could do with it, as it is only used for managing theatre bookings. The Trauma module is deemed acceptable, and the Trust uses the emergency booking system.

eMail

The lack of NHSmail was noted on more than one occasion as a problem; particularly in relation to sending patient identifiable information between organisations.

Hinchingbrooke Health Care NHS Trust

HHCT has experienced very little investment with its IT systems over recent years, during the time that Circle ran the Trust. Such investment as did take place was seen as tactical / short-term in nature and it failed to address the core IM&T issues.

There is an acceptance in many parts that Hinchingbrooke needs (for them and for the merged organisation) a clearer informatics strategy and a set of priorities. There is a concern that a "PAS Plus" approach to integrating systems misses (or even blocks) the opportunity to integrate and develop clinical services. Therefore, whatever solutions are proposed, they must allow for future development.

The clinicians at Hinchingbrooke generally have a poor view of the IT systems and services, although the efforts of the IT Department in managing the systems they have to work with is appreciated. There is broad support for rolling out the better systems from PSHFT, but there are some systems in HHCT that have plenty to offer for the future.

Patient Administration System

The main system used to get patient information is eCaMIS. Its use is variable but it provides the basic information for parts of the clinical process. However, there were many comments about the lack of integration between eCaMIS and many of the other clinical systems.

Some clinicians and senior management are aware of eTrack in PSHFT but are nervous about it because of the perceived 'single point of knowledge' in its support. However, none made any negative comment on its clinical applicability.

Order Communications

The biggest concern expressed across the board is that there is no electronic Order Communications capability at HHCT. These days this is quite an unusual position for a Trust. The lack of order communications has been raised by the IT team as a significant risk. The lack of order communications exacerbates delayed discharges and increases the risks of clinical errors.

Some clinical staff have used ICE at other Trusts and were happy with it.

Emergency Department

The A&E Department uses Symphony which is seen as a fundamental system although not configured optimally yet at HHCT. All emergency patient activity is managed through Symphony.

Maternity

The Maternity HICCS system is seen as very poor. The lack of functionality and flexibility in the system, together with a lack of training, means that most of the processes in Maternity are still manually carried out and paper based. Whilst there are plans for delivery of the new mandated Maternity dataset from April 2017, HICCS is not yet capable of delivering it. The system requires extensive re-keying of data and has poor audit and reporting capabilities. Furthermore, the links out to the community are poor.

It is worth noting that EMIS has indicated that HICCS is only installed in one other site and is not seen by them as a strategic product.

Observation Management

There is some demand for a nursing observations system as there isn't one in place.

Theatres

The Theatre system in eCaMIS is thought to be too simplistic and not well suited to operational use. Lack of an overview capability for theatre activity was seen as a significant shortcoming.

Pharmacy and ePrescribing

It is widely recognised that ePrescribing is critical. Also that Pharmacy should be linked to discharge. The Pharmacy system, JAC, has been in use for many years and is doing a good job (albeit requiring the latest updates). It doesn't interface with other systems, other than inside Pharmacy to two robotic systems. The wards make contact with Pharmacy on paper. There are laptops with JAC on around the hospital but no online connection back. Data is entered whilst walking around and then uploaded when back at base. The only use from the wards is to see if drugs are in stock. There is no direct labelling. The HHCT team feels there is not a lot to choose between JAC and Ascribe stock control systems but that JAC is better for ePrescribing, although selection of an ePrescribing system is recognised to most likely need an open procurement exercise.

Diagnostic Imaging

Radiology, as in PSHFT, use HSS CRISS which is felt to be a good system. They have used it here since 2012. The Fuji PACS is about 8 years old, but the Trust has had FUJI for 16-17 years overall. Prior to merger, both sites have identified the need to go to tender for a new system. The contract for the existing PACS runs to the end of 2017, by which time a new contract will need to be in place.

Pathology

The Pathology department in HHCT is now part of The Pathology Partnership (TPP). They have Clinisys Winpath (supplied by TPP) and are moving towards introducing WinPath Enterprise. It has gone live in Suffolk and soon to go live in Colchester. The plan for HHCT is move to WinPath Enterprise about June/July next year. There are concerns with Cambridge University Hospitals (CUH) potentially pulling out of TPP, especially as the rationalisation in the Partnership has seen some tests now only performed at CUH.

Critical Care

Critical Care in the Trust runs with the Philips ICCA (IntelliSpace Critical Care and Anaesthesia) which is just over a year old. There was a broad involvement of departments in choosing the system and good support for it. ICCA is very configurable. It took them about 8 months to fully set up and is now working well.

Views from Suppliers

Meetings were held with the two suppliers of the core clinical systems, EMIS for HHCT and System C the preferred PAS+ supplier selected for PSHFT.

System C

System C are comfortable with the concept of rolling the Medway PAS out to HHCT as part of the overall programme. They have provided examples of where they have achieved this previously, such as the creation of University Hospitals of North Midlands NHS Trust from Stoke and Mid Staffs. There are quite a few similarities in the systems challenges with the requirements here.

Another good example is with Nottingham University Hospitals Trust (NUH) which is a very large multi-site Trust using Medway. NUH is now merging with Sherwood Forest Hospitals NHS Foundation Trust and will be rolling Medway out across the new site.

System C understand the requirements to integrate eTrack over the Medway PAS but have yet to formally agree all the relevant APIs that will make this happen. They are aware that the contract will not be signed until these issues are addressed, as they are fundamental to the viability of the PAS programme.

Medway integrates with a wide range of other clinical and departmental systems (including ICE, Kainos and Symphony).

Medway has been deployed 21 times in the last 5 years.

EMIS

The CaMIS PAS at HHCT was originally supplied by Ascribe, who were subsequently taken over by EMIS. This is part of EMIS's move to extend from primary and community systems into secondary care.

The EMIS team were clear that they did not have any issues with providing or developing APIs to handle eTrack sitting on top of the PAS. They have a full set of ITK HL7 bi-directional interfaces.

They have several sites running eCaMIs including Southampton, Doncaster and Mid Yorkshire. They have worked in Bournemouth and Poole to put a Graphnet portal on top of CaMIS. They have also integrated with ICE as an order communications layer on their PAS elsewhere, and have a link to a Kainos system in Poole.

Conclusions from Stakeholder Discussions

There is a clear understanding of the implications on systems of the two Trusts merging. As the discussions progress regarding the sharing of clinical resource and the rationalisation of some services, it is evident that the clinical systems that underpin this must be rationalised also.

There was much stronger clinical support for the systems in PSHFT than in HHCT, but this is largely due to the presence of eTrack. Both Trusts have several older systems that will not easily support emerging models of care and will not be able to take the merged organisation forward.

However, the fundamental agreement is that there must only be one core Patient Master Index (PMI) and PAS across the merged organisation. This position must also be reached as quickly as possible.

Risks

As a result of the stakeholder interviews and subsequent analysis, it has been possible to summarise the risks facing the merged organisation in relation to the use of their clinical systems.

The Risk Framework is included at Appendix 3.

Actions recommended as an output of this assessment are based on their positive impact in mitigating the risks inherent in the current mix and configuration of the clinical systems in light of the proposed merger. This section sets out the observed risks pertinent to the assignment in the following categories:

- Clinical Risks (those which impact on patient safety or the patient experience)
- Strategic Risks (those which impact on the safe delivery of strategic intent. In this case, the delivery of the merger)
- Financial Risks (those that may impact assumed budgets and plans)
- Operational Risks (those which impact the smooth operation of normal processes)
- IM&T Risks (those which impact the delivery of IM&T services or projects)
- Reputational Risk (those that impact on the way that the Trust is perceived by its stakeholders)

Clinical Risks

Those risks which impact on patient safety or the patient experience

Descriptor	Likelihood	Impact	Risk Score
The current high number of 'stand-alone' systems across the two Trusts, results in no single view of the patient record; data fragmentation across the merged organisation; an enhanced integration difficulty and a higher business continuity risk. (Also Strategic Risk) Solution is to implement integrated systems from a smaller number of (trusted) suppliers	5:Almost certain	3:Moderate	15: High Risk
Lack of an electronic order communications system for pathology tests at Hinchingbrooke, represents a significant clinical risk. This is due to inherent delays with the (largely) manual system, together with lack of clinical notification when results are posted to the patient's record. Solution is to implement ICE order communications in line with system already in place at Peterborough.	5:Almost certain	3:Moderate	15:High Risk
Hinchingbrooke – Maternity system (HICCS) is massively unpopular amongst clinicians due to poor information and inflexibility of use. Risk of clinical mistakes based on poor information.	3:Possible	3:Moderate	9:Moderate Risk

Potential solution is to extend Peterborough system (K2) and to appoint a Maternity IT super user to support implementation and training at Hinchingbrooke			

Strategic Risks

Those which impact on the safe delivery of strategic intent. In this case, the delivery of the merger.

Descriptor	Likelihood	Impact	Risk Score
The current high number of 'stand-alone' systems across the two Trusts, results in no single view of the patient record; data fragmentation across the merged organisation; an enhanced integration difficulty and a higher business continuity risk. (Also Clinical Risk) Potential solution is to implement integrated systems from a smaller number of (trusted) suppliers.	5:Almost Certain	3:Moderate	15:High Risk
Under estimation of the change budget required to merge clinical and IT systems over the five-year transition. Current estimates largely driven by system costs and omit business and operational transformation costs. High level of clinical time and disruption should be planned for.	3:Possible	3:Moderate	9:Moderate Risk

Financial Risks

Those that may impact assumed budgets and plans.

Descriptor	Likelihood	Impact	Risk Score
Insufficient funding to achieve the merged systems approach. Current estimates largely driven by system related costs and omit business and operational transformation costs. High level of clinical time and disruption should be planned for.	3:Possible	3:Moderate	9:Moderate Risk

Operational Risks

Those which impact the smooth operation of normal processes.

Descriptor	Likelihood	Impact	Risk Score
Hinchingbrooke RTT calculations are not robust – requires intervention from the information team. (Also Reputational Risk) Potential solution – Replace with eTrack following Medway extension	4:Likely	3:Moderate	12:High Risk
eCAMIS Theatres module does not enable overview screens to compare theatre slots with actual activity. Risk of theatre under-utilisation. Investigate replace with Theatreman (Peterborough) or System C Medway module.	3:Possible	2:Minor	6:Low Risk
Hinchingbrooke over-reliance on paper records, with ensuing lack of availability; occasional misfiling and legibility issues. Potential solution – Roll out Kainos EDM system	3:Possible	2:Minor	6:Low Risk

IM&T Risks

Those which impact the delivery of IM&T services or projects.

Descriptor	Likelihood	Impact	Risk Score
Differential data standards will constrain provision and quality of management information. Potential solution is to review data standards as part of a revised data management policy covering the merged Trust	4:Likely	3:Moderate	12:High Risk
Multiple simultaneous system change projects may overwhelm the IM&T function. Loss of progress and/or direction Potential Solution – Careful Programme Management. Chief Clinical Information Officer to ensure clinical alignment of prioritisation.	4:Likely	3:Moderate	12:High Risk
Two separate IT Strategies are in place for the Trusts. There is a risk that Government policy for achieving a paper-less Trust will not be achieved and that continued development work will not be in the interests of the	3:Possible	2:Low	6:Low Risk

merged Trust. Potential solution – Implement a revised IT strategy covering the merged organisation to ensure achievement of paperless by 2020			

Reputational Risk

Those that impact on the way that the Trust is perceived by its stakeholders.

Descriptor	Likelihood	Impact	Risk Score
Hinchingbrooke RTT calculations in eCAMIS are not robust – requires intervention from the information team. RTT performance will be a focus for media organisations. (Also Operational Risk) Potential solution – Replace with eTrack following Medway extension	4:Likely	3:Moderate	12:High Risk

The Transition Programme

The Transition Programme will address the risks identified above by putting in place a series of projects to rationalise the clinical systems estate across the existing two organisations.

Critical Success Factors

To be successful the Transition Programme must, in addition to merging individual clinical systems:

- Achieve a single cross-site system on which the master patient index resides.
- Ensure all major areas of clinical activity have similar access to information systems, irrespective of hospital site location across the merged Trust.
- Ensure patient data will be entered once and used across all relevant systems in the merged Trust. This approach will be extended, as closer integration is achieved (e.g. with community or social care organisations).
- Maintain options for IT systems to support multi-disciplinary team working across the merged Trust, and local health economy.
- Reduce the number of clinical systems/applications in the merged Trust and hence simplify the integration complexity and management support overhead.
- Achieve a common IT governance approach including a single: IT Steering Group; security model; unified set of data management standards (including data audit).
- Designate a Chief Clinical Information Officer (CCIO) post to be filled jointly, by an existing, practicing clinician from each Trust. Working in partnership, these clinicians will work to a single set of objectives and provide clinical perspectives and leadership advice to the senior IT Team.
- Ensure future IT investment requests should be assessed as part of the common IT Governance approach and should be judged with reference to the critical success factors (CSFs).
- Provide a single-sign-on to IT systems and services across the merged Trust.
- Unify the current IM&CT departments to achieve a single set of development priorities and a single approach to programme leadership. This will lead to efficient planning and systems deployment, whilst maintaining the strategic direction of the merged Trust.
- Develop a merged IM&T strategy for the merged Trust.

Quick Wins

The programme to plan and implement the new PAS will be lengthy. The estimate is approximately 12 months for PSHFT and a further three or six months to roll out into HHCT. This is from the start of the programme which, of course, requires the contract to be signed.

It is recognised that there are urgent requirements for improvements in clinical systems and any manner in which part(s) of the future solution could be implemented quickly without impacting on the PAS programme would be of real value.

The key systems identified for early implementation to provide visible quick wins for clinicians and for the efficiency of the patient experience and pathway are as follows.

Order Communications for HHCT

The complete lack of order communications in HHCT is having a very significant impact on the efficiency of the clinical process.

The ICE system in PSHFT is doing an acceptable job and is still widely used in the NHS. It will be worth reviewing use of this solution at some time in the future, but not before the PAS has been rolled out and bedded in.

Thus it is recommended that a project is set up to implement ICE in HHCT as quickly as possible, and to interface it to CaMIS [redacted].

Maternity at HHCT

The HICCS Maternity system at HHCT is not supporting the operation of the department and is taking unnecessary resources and introducing unnecessary risk in the clinical process.

The K2 system in use at PSHFT is well liked and is providing the department with the support they need. There is also a good relationship between the staff in PSFT and the supplier so that local requests for development are treated favourably.

It is recommended that the K2 Maternity system is taken in HHCT as quickly as possible, and to interface it to CaMIS [redacted]

It is important to note, though, that this project will need to ensure that comprehensive training takes place as well as the selection of a small number of 'super users' to maximize the effectiveness of the solution.

Other potential quick wins

There are other systems that will be part of the overall strategic solution that could be procured and implemented in parallel to the PAS programme as long as there is available resource and the business cases can be constructed. They key one noted at this stage of the review is Nervecentre nursing observations in HHCT.

It is clear that ePrescribing across both Trusts' sites, together with an integrated Pharmacy stock control system would be of great benefit. It would be technically feasible to run a procurement and implement this alongside the PAS programme in order to try to gain the benefits more quickly but, in reality, this would be highly complex and potentially introduce additional risks. With neither Trust currently having ePrescribing this project is not directly linked to the merger. With these various considerations in mind, this is not being proposed to take forward as a quick win.

eTrack

It is clearly recognised that eTrack is a vital part of the future solution set. However, it requires more robust governance, testing and a separate development and testing environment to make it a safe investment.

It is important to note at this point that there are very few commercial solutions that would come close to the functionality of eTrack. Those that might are, for the most part, embedded in large full-blown and very expensive EPR systems. So whilst there is a significant cost in stabilising the eTrack environment, it is a small percentage of the cost of procuring this functionality elsewhere.

The current reliance on one individual is far too great a risk to take forward. Whilst a team of four eTrack analysts and programmers is now in place, their developing skills are still a long way from being able to support and develop the product in the way that Alec Dearden does.

Thus the key recommendations are that the following be put in place around eTrack:

- A team structure that provides some more immediate succession planning
- A formalised governance structure, including mechanisms for setting development priorities going forward, for software development and for the release process
- A compliant testing environment to allow safe transfer into live
- A stronger training programme to make sure users understand how to get the most out of the system.
- An accompanying communications programme to inform users of the plans, keep them updated on progress, and reset expectations for the way in which eTrack will deliver its services in the future.

As a final point, there still exists the possibility that eTrack could be managed through a joint venture with a private sector supplier. This has pros and cons but can be investigated further if the Executive teams have any appetite for this.

PAS Merger Options

At this stage of the review the options for clinical systems in the merged organisation have focused on the core PAS and integrated systems. Operationally, eTrack cannot simply be removed, and is so tightly integrated with the PAS, that our PAS options assume its presence in each case.

The options that were reviewed are:

1. Extend the selected System C Medway system to HHCT together with eTrack
2. Extend the current EMIS eCaMIS implementation in HHCT across to PSHFT and layer eTrack across both sites
3. Go out to a fresh re-procurement for the merged organisation.

Option 3 was discounted because it would take too long and would leave both Trusts very exposed with their current core systems' capabilities to support the merged organisation and its intentions to increase the flexibility of clinical care.

[redacted]

[redacted]

Options for other Clinical Information Systems

These will be looked at fully in the third report that is part of the planned output from this work. As part of this review a vitally important sequencing of systems will be drawn up.

However, there are some initial pointers that are being further investigated. These interim recommendations include:

- **ED –** [redacted]
    - patient flow benefits
        - On A&E disposal, able to book follow-on outpatients, potentially reducing DNA's
        - A&E disposal into a bed, is seamless, removing duplicate data entry requirement and time delay
    - A&E integration with inpatients module provides real-time bed requests to the bed management team, promoting efficient admissions
    - quick registration for ambulance handover
    - reportable views of non-returned equipment given to patients through treatment
    - quick clinician identification functionality (fob instant log-in)
    - Clinical Noting - All the clinical text against the patient is fully auditable (non-deletable) and viewable from PAS if necessary
    - Alerts for child protection - reportable also
    - Fully compliant majax - supports multiple major incidents
    - Real-time dashboards

- **RTT –** there is no IT-based RTT system actively used by clinicians in HHCT. In PSHFT this is currently run in eTrack. [redacted]
- **Theatres –** [redacted]
- **Nursing observations –** it is recommended to consider deploying Nervecentre into HHCT, which could be implemented before the PAS is rolled out
- **Electronic Document Management –** the Kainos Evolve system is beginning to deliver against the desired functionality. Further time and effort will see this become increasingly

supportive of the clinical processes. It is recommended that this be rolled out across the HHCT site as well.

- **Maternity –** it is recommended that K2 is implemented in HHCT as quickly as possible to provide genuine benefits as a 'quick win'
- **Radiology and Imaging**. It is recommended that both Trusts retain HSS CRISS but jointly look to procure a new PACS system. This is not seen as being on the critical path of the PAS replacement
- **Pharmacy –** the need for ePrescribing is well recognised. It is recommended that consideration is given to the procurement options of rolling out JAC to both sites and taking the JAC ePrescribing system to integrate with the Pharmacy stock control. If the ePrescribing system have to be procured through an open tender process, then the Pharmacy system will need to be selected at the same time as part of one process.
- **Pathology -** The Pathology operation must first decide on its operational future. If, as is felt sensible, PSHFT decides to work with The Pathology Partnership then the new systems would be implemented as part of this.
- **Information Management Systems –** The Trust should move to a merged infrastructure to ensure the consistent and efficient production of commissioning data sets, returns, KPIs, etc.

Key Performance Indicators

The Trust will know that the Transition Programme has been successful if the following Key Performance Indicators have been met.

- Clinicians can access patient histories irrespective of the patient's or clinician's location within the merged Trust.
- Clinicians will experience the same 'look and feel' of IT across the merged Trust.
- Clinicians and admin staff will have access to the same patient demographics without the need to re-key/duplicate information.
- There should be a saving in clinical time spent logging on to the merged Trust IT.
- A single vision and management for IM&CT is in place across the merged Trust.
- Improved clinical input to, and credibility and relevance of, IT to the merged Trust.
- Clinical systems readily support development of new models of care across the Trust and with care partners.
- Achieve smooth electronic handover and digital recording of clinical observations at ward – level across the merged Trust
- Efficient and timely electronic ordering and reporting of pathology tests, with results notified to the clinician on receipt.
- Improve maternity systems provision and standardise system across the merged Trust
- All patient discharge letters between hospital and GP's will be sent electronically
- Electronic medicines management across the Trust allows for ordering, prescribing, dispensing and administration regardless of site.
- Medical records, including correspondence, can be accessed electronically regardless of location.

Outline Costs

[redacted]

PAS/PMI/ED Replacement and Merger

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

eTrack

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]	[redacted]

Quick Wins

[redacted]

[redacted]	[redacted]	[redacted]	[redacted]
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Other Clinical Systems

[redacted]

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Transition Programme

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Conclusions

This report was intended to detail the findings to date, and act as an early indicator as to the direction of the recommendations and costs to be developed in the subsequent reports. The following recommendations and conclusions will be taken forward to the subsequent reports for further validation and refinement.

Recommendations for PAS

[redacted]

Recommendations for Other Systems

Quick Wins

[redacted]

eTrack

[redacted]

Clinical Direction for a Five-Year Programme

The outline Change Roadmap indicates that the integration of clinical systems across the merged organisation will be a programme extending across a minimum of five years. This programme of work will need careful management to ensure momentum is maintained and benefits driven out.

It is recommended that a Chief Clinical Information Officer (CCIO) role is established to ensure the clinical input to the direction of the programme and assure the clinical outcomes of the programme. The Trust may wish to consider fulfilling this role via shared appointments covering each site.

The Change Budget

The review has not considered the costs of infrastructure required to support the clinical systems; nor the cost of redesigning and integrating clinical processes.

The review has identified the following outline costs associated with rationalising clinical systems which will be further validated in the subsequent reports:

- [redacted]

However, it is assumed that the £342K revenue costs will be offset over time by the cessation of system licences as systems are rationalised. This will be further tested in the subsequent reports.

Appendix 1 - Interviewees

Libretti Health wish to extend their thanks for the time offered by a significant number of contributor whose considered views and input forms the basis for our analysis and recommendations.

The table below lists all the interviewees in the Stakeholder Consultation up to 31st August 2016.

PSHFT	HHCT
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PSHFT	HHCT
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Appendix 2 – Current Systems

Below are listed the current clinical applications in each Trust

System	PSHFT	HHCT
EPR	eTrack	eCamis (EMIS)
PAS	iSoft Clinicom	CAMIS / eCAMIS
ED	eTrack/iSoft Clinicom	Symphony (EMIS)
RTT	eTrack	eCamis (EMIS)
Bed Management	eTrack	eCamis (EMIS) - bits of it
Therapies	eTrack	None
EDM	Kainos Evolve	Casenotes (EMIS)
Notes Tracking	eTrack / Locator	eCamis - eCRT
Maternity	K2MS	HICCS (EMIS)
Outpatient Letters	ePro / Winscribe	eCamis
Order Comms	Sunquest/Anglia ICE	None
Discharge Letters	Sunquest/Anglia ICE	eDischarge & Sharepoint
ePrescribing	None	None
Pharmacy	Ascribe	JAC
Doctors Handover	eTrack / Nervecenter	Sharepoint (EMIS - in development)
Nursing Observations	Nervecenter	Infohub - In house system
Ophthalmology	Medisoft	Medisoft
Cardiology	Philips CVIS TomCat	Philips ICE
ICU	Ward Watcher	Philips ICE/Ward Watcher
Reporting	CXAIR/SQL/SSRS	SQL/SSRS/excel/access/in house web developments
Endoscopy	Olympus Endobase	HICCS (EMIS)
Diagnostic Imaging	HSS CRIS	HSS CRIS
PACS	Agfa IMPAX	FUJI
Dental	Planmeca Dimaxis	
Pathology	iSoft Telepath	TPP - systems. Winpath for internal pathology
Clinical Coding	iSoft Clinicom / 3M Medicode	3M Medicode
Radiotherapy	ARIA	
Theatres	Trisoft Theatreman	eCamis (EMIS)
Audiology	Auditbase	Auditbase
Integration Engine (TIE)	Intersystems (Ensemble)	Orion (Rhapsody)
Oncology	ARIA	Chemocare

Appendix 3 - Risk Framework

Actions recommended as an output of this assessment are based on their positive impact in mitigating the risks inherent in the current mix and configuration of the clinical systems in light of the proposed merger. This section sets out the observed risks pertinent to the assignment in the following categories:

- Clinical Risks (those which impact on patient safety or the patient experience)
- Strategic Risks (those which impact on the safe delivery of strategic intent. In this case, the delivery of the merger)
- Financial Risks (those that may impact assumed budgets and plans)
- Operational Risks (those which impact the smooth operation of normal processes)
- IM&T Risks (those which impact the delivery of IM&T services or projects)
- Reputational Risk (those that impact on the way that the Trust is perceived by its stakeholders)

The risks are assessed as they exist before mitigating action. As such, they represent the risks associated with inaction or significant delay to implementation.

Residual Risk

Following the implementation of the actions recommended, there will remain a level of residual risk. The risk assessment is, therefore, repeated to demonstrate the reduction in risks.

Risk Grading

Step 1 – Likelihood

The likelihood of the event within the Trust is selected from the table below. Although this is subjective, knowledge and expertise from others will be sought if appropriate.

Measures of Likelihood/Probability

LEVEL	DESCRIPTOR	DESCRIPTION
1	Rare	The event may only happen in exceptional circumstances.
2	Unlikely	The event could occur (recur) at some time.
3	Possible	The event may well occur (recur) at some time.
4	Likely	The event is expected to occur (recur) in most circumstances.
5	Almost Certain	The event will occur (recur) in most circumstances.

Step 2 – Impact

The most likely impact of the incident should then be selected from the table. If there is any doubt, the grade should be graded up, not down and advice should be taken.

If there is any doubt, the grade should be graded up and not down. The risk grading is then determined using the matrix below:

Measures of Impact

LEVEL	DESCRIPTOR	DESCRIPTION
1	None	None or very minor injury
		Minimal or no service disruption
		No financial loss
		No impact but current systems could be improved
2	Minor	Minor injury or illness, requiring first aid or medical treatment e.g. Cuts, bruises etc
		Some delay in provision of services
		Minor financial loss (£0 - £10,000)
		Slight possibility of complaint or litigation
3	Moderate	Moderate injury or illness, requiring first aid or medical treatment e.g. fractures
		Some delay in provision of services
		Moderate financial loss (£10,000 - £50,000)
		Likely complaint or litigation
		Could result in legal action or prosecution
		Local external attention e.g. media, HSE
4	Major	Permanent injury or disability
		Major financial loss (£50,000 - £250,000)
		Major service disruption or closure
		Certain chance of litigation or prosecution
		Likely to result in legal action or prosecution

		National external attention e.g. media, HCC, NHSLA
5	Catastrophic	Fatality (ies)
		Significant financial loss (> £250,000)
		Extended service disruption / closure
		High value litigation
		Certain chance of litigation or prosecution
		Extensive external attention e.g. media, CHI, NHSLA
		Significant impact on achievement of Trusts performance targets

Step 3 – Risk Score

The risks are then stratified according to the impact and likelihood of the risk to give a risk grading:

Likelihood	1: None	2: Minor	3: Moderate	4: Major	5: Catastrophic
5:Almost certain	5	10	15	20	25
4:Likely	4	8	12	16	20
3Possible	3	6	9	12	15
2:Unlikely	2	4	6	8	10
1: Rare	1	2	3	4	5

Risk Score	Risk Score Description
1 to 3	Very low risk (Action only if inexpensive / easy to implement -managed by routine procedures)
4 to 7	Low risk (Action that is cost effective in reducing risk and planned within a reasonable timescale -managed by Department Manager)
8 to 11	Moderate risk
12 to 25	High risk (Immediate action to remove / reduce risk/ - managed by Department Manager/Executive Director)

Peterborough and Stamford Hospitals NHS
NHS Foundation Trust

PSHFT/HHCT Full Business Case – Background Paper

Presented for:	Approval
Presented by:	Stephen Graves, Chief Executive
Strategic objective:	All Strategic Objectives
Date:	19 September 2016
Regulatory relevance:	Monitor: Enforcement Notice Monitor Licence: General Conditions (G6)
NHS Constitution delivery	Staff: All requirements Patients and Public: All requirements
Equality and Diversity	This report covers services and individuals equally and there are no specific equality and diversity issues for consideration
Freedom of Information Release	This report should be released under the Freedom of Information Act 2000 without consideration of redaction

Purpose

In May 2016, I produced a cover paper setting out the recent history of the Trust. The aim was to provide an update on work across the local health and care economy, to set out the next steps for the joint work with Hinchingbrooke Health Care Trust (HHCT), and finally to explain why I proposed that the Board approve the recommendation as set out in the Outline Business Case (OBC).

This paper provides continuity by recapping the background, gives a brief update on the local health economy work, and sets out the key developments since the OBC.

1. Introduction

Peterborough and Stamford Hospitals NHS Foundation Trust (PSHFT) was declared clinically and operationally sustainable but not financially sustainable by Monitor in 2013. This followed a Contingency Planning Team report they commissioned which looked at the causes of the financial deficit at the Trust following the move to the new Peterborough City Hospital in 2010.

There have been notable changes at Board level since 2010. The new Board has focused on stabilising and then starting to reduce the deficit. This has been achieved whilst the financial position across the NHS has deteriorated but a large deficit remains. The Board has put in place robust governance structures and processes to oversee and support the delivery of above average efficiency gains whilst delivering patient care improvements. The Board remains fully committed to the ongoing delivery of our cost improvement plans

whilst focused on ensuring we provide high quality services for our patients, delivered by excellent staff. The 2014/15 CQC reports, which rated both hospitals (Peterborough City Hospital and Stamford Hospital) as 'good' were testament to everyone's hard work. However, there are services that still need to be strengthened to ensure their sustainability into the future.

2. Background

In 2004, Peterborough and Stamford Hospitals NHS Foundation Trust was one of the first wave of Foundation Trusts and, from this time through to 2008, operated with a financial surplus. After many years spanning back to 1993, the business case for a new hospital on the Edith Cavell site led to the amalgamation of services onto the old 'city centre' site with those at the Edith Cavell site, which was approved by the Government.

In 2010, the new PFI-funded hospital opened and the Trust reported a £45m deficit for 2010/11. This serious financial problem led to a number of actions at a national level. These included:-

- A National Audit Office (NAO) report in November 2012
- A review by the Committee of Public Accounts Department in 2012/13
- A Contingency Planning Team (appointed by Monitor) report in 2013

The NAO set out three key reasons for the serious financial problems:-

- Under delivery of cost efficiencies
- A large increase in costs resulting from the new building
- Underfunded healthcare activity

The Public Accounts Committee, which looked at Peterborough and Stamford Hospitals NHS Foundation Trust as well as Hinchingbrooke Healthcare Trust, made a number of comments and recommendations. A key comment was the following:-

"Neither hospital is financially sustainable in its current form and both will have to make unprecedented levels of savings to become viable. Events at both Trusts reflect poor financial management and the failure of the SHA to exercise strategic control over local healthcare provision and capacity planning. The poor oversight demonstrates that the Department has not established a robust system of healthcare planning. All bodies demonstrated an abject failure to accept responsibility for these decisions and their impact on the local health economy. But the local community will have to live with the consequences of these decisions for many years to come, as will the NHS and the taxpayer who will have to foot the bill."

The Contingency Planning Team report produced the following recommendations:-

1) Tackle the inefficiency of the Trust
2) Rapidly progress joined up working across the local health economy
3) Make better use of the underutilised estate
4) Seek support from the Department of Health (DH) or other national stakeholders to bridge any residual deficit

Following the CPT report, a further key decision by Monitor, backed by a statutory 'Enforcement Order', was that the Trust itself should run a procurement process to be

acquired by another NHS provider or franchised by another organisation. This was known as 'Project Orange' and in 2013, the preparation work started. After the designation of Cambridgeshire and Peterborough as a 'Challenged Healthcare System', and the agreement of all organisations to work together, Project Orange was paused.

In July 2015, Monitor closed the Project Orange enforcement in part due to the ongoing work across the local health system and the fact that the Trust had continued to deliver against its financial targets, underpinned by efficiency gains that were regularly twice those achieved across the NHS. As a result, it gave the Trust the responsibility and requirement to develop its own 5-year Strategic Sustainability Plan. Beyond the ongoing improvements in efficiency that all providers need to deliver, the plan emphasised the need for ongoing and deeper clinical collaboration between partners across health and social care; to sustain and improve the efficiency of clinical services, and that there were some notable financial savings across the back office.

As a result, we entered in to a formal agreement in December 2015 to work with Hinchingbrooke Health Care NHS Trust (HHCT) to determine any potential financial and clinical sustainability benefits from closer collaboration including a merger.

3. Quality and Clinical Sustainability

In March 2014, the Trust was visited by the CQC. Six of the eight clinical streams at Peterborough City Hospital were rated 'good' and Stamford was rated 'good' throughout. However, a rating of 'requires improvement' was given to the Trusts. The Trust responded to this proactively by setting up a CEO led group to take forward CQC recommendations. The CEO was supported by the Chief Nurse, Medical Director, lead NEDs, and clinicians across the hospital.

This approach engendered excellent staff engagement and leadership and was key to the hospital achieving a 'good' rating overall following a further visit in May 2015.

The CQC rating of 'good' supports Monitor's finding that the Trust is operationally and clinically sustainable. Like all healthcare organisations, there continues to be an ongoing need to improve the quality of care that we provide to our patients, and to be open and honest about where we have frailty in our services either now or in the future. We can then honestly evaluate how we can meet those current or future challenges in order to deliver the best clinical services we can in the most cost effective way.

4. Collaboration

Since the OBC, further detailed work has taken place focused on in-depth discussion regarding six specialties:-

- Clinical haematology
- Emergency and urgent care
- Diagnostic imaging
- Stroke
- Cardiology
- Radiology

The project teams have met with all other services provided by both Trusts. This has enabled a good understanding of the current position and an outline plan leading up to and

after the potential merger. This work has also identified a number of services that have been, or will be, closed to new referrals over the last six months due to another provider withdrawing or the actual (or pending) retirement of a single-handed consultant. This further emphasises the benefit of being in a larger team where such an event would have a greater chance of being mitigated, and hence meaning patients would not need to travel.

Whilst clinical services have been the key focus, all non-clinical services, have been reviewed, in a process led by the Executive Directors jointly and supported by their senior teams and the project team. This was essential as it gives a future organisation the best chance of success through building upon a clear and agreed plan, which sets out known opportunities and issues supported by a much greater understanding of each individual organisation's plans and their organisational culture.

5. The Cambridgeshire and Peterborough Sustainability and Transformation Plan

In the OBC, the latest planning position across the local area was set out. Since then, there has been a further update in the form of 'Fit for the Future: Working Together to Keep People Well'. The document again sets out the current financial challenge of £150m (out of a budget of £1.7bn) and potential deficit of £250m in five years, if nothing changes. It then outlines how services will change following discussions with patients, carers and partners and staff. In particular, four key areas for change have been identified into a 10-point plan to deliver these priorities.

Fit for the Future Programme		
At home is best	1.	People powered health and wellbeing
	2.	Neighbourhood care hubs
Safe and effective hospital care, when needed	3.	Responsive, urgent and expert emergency care
	4.	Systematic and standardised care
	5.	Continued world-famous research and services
We are only sustainable together	6.	Partnership working
Supported delivery	7.	Culture of learning as a system
	8.	Workforce: growing our own
	9.	Using our land and buildings better
	10.	Using technology to modernise health

If all these changes are made, there will be a notable improvement in both the services we provide and the financial position. A key decision of the Sustainability and Transformation Plan (STP) that affects both Peterborough and Stamford Hospital NHS Foundation Trust (PSHFT) and Hinchingbrooke Healthcare NHS Trust (HHCT) was the future of emergency care, consultant-led obstetric care and paediatric services. Following an in-depth clinician-led review of national guidance, evidence, and local needs; it was agreed that these services should continue at all three acute hospital sites across the STP area. This position is defined in the STP, which has been endorsed by the PSHFT Board.

6. Next Steps

The Full Business Case (FBC) sets out a compelling clinical and financial case which benefits patients, the public, staff and the taxpayer.

If both Boards approve the FBC at the September 2016 meetings, a further period of public and staff engagement will continue. The clinical case will be reviewed by the East of England Clinical Senate. Any comments from the public, staff, and the Clinical Senate will be considered at the November Board meetings of both Trusts. Subject to these

comments, the Board will ratify its September approval. The future organisation will start on 1 April 2017.

An important message from public meetings held to date has been in ensuring membership from across the whole geography and that the Governors should reflect the different population centres of South Lincolnshire, Huntingdonshire and Peterborough. The emerging plans to ensure this is embedded in the future governance of the future organisation are featured in the FBC.

7. Conclusion

The FBC demonstrates in more detail, and greater breadth, the clinical and financial benefits of the merger for patients, staff and taxpayers. Indeed, it also shows that it is untenable for the organisations to continue as they are at present.

I therefore recommend that the Board of Directors approves the resolution as set out in section 1.9 of the Full Business Case:

The Boards are asked to approve the FBC for merger implementation on 1 April 2017. Approval is subject to the consideration of:

- The output of the further staff and public engagement in October and early November 2016
- The output of the independent Clinical Senates review of the proposed way forward for the integration of clinical services (as set out in the Clinical Senate Terms of reference (Appendix 8)
- At their November 2016 Board meetings, both Boards expect to ratify the decision to merge having reviewed the above additional inputs.
- Following the September Board decision, the FBC will be submitted to NHS Improvement.

Stephen Graves
Chief Executive
19 September 2016

Trust Board
29 September 2016

Collaborative working with Peterborough and Stamford Hospitals NHS Foundation Trust – consideration of the Full Business Case (FBC)

1. Purpose

The purpose of this paper is to update the Board on the progress with the collaborative working discussions with Peterborough and Stamford Hospitals NHS Trust (PSHFT) since the approval of the Outline Business Case in May 2016. It supports the Full Business Case (attached) that we have developed jointly, which outlines the clinical and financial benefits of the two organisations merging (technically an acquisition of Hinchingbrooke by PSHFT). It also proposes a resolution for consideration by the Board.

2. Sustainability of the hospital

As we have discussed a number of times as a Board, and as I outlined in my paper to the Board in May 2016, Hinchingbrooke Health Care NHS Trust (HHCT) is not sustainable in its current form, clinically or financially.

HHCT has a strong history of commitment to safe and accessible services for the population of Huntingdonshire. We provide good quality services, with low mortality rates, low infection rates and good patient experiences. We have also just been rated as 'good' by the CQC, with a 'good' rating in all 5 domains and in 6 of the 7 specialty lines, a fantastic achievement by all staff members given that we were rated as 'inadequate' just 19 months prior to the most recent CQC inspection. We also have significant and passionate community support from the local population.

As a Board our primary focus, which we are passionate about and committed to, is providing high quality care to our patients, with core acute services being available on the Hinchingbrooke site. However, HHCT is one of the smallest stand-alone acute Trusts in the country, and we face a number of sustainability issues as a result of its size.

2.1 Clinical sustainability

There is evidence that better outcomes are achieved through increased specialisation from clinical staff, focussing on performing fewer activities more frequently. Based on this there is a minimum threshold in the number of patients seen, or a minimum number of specific procedures performed regularly, which the size of the HHCT catchment area precludes in some specialties.

In addition, to develop the relevant skills and ensure the maximum safety of services, clinicians need to increasingly be part of larger teams in addition to working compliant rotas (senior and junior doctors). This is further exacerbated by the requirement to ensure increased provision of services across the whole week (7 days), ensuring consistency of service delivery throughout this period.

We also expect that future National Institute for Clinical Excellence (NICE) guidance will continue to require increased specialisation noting the resulting clinical outcome benefits that this is expected to achieve.

Despite the passion, commitment and hard work of our staff, there are some services that we are currently struggling to provide sustainably for the population of Huntingdonshire. These include clinical haematology, A&E / Emergency Department (ED), respiratory medicine, cardiology, stroke and imaging, primarily due to difficulties in recruiting to senior medical and nursing roles for these services.

HHCT is too small for the continued future provision of high quality sustainable modern healthcare, as currently provided, to the local population of Huntingdonshire. Alternative solutions are required for us to be able to continue to provide a number of services locally on the Hinchingbrooke site.

2.2 Financial sustainability

In addition to the clinical sustainability solutions facing HHCT, we are also facing material financial sustainability issues.

We have one of the largest financial deficits in the country in terms of percentage of turnover and the recent national financial efficiency work led by Lord Carter, identified HHCT as being the 2nd most financially inefficient hospital in the country.

The 4 key driving factors affecting our financial position are:

- HHCT has relatively high overhead and infrastructure costs compared to other acute hospitals because of its size. It is relatively more expensive to service a small hospital compared with a larger hospital, as for example, we need a Trust Board and very similar governance structures to larger hospitals.
- We need a complete back office structure including, for example, Human Resources, Information Technology, Procurement and Finance staff, which when compared to larger hospitals these resources and therefore costs are comparatively higher per bed.
- Due to being small, we have greater exposure to variability in workforce pressures. For example, we have less flexibility to manage sickness, turnover, vacancies etc than larger hospitals do, resulting in greater locum and agency staff usage and the higher associated costs of these staff.
- As outlined in the clinical sustainability section above, as a result of having some relatively less appealing clinical roles due to the size or casemix of activity at HHCT and some of the resultant clinical sustainability concerns, we have a very high level of expensive medical and nursing locum and agency usage in some specialties.

We do however, have a 5-year plan to get back in to financial balance. This is ambitious and requires a significant amount of work to be undertaken and delivered fully. The plan is grouped into 3 areas:

- Improvements in our own efficiency and financial management (£7.5m)
- Implementation of the Health Campus in full (£5m+)
- Merger with / acquisition by PSHFT to reduce back office costs further than we can do alone (£4m)

3. Collaboration with PSHFT

As a Board we are committed to providing high quality care, easily accessible on the Hinchingbrooke site for the local population of Huntingdonshire. As a result of the clinical and financial issues outlined above, we are however unable to sustain all our services as they are.

We need some form of greater collaboration with other acute hospitals and other parts of the NHS so as to be able to fully address our sustainability concerns and maintain local provision where it is safe to do so.

The Outline Business Case (OBC) that I brought to the Board in May indicated there to be clear clinical and financial sustainability benefits for both organisations through merging (acquisition of HHCT by PSHFT). The Board approved the OBC and in doing so, agreed that we would work together with the PSHFT Board to deliver a Full Business Case (FBC) by today.

The Board indicated, at the May 2016 meeting, that an FBC needed to address the following issues, which it has attempted to do:

- Solutions for joint working for each department / specialty and how recruitment and retention would be improved as a result of a merger / acquisition
- More detail on the costs of a merger / acquisition and the expected savings
- Recognition of different organisational cultures and the need to a create a new culture for a new organisation
- Safeguards for representation for staff at Hinchingbrooke and patients in Huntingdonshire through membership and governors of a new organisation
- Service commitments from the acquiring Board with a clear vision for a new organisation's core services
- Clarity on the impact on patients, with patient stories
- Examples of joint working now and how they could be developed for the future

The FBC now requires discussion.

4. Collaboration across the C&P STP

In addition to the sustainability pressures HHCT is facing itself, the Cambridgeshire and Peterborough (C&P) health system is financially unsustainable in its current form. It is estimated that the financial deficit across the NHS providers and commissioners in the C&P system is as much as £250m per year by 2020/21 if we continue to provide services as we are currently. The system incurred a collective deficit of £150m in 2015/16 (out of a budget of £1.7b), one of the highest per person in the country.

In the OBC, the latest planning position across the C&P system was explained. Since then, further work has been undertaken, resulting in the 'Fit for the Future: Working Together to Keep People Well' document released in July 2016 by C&P CCG. It outlines how services will change following discussions with staff, patients, carers and partners and in particular highlights four priorities for change and a 10-point plan to deliver these priorities.

Fit for the Future Programme		
At home is best	1.	People powered health and wellbeing
	2.	Neighbourhood care hubs
Safe and effective hospital care, when needed	3.	Responsive, urgent and expert emergency care
	4.	Systematic and standardised care
	5.	Continued world-famous research and services
We are only sustainable together	6.	Partnership working
Supported delivery	7.	Culture of learning as a system
	8.	Workforce: growing our own
	9.	Using our land and buildings better
	10.	Using technology to modernise health

This forms the basis of the local C&P Sustainability and Transformation Plan (STP).

The most significant part of the STP conversations that directly affect HHCT to date, have been the future of emergency care, consultant-led obstetric care and paediatric services. Following in-depth

clinician-led reviews of national guidance, evidence, and local needs, it was agreed that these services should continue at all three acute hospital sites across C&P. This is clearly articulated in the STP and the 'Fit for the Future' document and supported by the HHCT Board.

Collaborative work continues across the whole C&P system, developing the STP for further submission of plans to NHS England and NHS Improvement at the end of October. Post submission and relevant approval by regulators, public consultation on any service reconfiguration will take place.

5. FBC summary

The Trust's sustainability concerns have been considered in detail by the Board and the Executive team in conjunction with colleagues at PSHFT. We believe that merger with (acquisition by) PSHFT will enable us to provide the quality and scope of services we wish to, locally for the residents of Huntingdonshire on the Hinchingbrooke site.

The FBC has determined that merger / acquisition will not only support the ongoing provision of fragile services locally at Hinchingbrooke, but will improve the care that both organisations provide and will also enable significant financial benefits to be achieved through the integration of back office functions. A merger / acquisition would also offer access to staff to increase training and education opportunities as well as making both organisations more attractive places to work for a number of the difficult to recruit to roles.

Merger / acquisition does not resolve all the clinical and sustainability concerns that we currently face but the FBC shows that it would support the following at HHCT:

- Maintain or improve the sustainability of clinical services at HHCT (and PSHFT)
- Enable the provision of more services / sub-specialty services at HHCT, and the loss of none
- Generate £9m of recurrent revenue savings on an annual basis (across a new organisation)
- Support the recruitment and retention of high quality specialists and reduce the use of agency staff
- Improve the infrastructure underpinning the clinical services (eg: IT solutions including for example, order communications)
- Increase direct local community engagement in the hospital through the Council of Governors representation for Huntingdonshire public governors and Hinchingbrooke staff governors

Since the OBC decision, there has also been a large amount of staff and public engagement in Huntingdonshire, Peterborough and South Lincolnshire with regard to the collaborative work. Myself and my counterpart at PSHFT (Stephen Graves) have meet with >400 members of the public and have also attended all the district, county and city council relevant scrutiny committees to keep the local councillors and public informed of our plans. We have also regularly discussed issues with local MPs.

These meetings have been a fantastic opportunity to update the staff and the public with our plans and to listen to their concerns. There have been many issues raised through these discussions which we have attempted to address in the FBC. The 5 key issues, grouped together are outlined below. Should both Boards approve the resolution in section 7 in their September Board meetings, there are specific questions related to these issues that are planned to be asked in the consultation with the staff and the public through October and early November. Key issues:

- Loss of a local Board at Hinchingbrooke
- Concern about the potential movement of services and patients between sites
- The financial position of a new organisation and any impact from the PSHFT PFI on the future viability of services at any of the sites as a result

- Concerns from the workforce about jobs and process
- Engagement with the public

6. Next Steps

The next steps in relation to the collaboration potential with PSHFT is for both the Boards of HHCT and PSHFT to make a decision on the resolution outlined in section 7, that is whether the FBC, as it is, should be approved in principle.

Should both Boards agree this at their September 2016 Board meetings, the agreed timeline to complete the FBC for review by both Boards for ratification of the decision would be November 2016.

Between the September and November Board meetings there will be a further 6-week period of consultation (this is not a statutory public consultation) with the staff and the public and an opportunity to add to the case, before the final approval by both Boards in November 2016. The outstanding due diligence, including a review of the clinical case by the East of England Clinical Senate, a post-merger implementation plan and progress on the recommendations of the currently received due diligence will also be actioned and addressed.

Should this be completed and our regulator, NHS Improvement, approve it post their detailed review, it would be expected that a transaction to create a new organisation would then happen on 1 April 2017. In legal terms this would be an acquisition of HHCT by PSHFT, however this would only relate to the transaction and transfer of assets and liabilities, with both Boards agreeing the need to maximise the potential for success of any future organisation through the merger of the best of both.

Both Boards have also discussed and agreed the need to maintain safe services locally in Huntingdon, Peterborough and Stamford and the need to ensure that the Governors and Board members of any future organisation would reflect the local populations, both of which are clearly articulated in the FBC and form the basis of all ongoing discussions and developments.

7. Conclusion

Through the development of the FBC we have identified that many of our clinical and financial sustainability concerns can be addressed through merger with / acquisition by PSHFT, ensuring the ongoing provision of high quality care on the Hinchingbrooke site that we would struggle to maintain in isolation.

There remain some outstanding items of information to complete and enhance the FBC, including the output of some of the external due diligence (clinical in particular) and the response to the consultation with the staff and the public.

I therefore recommend that the Trust Board approves the resolution which is set out at the end of the Executive Summary of the Full Business Case (shown below), and reviews the FBC for a final decision at its November Board meeting once the FBC is complete.

Board resolution:

The Boards are asked to approve the FBC for merger implementation on 1 April 2017. Approval is subject to the consideration of:

- The output of the further staff and public engagement in October and early November 2016
- The output of the independent Clinical Senate review of the proposed way forward for the integration of clinical services (as set out in the Clinical Senate terms of reference)

At their November 2016 Board meetings, both Boards expect to ratify the decision to merge having reviewed the above additional inputs.

Following the September Board decisions, the FBC will be submitted to NHS Improvement.

Lance McCarthy, Chief Executive
September 2016

Questions and Answers from Public Meeting at The Fleet, Peterborough.

Held on: 9 August at 6pm

Q: Are you more likely to be moving the staff between sites rather than the patients?
A: Yes. This is how we plan to strengthen clinical services.

Q: Who is doing the work to join the two organisations together?
A: We are doing this in house with external expert support as and when needed. It is important that we undertake this ourselves so that we can control our future rather than a team of external consultants for example, who would leave the organisation once the work is complete. We are seeking external support however, for financial, legal and IT issues, for example. And we need to use external support to provide assurance that the work we are doing is robust and meets requirements.

Q: Are your staff at PCH and Stamford hospital on board with this plan?
A: We have held engagement events with staff and have kept regularly updated at every stage of the process so far. We are addressing any concerns as they arise. There is bound to be concerns and nervousness around any plan that proposes change, but we believe that by regular engagement and dialogue with staff we can provide as much information as possible.

Q: Are the unions on board? Are they supporting staff?
A: We have been briefing our local and regional union representatives regularly and this has been positive so far. Regional reps have supported our engagement events and we will continue to keep them updated at each stage of the process.

Q: Would you work out the proportion of public governor representation for each geographical area according to the size of the population served by each site?
A: This is a consideration we will need to make as part of the membership engagement plan. We want to hear the views of members of the public on this issue to ensure we agree the most appropriate representation for the membership of the larger foundation trust we would become.

Q: Do you have examples of mergers that have been successful and if so, have you taken advice from them?
A: Yes. We have spoken with colleagues at Frimley Park which joined with Heatherwood and Wexham Trust; York Hospital which merged with Scarborough Hospital and the Royal Free Hospital in London which has merged with other local health organisations. All these mergers are well underway and so we have been able to take advice on what they learned from the experience and apply that to our process. As a result, we feel we are doing much more work around the clinical benefits of merging than other organisations that have merged to date. We have also been advised that success depends upon having a dedicated and focused team delivering the change as well as being careful and cautious over the pace of change. We also appreciate that without our staff on board it will be much more difficult to merge successfully and achieve the benefits we have identified.

Q: Will there be changes to hospital services as a result of the merger?
A: As the provider of acute services, our hospital services are determined by our commissioners - made up of local GPs with the clinical commissioning groups that we work with in the local health community. Our commissioners pay for the services we provide - therefore they will have the final say on any possible changes to hospital services delivered

across the three sites. They will publicly consult on any changes they recommend. However, it is worthy of note, that in its Sustainability and Transformation Plan, the Cambridgeshire and Peterborough clinical commissioning group said that it did not anticipate changes to the delivery of existing A&E services or maternity services at Hinchingbrooke or Peterborough.

Q: How can you save money by merging without changing services at any of your hospitals sites?
A: The savings are largely from corporate functions being merged rather than any patient-facing services.

Q: Is there a possibility that the department of health could remove its PFI funding for Peterborough City Hospital's deficit?
A: We have received funding for the past three years and if we can continue to make the cost improvement savings that we have agreed to, there is a chance we can go back to the Department of Health and the Treasury to receive further help on top of that.

Q: How can sharing staff across sites improve recruitment prospects? There could be some staff for whom working in different locations could negatively impact upon their travel costs or childcare arrangements, for example.
A: We know that it is easier to recruit clinicians to larger teams which give them more opportunities to develop their skills. Many of our senior clinicians already move around between Peterborough and Stamford hospitals so this is already in place and working well. It is unlikely that lots of staff of lower grades will be asked to move around.

Q: Will you provide staff with new contracts?
A: Where there are contracts that do not specify moving between sites for job roles for example, we will issue new contracts. However, we will consult with staff formally should this be the case.

Q: What are you doing to minimise the risks of this merger not being successful?
A: We assess the risks and chart the progress to mitigate them at our fortnight meetings of the Transition Programme Board. By talking to the other trusts which have already merged, we can use their insights to guard against risk and learn from things they feel they could have done differently.

Q: Which back office staff will be at risk should the merger go ahead?
A: Executive board members and other managerial roles which are duplicated across both organisations. For example, we anticipate we will only need one head of each corporate department rather than one for each trust.

Q: Can you provide assurance that the planned merger will not diminish any services delivered at Hinchingbrooke hospital?
A: There are no plans to reduce services at either hospital as a result of this merger. What we cannot guarantee is that at some point in the future our commissioners may decide they want to see services delivered differently. However any change to clinical services requires consultation with members of the public.

Questions and Answers from Public Meeting at Stamford Hospital, Stamford.

Held on: 4 August at 10am

Q: If you are a member of Peterborough and Stamford Hospitals NHS Foundation Trust now, will you automatically become a member of the new trust?
A: Yes. All existing members, whether they are public members or staff, would automatically become members of the combined trust at the point it was created.

Q: Why is Hinchingbrooke in difficulty? Is it because Circle left?
A: There is less money in the NHS as a whole and smaller hospitals such as Hinchingbrooke have felt the effects of this sooner than some larger hospitals. This is primarily through the difficulty of recruiting to key posts and instead having to use expensive agency staff. Circle withdrew from running Hinchingbrooke Hospital and handed it back to the NHS as it was unable to realise the profits it had forecast.

Q: If there are issues with the sustainability of clinical services at Hinchingbrooke, won't merging with Peterborough mean the quality of care patients receive at Peterborough and Stamford will be brought down?
A: The two chief executives of each trust are completely in agreement that this merger is not about changing local clinical services nor the quality of care. Therefore we expect that patients will not see any negative impact. We have already seen some benefits of working together – fulfilling staff shortages across both sites is the first notable benefit of this plan. There is no question of one or two hospitals of the three being the poor relation. Together services will be better, safer and local.

Q: Will future plans for Stamford Hospital's redevelopment still go ahead if the merger takes place?
A: We are carrying on with our redevelopment plans for the Stamford Hospital site. We are committed to installing an MRI scanner at Stamford Hospital and we hope that in the near future we will have clear guidance from the department of health regarding funding to start the development of the East end of the site, where outpatient services are delivered. Our delays are due to national issues, not local decisions to stop the redevelopment work.

Q: Is there the chance that once the merger takes place, Stamford and Hinchingbrooke hospitals will close and be swallowed up by Peterborough City Hospital?
A: Nothing in our plans relate to closing any of the hospitals. Given the size of the combined population we would serve by merging, we would need to operate from three bases. None of the savings identified in our Outline Business Case relate to closing sites or moving clinical services from their current site. Service changes are a commissioner responsibility and require legal public consultation.

Q: If you split your membership into three geographical constituencies, would each constituency have equal weight when any decisions are to be made? What happens if one constituency is overruled on a decision by the other two, for example?
A: This is something we need to discuss further as part of our discussions with members of the public. We will explore this is greater detail as in the Full Business Case, taking on board comments from the public at our local engagement events.

Q: For patients, the biggest worry will be having to travel further for their treatment. Can you reassure them that this will not be the case?
A: The business case that we put together describes how we would keep services local. For example, South Lincolnshire is a sizeable population base and we would not expect to change services from their current arrangements. Our plan is to continue to grow services at Stamford Hospital.

Q: Can you assure us that Rutland will have governor representation?
A: This will depend upon whether a Rutland-based individual, who is already a member of the Trust, puts themselves forward to be a governor and is then voted for by our members in the governor election process.

Q: Do you see your plans to merge impacted by the proposals to devolve local councils?
A: We have been gaining the views of local councils as part of our briefings to the local health scrutiny committees and we have had good support so far. Beyond that we do not expect this will impact upon our plan.

Q: What financial benefits will be reaped by merging?
A: Merging will not completely solve Peterborough's deficit issue, but it will make a significant contribution. Immediately after merging we will not see the full benefit, as we anticipate it will cost £12m-13m to merge, but we can achieve savings in year 1. However we can make the £9m savings every year, so after year 2 we will start to see a positive benefit.

Q: Will the merger reduce the need for agency staff?
A: Yes, we believe so. Each organisation has ongoing cost improvement plans to reduce their agency spend. We can make significant savings above current levels by merging as we combine clinical teams across our sites.

Q: Most of the impact will be on staff moving between hospitals - will you have contracts that reflect the need to travel?
A: We have shared our clinical vision with staff, and clinicians have been meeting for some time to talk about how this might work for them. It is worth noting that the engagement we have undertaken with staff is considerably greater than other hospitals that have gone on the same journey as us. Contracts would be amended to include the requirement to work across sites for those staff for whom it will be relevant and for those whose contracts do not already include this aspect. For example, many senior clinicians already work between Peterborough and Stamford hospitals. Working across sites will not affect a large mass of staff, but for those who it does affect we will fully consult with them in any contract change this might bring.

Q: Have you had any discussions with Peterborough city council to help pay off the PFI debt?
A: The cost of breaking the bond with our PFI provider is great and until that changes, paying off our debt is not a value-for-money idea for the taxpayer. Therefore we are not pursuing any idea of working with our local authority to pay off the debt.

Q: Are there likely to be redundancies?
A: We identified the potential loss of up to 70 posts in the Outline Business Case. This would come from executive and non-executive board members and back office/corporate functions. We are talking to the unions about this and we are trying to ensure any redundancies are as few as possible. We are currently not recruiting permanently to roles that become available while the merger work is under way so that we can minimise he number of redundancies, where possible.

Q: How much money is factored in to make highly paid staff, such as board members, redundant?
A: The cost of redundancies is part of the £12m-13m we have identified as the cost of merging in years 1 and 2.

Q: Is the problem with the fire safety infrastructure at Peterborough Hospital sorted? Who is paying for the remedial works?
A: The remedial works to strengthen the fire safety infrastructure are well under way. However due to the scale of the problem we don't expect this to be finished until February 2019. The building contractor is paying for the remedial works and we are working closely with the local fire authority on an action plan to ensure the works are delivered on time. While this work is taking place, we have revised our evacuation plans and ensured staff are fully trained in fire safety. We do not anticipate this will have any impact on the proposed merger work.

Questions and Answers from Public Meetings at Hinchingbrooke House, Huntingdon.

Held on: 10 August at 2pm and 5.30pm

Q: How did Peterborough and Stamford Hospitals merge and was it successful?

A: Peterborough Hospitals NHS Trust was established in 1993 and comprised two hospitals, Peterborough District Hospital and Edith Cavell Hospital. Rutland and Stamford Hospital, in South Lincolnshire, joined the Trust in 2002.

Today around 4,000 staff work at Peterborough and 180 work at Stamford Hospital. Many Outpatient clinics are held at Stamford Hospital and clinical staff work between the two sites to deliver these services. Both hospitals use the same systems and staff at Stamford are very much part of the Trust, actively involved in all corporate initiatives, for example.

Q: Why aren't we merging with Addenbrooke's Hospital?

A: Hinchingbrooke, Peterborough and Stamford hospitals are similar in terms of the services they provide, whereas Addenbrooke's is a university hospital and tertiary centre for a number of specialities. As our three hospitals are much more closely aligned, a merger of the three would be more viable clinically and financially.

Q: Can you clarify that Hinchingbrooke Hospital will retain an adequate A&E department?

A: The Clinical Commissioning Group has confirmed that A&E will remain at Hinchingbrooke seeing minor injuries and major cases. Any changes to the provision of services at any site is not a decision for the Trust boards to make. Any decision to change services is made by our local Clinical Commissioning Groups subject to the outcome of any consultation with the public.

Q: Have you factored in the hypothetical issue of a major accident on the A1/A14 and its impact upon the Hinchingbrooke A&E dept?

A: As part of our normal operational planning, we have clear, mandatory major incident plans in place which are triggered in the event of any major incident involving a large number of casualties, for example.

Q: I can't understand why Hinchingbrooke Hospital has such a big deficit and why we would join with another trust that has a large deficit.

A: By merging we will be able to reduce our deficits over a number of years. We will incur a one-off cost of £12m-£13m to merge the trusts. However we will save £9m a year, every year by merging. This means that by end of the second year as a merged organisation we will have started reducing the deficit.

Q: Once acquired - what would stop Peterborough and Stamford from selling Hinchingbrooke Hospital?
A: For that to happen there would have to be a full public consultation and it would also need to be approved by the Department of Health. Addenbrooke's and Peterborough hospitals would have to deliver the services to the Huntingdon population instead, which, given the lack of space available to either of those hospitals for expansion, would be considerably difficult to achieve. The additional costs would also be prohibitive.

Q: This merger is politically driven isn't it?
A: No. The Outline Business Case which proposed a merger of the two trusts was approved by both trust boards. The Full Business Case will need to be approved by the regulator and the Secretary of State for Health. Other options were considered, however the proposed merger is currently the only way to sustain clinical services at both hospital trusts.

Q: Where did the money for the sale of Peterborough District Hospital go?
A: The effect of the sale on the deficit meant that Peterborough and Stamford Hospitals NHS Foundation Trust borrowed less money from the Department of Health for running costs that year. The sale proceeds were a one-off gain.

Q: Can you give assurances that the £9m savings will be made by cutting back office staff costs?
A: All proposed cost savings will come from the reduction of non-clinical staff, such as finance, HR, IT and the executives and non-executives on the board. We will also use fewer, more costly, locum staff as they will be replaced with substantive staff.

Q: Does the cost savings include staff and agency staff?
A: The more locum staff we use the less money we have. This is where the work we are doing to attract more substantive staff will help. Doing this as a merged organisation will make our offer to new recruits more attractive.

Q: We are driven by an austerity programme. But has the board thought of appealing to the Government and asking them to put the deficit into a bond, for example?
A: PFI schemes have changed. There is a national conversation taking place about how to bear the burden of these. It is not feasible at present to make any other arrangements with regard to Peterborough Hospital's PFI payment. Currently, Peterborough and Stamford Hospitals pays in excess of £25m for the cost of the PFI every year and gets £10m back from the government to help meet this extra cost. Compared with many other hospitals Peterborough City Hospital is double the size for fewer patients – but that is the standard required of new hospitals today.

Q: To what extent will the £9m savings contribute to the PFI and running costs?
A: The savings we can make together will contribute to reducing running costs in both hospitals. We are treating the PFI costs separately. By showing how we can work efficiently and meet our annual Cost Improvement Plan targets, we hope to be able to receive additional PFI support from Department of Health in the future.

Q: I was the first consultant to work on this site and retired 20 years ago. I find it sad to see what has happened. Why can't we use the Brexit money to clear

Hinchingbrooke's debts?
A: We are now in a situation where the NHS is struggling. Demand has risen over the last 20 years and is continuing to rise. We are at a point where we have greater demand on our services, which has contributed to the situation we are in. It's not for us to say how the Government should use funding, but we appreciate that this is a national issue.

Q: I think Hinchingbrooke's future is ok – I would be scared if I was living in Stamford, though.
A: 30% of patients treated by Peterborough and Stamford Hospitals come from South Lincolnshire. Stamford hospital is a key part of the Trust's delivery of services to patients in South Lincolnshire and is being redeveloped as part of our existing plans.

Q: How much of the £9m saved will stay at Hinchingbrooke?
A: We estimate the split will be £5m to Peterborough and Stamford and £4m to Hinchingbrooke. However, as a single organisation, we would look at this more holistically. If we merged we would become a Foundation Trust which would mean people can join as a members and be elected as governors who have a major say in how the hospitals are run and are required to approve any major transactions.

Q: Are you being too optimistic about merging by 1 April next year? Will it be a 'big bang' launch on 1 April?
A: We will go through a process of preparation ahead of 1 April 2017. We are currently working through all the steps of a detailed implementation plan. The legal transfer will take place from a April, but we do not anticipate that we will have single IT systems in that time, for example. It is likely that it would take 12 to 18 months before the merger is fully integrated. We are taking valuable lessons from those Trusts that have merged before to understand the best way of managing the integration process.

Q: In terms of long-term sustainability how big an issue is the PFI on Peterborough City Hospital?
A: When we opened the hospital in 2010 the PFI contract was a 35 year long contract. By the time we come to the end of the 35 years we will have paid more than a billion pounds in PFI payments. However, at that point, the hospital will be handed back to the NHS in as good a state of repair as it was on day 1. We must also remember that the PFI payments also cover the cost of operational services such as portering, catering and cleaning as well as the building.

Q: Where is the overspend? How did it happen?
A: In the most simple terms, we haven't become efficient enough and, along with the whole of the NHS, recruiting enough staff is an issue.

Q: Have you been forced to make this decision because of the Sustainability and Transformation Plan?
A: No. The work is part of the overarching Sustainability and Transformation Plan, but it is very much about our hospitals ensuring we can become clinically and financially stable organisations both now and in the future. Doing nothing is not going to make us sustainable and is therefore not an option for the longer term.

Q: Who are the experts you are using to make sure your proposals are robust – and who is paying for them?
A: We are using a number of experts, for example, Hempsons, a leading healthcare law firm, accountancy auditors KPMG and governance and risk specialists Deloitte. They have been appointed via a procurement process and the cost of their services are being paid for by NHS Improvement. Each expert organisation has been hired for their reputation as independent experts who have broad and specialist experience. We used some of these companies to report on the Outline Business Case before it was approved by our Trust board.

Q: Will Hinchingbrooke Health Care NHS Trust disappear and become part of the Foundation Trust?
A: Technically and legally the 'merger' will be an acquisition of Hinchingbrooke Health Care NHS Trust by Peterborough and Stamford NHS Foundation Trust, which means Hinchingbrooke Healthcare NHS Trust will be dissolved and become part of the Peterborough and Stamford NHS Foundation Trust. Hinchingbrooke Hospital will still exist as part of the combined new organisation. Staff will be moved to the new organisation under the TUPE process. (**TUPE** : 'Transfer of Undertakings (Protection of Employment) Regulations.)

Q: What plans do you have to manage a population increase?
A: We have clear demographic plans which are built into our financial models and costs and income. Physical space, capacity and staff is built into a five year projection that we are developing.

Q: What is the difference between Hinchingbrooke and Peterborough in terms of representation?
A: As a Foundation Trust the new merged organisation would have a Council of Governors. This is split between public governors, staff governors and partner governors. Governor meetings will be held between the hospitals and population areas. We are asking people what they think these constituencies should be and there is a space on the feedback form for people to record their views. The council of governors operates in an advisory and decision-making capacity. However, they appoint the Chairman, they assist in the appraisals of non-executive board members and have the power to remove the board and the Chair, if necessary.

Q: What happens if there are delays and you are not ready by 1 April?
A: This is only likely if we are required by NHS Improvement to provide more information to strengthen the business case. We do not expect any delays at this stage.

Q: Some people think it's being rushed.
A: The pace is brisk but we need to ensure progress is being made. There is still an enormous amount of work to do in the lead up to 1 April 2017. However the process will take some 18-24 months before the trusts are fully integrated. For example we will need to do things like set up a new single bank account and a payroll system for day 1, but look at integrating our IT system later on. Not all of the benefits will be delivered by day 1 – 1 April 2017.

Position Statement on the proposed merger between Hinchingbrooke NHS Trust and Peterborough and Stamford NHS Foundation Trust

1. Introduction

1.1 Healthwatch Cambridgeshire is the local statutory patient and public involvement organisation. We undertake a range of engagement activities with local communities and record people's experiences of using health and care services. On the basis of this intelligence, we can use statutory powers to challenge health and care decision makers if care isn't working in the way it should.

1.2 We are part of a national network through Healthwatch England and have direct local and national links with regulatory bodies such as the Care Quality Commission and NHS Improvement.

2. Hinchingbrooke NHS Trust

2.1 We are delighted to have an excellent relationship with the staff and Board of Hinchingbrooke NHS Trust. We have supported their improvements in patient experience following the poor CQC Inspection outcome and have been pleased to see a more rigorous and inclusive approach to patient experience develop. The improvements in care seen at the Trust in the past 18 months is evident, the Trust should be applauded for moving from 'Inadequate' to 'Good' in their latest CQC report.

2.2 We collect a significant amount of patient feedback about the hospital and its services. For many years there has been uncertainty about the hospital's future and there is huge community interest in keeping the hospital open. Local people feel that their hospital has been used as a political football, the low level of trust in decision-makers is evident.

2.3 The majority of feedback we receive about the hospital is positive. However, we are aware that people are reticent to give negative feedback for fear of losing the hospital.

Healthwatch Cambridgeshire, The Maple Centre, 6 Oak Drive, HUNTINGDON, PE29 7HN

2.4 When the possibility of the merger was announced there was a high level of local panic as people misinterpreted this as closure. Healthwatch Cambridgeshire has given presentations and spoken to many groups, including the 'Hands Off Hinchingbrooke' campaign, explaining this is not the case and that the merger is one way of keeping a viable safe local hospital. We understand the recruitment issues the Trust faces, underlined by the poor rating of the Emergency Department in the last CQC report. We further understand that sustainability of such a small hospital in its current organisational form is not realistic.

3. Healthwatch Cambridgeshire's position

3.1 It is important that local people feel they are listened to and have an opportunity to shape change. We have attended all of the local public meetings to listen to what people are saying.

3.2 We have asked that the Full Business Case include a comprehensive plan for meaningful patient and public involvement, which includes:

- Proposals to make sure local people are members of the merged Trust;
- A commitment to principles and activities that promote talking and listening to local people about their experiences of care;
- Routine ways to make sure these are used to inform decision making and develop services; and
- Regular feedback to the Trust Board broken down by hospital site, as well as overall, so we know how care is working at Hinchingbrooke.

3.3 HWC will be examining the Full Business Case to assess how these points are addressed and will present that assessment to Hinchingbrooke NHS Trust.

3.4 HWC will fully support the consultation should the decision be taken to go ahead with the merger.

3.5 Further information can be found at:

http://www.healthwatchcambridgeshire.co.uk/news/future-care-hinchingbrooke-hospital

Care Quality Commission

Hinchingbrooke Health Care NHS Trust

Hinchingbrooke Hospital

Quality Report

Hinchingbrooke Park
Hinchingbrooke
Huntingdon
Cambridgeshire
PE29 6NT
Tel: 01480 416416
www.hinchingbrooke.nhs.uk

Date of inspection visit: Announced Inspection 10-11th May 2016. Unannounced inspection: 20th May 2016.
Date of publication: 11/08/2016

This report describes our judgement of the quality of care at this hospital. It is based on a combination of what we found when we inspected, information from our 'Intelligent Monitoring' system, and information given to us from patients, the public and other organisations.

Ratings

Overall rating for this hospital	Good
Urgent and emergency services	Requires improvement
Medical care (including older people's care)	Good
Surgery	Good
End of life care	Good

Summary of findings

Letter from the Chief Inspector of Hospitals

The Care Quality Commission (CQC) carried out a comprehensive inspection between the 15 and 18 September 2014 at which the trust was rated as inadequate and placed into special measures. The CQC undertook a review of the areas rated as inadequate in January 2015 to ensure the safety of patients. At this inspection we rated most elements as requiring improvement although the urgent and emergency services were rated as inadequate. We undertook a focused inspection to review all areas identified as requiring improvement or inadequate in October 2015 to monitor the trusts progress. We returned on 10 May 2016 to monitor whether the improvements seen at the previous inspection were sustained.

Since 1 April 2015 the trust has a traditional management structure of an NHS trust. The trust has a trust board and with non-executive directors. The chief executive has now been in post for nearly 10 months. The changes that had been put in place were beginning to embed and staff were aware of the process for escalating issues to the senior team. The trust were aware of challenges and had plans in place to address these. We were aware of ongoing talks with a neighbouring trusts about efficient use of resources across the county.

The comprehensive inspections result in a trust being assigned a rating of 'outstanding', 'good', 'requires improvement' or 'inadequate'. Each section of the service receives an individual rating, which, in turn, informs an overall trust rating. The inspection found that overall the trust has a rating of 'Good'.

Our key findings were as follows:

- Most new systems and process were in place and these were embedded. Senior managers could articulate risks both internal and external to the organisation.
- Some new systems in processes in the emergency department such as triaging patients arriving by ambulance were yet to be embedded.
- There was an increased emphasis on incident reporting and disseminating learning to all areas of the trust though there were some delays in reporting incidents in surgery.
- Medicines were well managed across the trust with consistent processes to investigate concerns.
- Staff were caring and compassionate in their care of patients.
- Organisational development work had significantly impacted on the trusts development into a learning organisation.
- The emergency department continued to be under pressure through increasing volumes of attending patients and small numbers of emergency care consultants.
- The care of patients with a mental health condition was improved in the emergency department.
- There was an increased programme of audit including stroke audit though performance against some audits in the emergency department was below the England average.
- Referral to treatment times (RTT) were met for medical and surgical patients.
- There were clear visions for the services and visible leadership within the divisions.
- The trust and individual divisions were working with other providers and stakeholders on sustainability and transformation plans. Staff and managers had plans for improving care pathways though there was some anxiety amongst staff about collaborative working with other providers.
- There was a detailed end of life strategy in place which had received additional resourcing to meet the needs of patient and their relatives.

We saw several areas of outstanding practice including:

- The trust employed an Admiral nurse to support people living with dementia, their relatives and carers as well as staff. This was one of only five Admiral nurses in acute trusts in England.
- Staff worked with a local prison where consultants review patients that are at the end of their lives and work with prison and hospital staff to ensure that patients were safely admitted to the hospital or referred to the local hospice.

Summary of findings

However, there were also areas of poor practice where the trust needs to make improvements.

Importantly, the trust must:

- Ensure that there are sufficient numbers of suitably qualified, skilled and experienced medical staff on duty in the emergency department. Also ensuring that there are robust contingency plans and which forecast shortages and ensure that sufficient cover is provided.
- Ensure that the time to treatment from a clinician in the emergency department is reviewed and times to treatment are improved.
- Ensure that the triage process for ambulance arrivals is received to ensure that the pathway for patients is safely and times of assessment accurately recorded.
- Ensure that infection control practices within the emergency department are improved.
- Ensure that the processes for the checking of equipment, particularly blood glucose and anaphylaxis boxes, in the emergency department is improved and safe for patients.

In addition, the trust should:

- Review the observation and seating arrangements for the children's area to ensure parents and children only sit in this areas.
- Should ensure that fridge temperatures are routinely checked.
- Should allow staff to attend and receive updated mandatory training.
- Review the need to monitor the culture of staff within the emergency department.
- Review the environment and provision of children's services and where children are treated.
- Ensure that records are used in a consistent way across wards, that they are contemporaneous; reflect patient needs and appropriate actions taken following risk assessment.
- Review the relative risk of readmission for surgery patients as data shows this to be significantly above the England average.
- Review the complaints process and the time taken to provide people who complain with a full response.
- Should ensure that audits are undertaken locally within the emergency department to improve quality measurement and assurance.
- Should ensure a consistent monitoring of preferred place of death for patients receiving end of life care.
- Should ensure that there is a clear target for fast track discharge of patients requiring end of life care and ensure consistent monitoring of the timeliness of these discharges.

Based on the findings of this inspection I would recommend the trust be removed from special measures. However I would recommend that ongoing support continue during this period of transition.

Professor Sir Mike Richards
Chief Inspector of Hospitals

Summary of findings

Our judgements about each of the main services

Service	Rating	Why have we given this rating?
Urgent and emergency services	Requires improvement 	The emergency department was rated as requires improvement for being safe because there remained concerns regarding staff hand hygiene techniques, and use of PPE. The boxes which monitor the blood glucose of a patient, known as a BM box, and the anaphylaxis boxes were not checked daily as required. Time to see a clinical decision maker to receive treatment was consistently above 60 minutes. The process for triage of ambulance patient was not yet fully embedded and therefore this could place patients at risk through a lack of monitoring. However we also found that medicines management was safe, items were stored securely and dispose of appropriately. The care and treatment of patients with a mental health condition had much improved since our previous inspection. This included staff awareness on the importance of care for those with mental health conditions. The environment for the children's waiting area had improved since our last inspection. The service was rated as requires improvement for being effective because the service performed worse than expected on the RCEM Asthma audit, and severe sepsis and septic shock audit. Some of the national audits were from 2013; however there was a lack of local audits being undertaken. The service could not demonstrate if any of their key patient outcomes had improved. Fluid rounds and drinks provision for patients had not increased despite the warm temperatures in the department. However we also found that there was a clear protocol for staff to follow with regards to the management of stroke and sepsis. Pathways were written in line with the national institute for health and care excellence (NICE) and RCEM guidelines. Management of pain and administration of pain relief had improved since our last inspection. The service was rated as good for caring because the feedback received from service users was positive. The friends and family test results were consistently above the England average. We observed positive and caring interactions between staff and patients throughout the inspection. Staff were caring and

compassionate when they spent time with patients. However we also received comments from three patients and relatives on comment cards where they felt the service was not good.
The service required improvement for being responsive because the trust was not consistently meeting the four hour standard. On review we found that this was not only affected by reduced bed capacity but in addition, delays in decision to admit times. The average time spent in the department was much longer than the England average. However we also found that the service has significantly improved the working relationship and pathways, assessment and treatment for adults and children with mental health conditions. The waiting area had an improved paediatrics waiting area including a separated play zone for children.
The service required improvement for being well led because the risk register, identification or risk and management of risk was not yet embedded within the service. The risk register provided did not detail any emergency department specific risks despite concerns about medical staffing being raised by the trust as a risk. There was a lack of medical leadership within the department due to staffing shortages. However we also found that the nursing staff had been provided with some training in leadership, and the leadership and governance for the children's emergency department had sustained good practice which had further improved the children's service.

Medical care (including older people's care)

Good

We rated medical services as Good overall. Learning from incidents was consistently shared with staff across the division and formal mortality and morbidity meetings had been introduced and we observed good infection control practices in relation to hand hygiene and the use of personal protective equipment. All patients had their allergies recorded on their medicines chart and medicines were stored securely though prescription charts were not completed fully for time critical medications such as paracetamol though the trust informed us they would be using new charts in the near future. Staff had a good understanding of safeguarding principles and how to make safeguarding referrals and mandatory training had

improved compliance across the division. However, records and risk assessments were mainly correct however they did not always reflect the needs of patients and were not updated to reflect changing care or needs.

Patient outcomes were now measured including the reinstatement of stroke audit data. Local audits plans were comprehensive and had lead clinicians identified. Patient care and pathways followed national guidance and best practice and staff had good knowledge of the Mental Capacity Act 2005 and Deprivation of Liberty Safeguards. However, several patients had been identified as being at risk of malnutrition but we could not see that steps had been taken to address this.

We observed staff interacting in caring and compassionate ways with patients and relatives. Friends and Family Test (FFT) response rates were higher than the England Average and most wards scored highly on the test. Patients we spoke with told us that staff were caring and had kept them involved and up to date with their care and treatment.

The division was meeting referral to treatment times (RTT) and was actively engaging with sustainability and transformation plans and was working collaboratively with neighbouring trusts around the provision of some care including stroke care. There was now a speech and language therapist for patients suffering stroke and other service level agreements for therapy staff providing stroke care and patients had their individual needs met and we saw good practice in relation to dementia care on one ward. However, complaints and concerns were addressed locally. More staff were aware of learning from complaints but half of those we spoke with were unclear on this.

A number of changes in ward leadership and the introduction of a quality matron had become embedded since our last inspection. Governance and risk had been addressed with the implementation of mortality and morbidity meetings and that the findings of root cause analysis was more widely shared. The division was actively engaging with sustainability and transformation plans and collaborative working with other providers. However, we were concerned about the

sustainability of some services due to a lack of key staff. Whilst locum staff were in place permanent recruitment had been difficult. The division was aware of these concerns and a review of some specialty care was underway.

Surgery

Good

Surgery services were rated as good overall.
Staff had access to an electronic incident reporting system and knew how to report incidents.
Scrutiny of mortality cases was regular and robust, with all cases being presented at dedicated meetings and actions for improvement being set.
There was no increased risk of death for this surgery services at this trust, as the trust performed as expected in the two surgery specific mortality indicators, death in the low-risk diagnosis group and death after surgery. Good hand hygiene techniques and the use of personal and protective equipment such as aprons and gloves was consistent amongst all staff. Surgical site infection rates were low, with two cases being reported for large bowel surgery between April 2015 and December 2015 and zero cases being reported for other surgical specialties.
Equipment was regularly safety tested and all equipment checked on our inspection was within date for the next safety check. Resuscitation trolleys were consistently checked with no omissions noted for the time period we checked (January 2016 to May 2016). Medicines were stored securely across surgical wards and access was limited to nursing staff. Learning from medicine related incidents was evident. For example, an insulin-related incident had led to a ward manager completing a course on insulin safety and cascading that learning to their team.
World Health Organisation (WHO) surgical checklists were consistently used by the service and their use was audited. Overall training compliance for Mental Capacity Act and Deprivation of Liberty Safeguards was 92% for surgical services which was above the trust target of 90%. The service comprehensively audited its performance each year, including both local and national audits. There was an established pain team and provision was in place for this support to be provided out of hours. The trust performed in line with, or better than the England average in the national hip fracture audit, the

Summary of findings

national lung cancer audit, and the patient reported outcomes measures for groin hernia, hip and knee replacement and varicose vein surgeries. With the exception of theatres, staff appraisal rates were better than the trust average across the surgery services.

Friends and family responses were positive for surgery services, indicating that between 93% and 100% of respondents would recommend the service to their family and friends. Patients were involved and informed about their care, with a range of patient information leaflets and a hip and knee club for patient undergoing joint replacement surgery. Emotional support was available from an Admiral nurse (a specialist dementia nurse). The Admiral nurse was observed to provide dedicated care to a person living with dementia, ensuring they were settled and had their privacy and dignity respected. The service provided care within 18 weeks of referral in the majority of cases (90% of the time or more). Cancer treatment targets were consistently met or exceeded and the trust was amending cancer pathways with a view to bringing cancer targets down.

The service performed better than the England average in rebooking cancelled operations within 28 days. One theatre was available 24 hours a day, seven days a week for emergency or life threatening surgeries, in line with National Confidential Enquiry into Patient Outcome and Death (NCEPOD) guidelines. There was awareness at ward level of complaints and learning, with ward managers able to give examples of improvements made to their ward areas as a result of learning from complaints. A clear plan was in place for the development of a surgery strategy that was linked directly to the development of the new trust values. The development of the strategy involved staff and was based on the results of the staff survey. There was good ward level understanding of risk; however the recording of scrutiny of risk and other clinical governance issues was inconsistent across surgical specialties. Almost half of incidents were not reported within 14 days of their occurrence. The

acute trauma and surgery unit and Juniper ward consistently performed below trust targets for various infection control and patient safety measures.
The length of stay for elective trauma and orthopaedics was 1.5 days over the national average, and the overall risk of re-admission for elective patients was much higher than the England average at a score of 158 compared to an average score of 100.The service had not appropriately managed an increase in medical outliers. This had led to the displacement of emergency and elective surgical patients and ultimately the cancellation of joint surgeries at the time of our inspection, due to elective and emergency (or patients swabbed for Methicillin resistant staphylococcus aureus (MRSA) and those not swabbed) being placed in bays together.

End of life care

Good

End of life care was good at Hinchingbrooke Hospital as patients received safe, effective, and responsive care that met their individual needs and protected them from avoidable harm.
Infection, prevention, promotion, and control was good and patients benefitted from visibly clean environments that were routinely audited and cleaned. Staff knew how to respond to safeguarding concerns and reported these appropriately. Staff reported incidents using the trust electronic incident reporting system and learning from incidents was shared across the staff teams.
Equipment was appropriate for the patient's needs and the bereavement, mortuary, and chaplaincy team made use of a number of key environments to enable relatives and families to access private areas for reflection and practice their religion or belief. The mortuary team provided a caring and empathetic approach and created a homely and comforting environment for families to see their deceased loved ones.
The trust ensured staff were trained, appraised, and supervised appropriately. Improvements were seen in end of life training for all staff, particularly junior doctors, and the number of staff completing the Quality End of Life Care for All (QUELCA) training had increased. Patients were cared for using best practice guidance, for example, National Institute for

Summary of findings

Health and Care Excellence (NICE), and individual care planning promoted patient nutrition, hydration, and the effective use of pain relief to manage patients' symptoms.

Patient records were of a very high standard, reflected the patient's individual needs and choices, and demonstrated multidisciplinary (MDT) working to support patient outcomes. There had been improvements in the way do not attempt cardiopulmonary resuscitation (DNACPR) was recorded and the trust carried out audit activity to ensure quality was measured in key areas of its services. Patients were referred to the specialist palliative care team in a timely and professional way, this meant that patients accessed last days of life care and treatment that met their individual needs.

Patients and their families were cared for with high levels of dignity, compassion, and respect throughout our inspection. Staff gave examples of good practice that enhanced patients' physical, psychological, and emotional wellbeing. Families were offered a wide range of information to help them deal with death and dying and the trust collaborated effectively with external providers, for example, funeral homes, counselling services and patient advice services.

The trust had a clear strategy and vision in place for end of life care with staff roles and responsibilities clearly set out within it. The culture across the service was one of support and mutual respect amongst the staff team and there was a significant focus on improving staff knowledge and competence in end of life care.

Hinchingbrooke Hospital

Detailed findings

Services we looked at
Urgent and emergency services; Maternity (community services); Medical care (including older people's care); Surgery; End of life care.

Detailed findings

Contents

Background to Hinchingbrooke Hospital

Hinchingbrooke Hospital is an established 289 bed general hospital, which provides healthcare services to North Cambridge and Peterborough. The trust provides a comprehensive range of acute and obstetrics services, but does not provide inpatient paediatric care, as this is provided within the location by a different trust. The trust has the traditional system of governance in NHS. The trust had previously been managed by a private provider. The ethos of empowerment of staff remained at the hospital and the "stop the line" initiative was still in use. This allowed anyone to raise issues immediately with the senior team. We found that this system was now working well within the hospital.

The average proportion of Black, Asian and minority ethnic (BAME) residents in Cambridgeshire (5.2%) is lower than that of England (14.6%). The deprivation index is lower than the national average, implying that this is not a deprived area. However, Peterborough has a higher BAME population and a higher deprivation index.

Our inspection team

Our inspection team was led by:

Chair: Jane Barrett, Chair Thames Valley Clinical Senate

Head of Hospital Inspections: Fiona Allinson, Head of Hospital Inspection, Care Quality Commission

The team included seven CQC inspectors and a pharmacy inspector from CQC. A variety of specialists made up the team including: a nurse specialist in; emergency medicine, medical assessment, surgery an end of life care nurse and an expert by experience. (Experts by experience have personal experience of using or caring for someone who uses the type of service that we were inspecting.)

How we carried out this inspection

To get to the heart of patients' experiences of care, we always ask the following five questions of every service and provider:

- Is it safe?
- Is it effective?
- Is it caring?
- Is it responsive to people's needs?
- Is it well-led?

The inspection took place between 10 and 11 May 2016, with unannounced inspection on 20 May 2016.

Detailed findings

Before visiting, we reviewed a range of information we held, and asked other organisations to share what they knew about the hospital.

We did not hold a listening event on this occasion. However some people shared their experiences with us via email or by telephone.

We spoke with staff working in patient care areas and in the management teams. We talked with patients and staff from all the ward areas and outpatient services. We observed how people were being cared for, talked with carers and/or family members, and reviewed patients' records of personal care and treatment.

Facts and data about Hinchingbrooke Hospital

Trust information 2014/ 15

Key figures

• **Beds**: 289

– 237 General and acute

– 42 Maternity

– 10 Critical care

• **Staff**: 1,557 (WTE)

– 188.11 Medical

– 491.40 Nursing

– 876.93 Other

• **Revenue**: £108,966,391

• **Full Cost: £122,737,210**

• **Surplus (deficit): (£13,796,820)**

Activity summary (Acute)

Activity type 2014-15

Inpatient admissions 20, 298

Outpatient (total attendances) 154, 965

Accident & Emergency

(attendances) 43, 353

Our ratings for this hospital

Our ratings for this hospital are:

	Safe	Effective	Caring	Responsive	Well-led	Overall
Urgent and emergency services	Requires improvement	Requires improvement	Good	Requires improvement	Requires improvement	Requires improvement
Medical care	Good	Good	Good	Good	Good	Good
Surgery	Good	Good	Good	Good	Good	Good
End of life care	Good	Good	Good	Good	Good	Good
Overall	Good	Good	Good	Good	Good	Good

Notes

Urgent and emergency services

Safe	Requires improvement
Effective	Requires improvement
Caring	Good
Responsive	Requires improvement
Well-led	Requires improvement
Overall	Requires improvement

Information about the service

The emergency department (ED) at Hinchingbrooke Hospital provides a 24 hour, seven day a week service to the local area. Patients present to the department either by walking into the department via the reception area, or arriving by ambulance. The department has facilities for assessment, treatment of minor and major injuries, a resuscitation area, and a children's provision ED service.

There is an acute assessment unit (AAU) within the same directorate, for which patients are admitted for up to 24 hours.

Our inspection included two days in the emergency department as part of an announced inspection, and an unannounced visit on 20 May 2016. During our inspection, we spoke with clinical leads from medical and nursing disciplines for the department. We spoke with four members of the medical team (of various levels of seniority), nine members of the nursing team (of various levels of seniority), and five members of support and operational staff. The emergency department sees, on average, approximately 120 patients per day.

During our inspection, we spoke with six patients and four relatives and undertook general observations within all areas of the department. We reviewed the medication administration and patient records for 12 patients in the emergency department.

On average, the emergency department saw around 43,247 patients a year between 2014 and 2015, which equated to around 832 patients a week.

Summary of findings

At our last inspection the emergency department was rated inadequate in terms of being safe and well led, requires improvement for being effective and responsive and good for being caring. This meant that the service was rated as inadequate overall in 2015. At this inspection we noted that there had been improvement overall at this service and we have now rated the service as requires improvement.

The emergency department was rated as requires improvement for being safe because there remained concerns regarding staff hand hygiene techniques, and use of PPE. The boxes which monitor the blood glucose of a patient, known as a BM box, and the anaphylaxis boxes were not checked daily as required. Time to see a clinical decision maker to receive treatment was consistently above 60 minutes. The process for triage of ambulance patient was not yet fully embedded and therefore this could place patients at risk through a lack of monitoring. However we also found that medicines management was safe, items were stored securely and dispose of appropriately. The care and treatment of patients with a mental health condition had much improved since our previous inspection. This included staff awareness on the importance of care for those with mental health conditions. The environment for the children's waiting area had improved since our last inspection.

The service was rated as requires improvement for being effective because the service performed worse

than expected on the RCEM Asthma audit, and severe sepsis and septic shock audit. Some of the national audits were from 2013; however there was a lack of local audits being undertaken. The service could not demonstrate if any of their key patient outcomes had improved. Fluid rounds and drinks provision for patients had not increased despite the warm temperatures in the department. However we also found that there was a clear protocol for staff to follow with regards to the management of stroke and sepsis. Pathways were written in line with the national institute for health and care excellence (NICE) and RCEM guidelines. Management of pain and administration of pain relief had improved since our last inspection.

The service was rated as good for caring because the feedback received from service users was positive. The friends and family test results were consistently above the England average. We observed positive and caring interactions between staff and patients throughout the inspection. Staff were caring and compassionate when they spent time with patients. However we also received comments from three patients and relatives on comment cards where they felt the service was not good.

The service required improvement for being responsive because the trust was not consistently meeting the four hour standard. On review we found that this was not only affected by reduced bed capacity but in addition, delays in decision to admit times. The average time spent in the department was much longer than the England average. However we also found that the service has significantly improved the working relationship and pathways, assessment and treatment for adults and children with mental health conditions. The waiting area had an improved paediatrics waiting area including a separated play zone for children.

The service required improvement for being well led because the risk register, identification or risk and management of risk was not yet embedded within the service. There were three risk registers in the medicine division and the trust acknowledged there was some confusing language used within the division in relation to the risk registers. There was a lack of medical leadership within the department due to staffing shortages. However we also found that the nursing staff had been provided with some training in leadership, and the leadership and governance for the children's emergency department had sustained good practice which had further improved the children's service.

Urgent and emergency services

Are urgent and emergency services safe?

Requires improvement

Urgent and emergency services were rated as requires improvement for being safe because:

- There remained concerns regarding staff hand hygiene techniques, and use of PPE.
- The boxes with kit which monitors the blood glucose of a patient, known as a BM box was not always monitored as required. The anaphylaxis box was not checked daily as required.
- Time to see a clinical decision maker to receive treatment was consistently above 60 minutes.
- The process for triage of ambulance patient was not yet fully embedded and therefore this could place patients at risk through a lack of monitoring.
- The department was not fully compliant with standards for 'Children and young People in Emergency Care Settings 2012'. However improvements had been made to this area, with further plans for the future.

However we also found:

- There was evidenced learning from incidents with detail shared amongst staff through meetings.
- Staff were knowledgeable about what constitutes a safeguarding concern, how to recognise abuse and how they would escalate such concerns appropriately.
- Medicines management was safe, items were stored securely and dispose of appropriately.
- The care and treatment of patients with a mental health condition had much improved since our previous inspection. This included staff awareness on the importance of care for those with mental health conditions.
- The environment for the children's waiting area had improved since our last inspection.

Incidents

- The service had reported no never events since our last inspection. The definition of a Never Event has changed. Although each Never Event type has the potential to cause serious patient harm or death, harm is not required to have occurred for an incident to be categorised as a Never Event. The service followed the trusts incident reporting policy and has reported 255 incidents between 10 November 2015 and 29 February 2016. This is an improvement and increase in incident reporting since our previous inspection.
- The incidents reported, in the majority, resulted in no or low harm for impact with the top reported incidents being low staffing levels, pressure ulcers, and communication related incidents.
- Two serious incidents were reported for the service between 10 November 2015 and 29 February 2016, which were linked to patient falls.
- There was evidenced learning from incidents with detail shared amongst staff through meetings, handovers and through online forums. We observed information displayed on staff notice boards about incidents and what had been learnt from incidents. We spoke with one doctor and two nurses about the serious incidents. All were able to detail what lessons had been learnt from these events and what they would do differently next time a patient at high risk of falls would be in the department.
- Where serious incidents had occurred we reviewed the reports which had recorded that the families and the patients, where appropriate, where informed about the incident and the investigation in accordance with duty of candour requirements.
- The lead consultant described what mechanisms the service had for reviewing and holding mortality and morbidity reviews. Reviews are done at the monthly meetings to identify any patterns trends or learning which would then be shared with staff through local meetings and the main staff notice board.
- We reviewed the information on mortality. Minutes of meetings held between November to April detailed discussions about individual cases together with key learning from each case for sharing.

Cleanliness, infection control and hygiene

- The department was clean as far as possible. The environment presented challenges for ensuring the department looked clean at all times. There was an established rota in place for cleaning the department regularly throughout the day.
- The policy when patients who attended the department and were at risk of infection were known was that they were to remain isolated in their cubicle and the cubicles would be deep cleaned prior to the next patient being able to use it.

- Equipment was visibly clean upon inspection and had been labelled with 'I am clean' labels.
- We observed poor infection control practice amongst the medical staff working in the department. We saw three doctors go between patients throughout their shift without washing their hands and type notes on the computer without washing their hands, wearing gloves and then removing them and not washing their hands and going between cubicles without using hand gels or washing their hands.
- We noted that there had been an improvement in the hand hygiene practices amongst the nursing staff since our last inspection.
- We also observed two members of medical staffing not adhering to the uniform policy by wearing jewellery with jewels in them. Also wearing more than one ring on their hands at any one time.
- Infection control audits from February 2016 identified a 96% compliance with infection control practices and this had also highlighted hand washing therefore further improvements in this area.
- The infection rates on catheter related UTIs for the department was 0.81% which was displayed as green for a positive result on the A&E dashboard.
- There have been no reported cases of MRSA linked to the emergency department.
- Curtains in the main department on each cubicle were disposable, and there were records in place of when these were to be changed.

Environment and equipment

- The environment design and layout within the major's department area meant that it was not possible to observe all patients closely. This was raised during the previous inspection where we noted that the curtains on all bays were closed. On this inspection the nurse in charge routinely went round and ensured that the curtains were open, where possible, to be able to observe patients.
- We checked the resuscitation equipment in the department and found that all had been checked daily and were stocked in line with resuscitation council guidelines.
- The boxes with kit which monitors the blood glucose of a patient, known as a BM box, were available in three areas of the department. We checked all three and found many gaps in checking of these boxes. Within majors there were 13 dates not checked in January, four not checked in February, nine not checked in March, 11 not checked in April and two out of 10 days not checked in May 2016 up to our inspection.
- The anaphylaxis box within the department was checked and found to be stocked, however there were no records that this had been checked daily as required by national recommendations.
- The gas store was located in an inappropriate area near the ambulance entrance. The oxygen cylinders were stored in a cupboard where there were computer servers and wires and the electronic mechanism for the sliding doors which created a fire risk. The cylinders specifically state to store away from electrical items. The trust were aware of these concerns and had completed a risk assessment to address them as well as a redesign plan for the department.
- The department was not fully compliant with standards for 'Children and young People in Emergency Care Settings 2012'. This was because the children were treated in the same area as adults. However the service had made significant improvements in this area by separating the children's waiting area from the main waiting area. However we noted that adults without children were sat in their waiting to be seen. The service had plans for further improvements in this area over the longer term.

Mental Health Care

- At our last inspection the care of patients with mental health concerns was noted to be a significant risk. At this inspection we found that the policies and procedures for care and treatment of patients with mental health concerns had all been updated.
- Staff had received training on the requirements of care for those with mental health concerns. This was provided through the local mental health trust.
- The service had set up an agreement and trialled the placement of psychiatric liaison in the department during peak attendance periods. The service had noted that patients were seen and assessed more rapidly with this in place. The service was working to try and secure this on a more long term permanent basis to support staff and patient access.

- There is no dedicated room or bay for patients with mental health concerns who present with health anxieties or in crisis. Patients are placed into an available bay, where they could be observed or into the relative's room.
- During we observed the new risk assessment procedure and policy being used for three patients. These patients were assessed and placed in a location within the department, which was suitable based on the level of risk identified. If the patient was low risk they waited in an observed waiting room. If the patients were of a medium or high risk they were placed in a cubicle near the nurse base to allow for close observation.
- The relative's room which was used for low risk patient's, did not meet the minimum standards required for an assessment room. There was only one entrance/exit point still, there were no call bells or alarms in the room which meant that it was not safe to use on high risk patients. We were assured that only low risk patients were now placed in that room.
- We inspected the department for the risk of ligature points and found that the service had undertaken an environmental review to remove all assessed ligature points. There was a risk assessment in place for the department now, which detailed the risks of self-harm or suicide.
- We were assured that the procedures for mental health had significantly improved since out last inspection, however further improvements with the environment were still required.
- Staff had systems to request a specialist mental health assessment such as from the local mental health trust, Crisis Resolution and Home Treatment (CRHT) for adults, the Child and Adolescent Mental Health Services (CAMHS) and from older persons services once they assessed the person was medically fit for discharge and their physical health needs were met. We saw referral forms for CRHT.

Medicines

- Medicines cupboards were all locked and medicines were secure. When the resuscitation area was not in use the cupboards were found to be locked at all times.
- We checked a sample of medicines, including emergency medicines, these were in date and stored at the correct temperature. Controlled drugs stores were also checked and found to be correctly recorded and stored appropriately.
- The main fridge was locked due to containing insulin and tetanus vaccinations. The temperatures for medicines requiring refrigeration were mostly checked to ensure medicines were stored correctly. However we found eight days were not checked in March, and three were not checked in April 2016. All days were checked for May up until the date of our inspection.

Records

- We examined the records of 12 patients during our inspection and identified with the staff that there were challenges on completing the records between paper and electronic systems. The mix between paper and electronic recording on the system led to delays in updates being available for others to review the patient records. The management team of the service informed us that there were longer term plans in place to ensure that the records system was more robust.
- We identified that there were discrepancies in two cases where the records on the medicines administration chart were not legible after being written by the doctor and this was immediately rectified by the team.

Safeguarding

- We saw a current safeguarding policy for adults and children, which was accessible on the intranet. The policies were version controlled and the policies reflected national guidance.
- Staff were knowledgeable about what constitutes a safeguarding concern, how to recognise abuse, and how they would escalate such concerns appropriately. The trust had a safeguarding policy which was accessible to staff.
- Training records for the department showed that 89% of medical and nursing staff have received safeguarding adults training at level 1. 92% of medical staff and 97% of nursing staff have received safeguarding children level one training.
- The department had declared a risk on their risk register that there was not a sufficient number of staff trained with level 3 safeguarding children training at only 74% of all staff trained. Whilst an increase since our last inspection where training rates were 60% further work was needed to improve these rates.
- Staff were clear on the Children's & Adolescent Mental Health Support teams arrangements. They told us that safeguarding training included an over view of the mental capacity act and consent practices for children.

- Staff we spoke with referred to reporting safeguarding vulnerable adults and children concerns to the local authority and the trust safeguarding lead. We saw evidence of staff appropriately reporting concerns for a child.
- Posters were displayed throughout the department for domestic violence support. Leaflets for victims of domestic abuse were available.
- We observed staff openly discuss two cases where there was a potential safeguarding concern. We observed the discussions to be appropriate and result in a referral being made to safeguard the patient, which was good practice.

Mandatory training

- Mandatory training was available to all staff who worked in the service. The emergency department staff compliance was 73% for moving and fire training, 86% equality , diversity and human rights, 88% information governance, 24% were trained on PREVENT. Some of these training rates were lower than at the time of our inspection in 2015.
- We asked staff about this who informed us that it had been challenging for them to attend training during the winter due to the capacity and demand issues for the department. This had resulted in training sessions being cancelled.
- The department dashboard does not record mandatory training for Advanced Life Support, and emergency Paediatric Life Support. Records that were provided to us demonstrated that 80% of medical and nursing staff had received this training.

Assessing and responding to patient risk

- At the point the patient reached four hours in the department the staff would complete the inpatient risk assessment record for their care. If the patient was at risk they would transfer them onto a hospital bed as soon as possible. All patients in the department over six hours were placed onto a trust bed where available to support their comfort and reduce risk.
- The trusts policy on early warning scores (EWS), approved in August 2015, states that all adult patients admitted as an in-patient will have a set of physiological observations and a EWS score calculated at least once in 12 hours. The trust informed us that all patients arriving to the department should have at least one set of observations done within 15 minutes.
- The department has a defined streaming system in place for the patients who arrived into the department on foot through the front door, and once streamed into the appropriate pathway then they will be triaged and then treated. This process worked effectively in the main triage area for patients arriving on foot.
- At our last inspection we identified ECGs were not being acted upon in a timely way. At this inspection we reviewed 9 ECGs and all had been appropriately reviewed and acted upon. However the times of these reviewed were not always recorded on the ECG paper. This meant that we were not sure when the patient was reviewed after the ECG was done.
- The ambulance time to initial handover and assessment reported was consistently better than the England average at around 5 minutes. We observed this to be the case during the course of the inspection; handovers from ambulances were taken by the nurse in charge.
- The average time to first assessment, which should be 15 minutes at triage, was showing that the service was performing better than the England average. However there remained a lack of clarity on the triage process through the ambulance arrival route.
- We examined the arrival times of 10 patients who came in through the ambulance route. Of these six had the same arrival time, assessment time and treatment time. Of these two patients were in the resuscitation area, which meant that the timings were appropriate as treatment was provided immediately. However the other four timings could not be explained. Therefore we were not assured the system for ambulance triage had significantly improved.
- However, data provided by the trust showed that in April 2016 patients were being triaged on average at approximately 7 minutes when entering the department and in May 2016 it was 8 minutes.
- The time to treatment by a clinician within the department remained significantly higher than the England average. Treatment is expected to be provided within 60 minutes of arrival. However the service had consistently been averaging around 150minutes to treatment since January 2014.

Nursing staffing

- The nursing vacancy rate had decreased since our last inspection with a 12% nurse vacancy, however there was a higher turnover rate than expected. The turnover rate was recorded as 15% for nurses and 20% for support staff up to February 2016. This was higher than the trust's trajectory of 5%. We were informed that the reasons for staff leaving were linked to staff going to larger trusts or to retired.
- The department had maintained the majority of their staffing establishment for qualified and registered children's nurses in the emergency department, which was positive.
- The overall level of nursing staff on duty was much improved on last year, and we noted that the nurse in charge role was now supernumerary. This enabled the nurse in charge to have oversight of the department and escalate any concerns sooner when required. This was a positive improvement on the staffing from our inspection in 2015.
- The total vacancy, acuity and dependency and demand of the service meant that there was an 2% average use of agency and bank staff on shifts each month. The use and coverage of bank and agency was monitored and managed locally.
- Nursing handovers were done between staff at the beginning and end of each shift. Handovers occurred with nurses allocated to each area handing over to the nurse taking over their area of responsibility. We observed two handovers and observed that it worked well on a local basis.
- The nurse in charge was present on the board round of the medical staff who were handing over patients in the department.

Medical staffing

- The department was staffed by 3.5 WTE permanent consultant. At the time of our inspection one consultant was on long term sick leave and another had resigned and was due to leave at the end of May 2016. The service filled the rota for consultants with locum doctors.
- The consultant ratio at 21% is lower than the England average of 23%.
- The department currently has 6 WTE middle grade doctors. At 43% the use of middle grade staff at the trust is significantly higher than the England average of 13%.
- The department is putting several middle grade staff through a development scheme linked to the College of Emergency Medicine to obtain consultant positions within the hospital within three years.
- The department has only 7% of specialist trainee posts against the England average of 39%, however to ensure that they have cover they utilise middle grade support.
- The department currently has 10 foundation year trainees from Health Education England, which at a rate of 29% is higher than the England average of 24%.
- The current medical turnover rate within the department was 13.5% in February, which is significantly higher than the trust's target of 5%.
- There were concerns raised prior to our inspection regarding the availability of medical staff and the lack of consultants meaning that there were times where there was no consultant cover for the department. At this inspection we found that the lack of permanent staff cover was a significant risk for the service, and we were assured that the trust were developing plans to try and sustain medical staff coverage for the service. However medical staffing remains a risk for the trust. The trust was actively engaging with other providers and neighbouring trusts to ensure a consultant presence within the emergency department.
- Handovers were led by the doctor in charge of each shift and took place at the beginning and end of each shift. We observed the handover and the discussion of each patient which was comprehensive and clear.

Major incident awareness and training

- The trust had a major incident policy and plan in place for major events.
- 95% of staff working in the emergency department had received major incident awareness training within the last two years.
- The service had received external training in major incidents which included, CBRN, HAZMAT, logistics and command and control training.

Urgent and emergency services

Are urgent and emergency services effective?
(for example, treatment is effective)

Requires improvement

Urgent and emergency services were rated as requires improvement for being effective because:

- Of the 18 indicators in the national RCEM Asthma audit the trust performed worse than the England average in 15 of those indicators.
- The severe sepsis and septic shock audit dated October 2015 showed that the trust's performance had declined in five of the six key indicators. There were no new audits which demonstrated if there had been any improvement in this area.
- There was a lack of local audits being undertaken due to shortages of permanent medical staff. This meant that we were not assured, and the service could not demonstrate if any of their key patient outcomes had improved.
- Fluid rounds and drinks provision for patients had not increased despite the warm temperatures in the department.

However we also found:

- There was a clear protocol for staff to follow with regards to the management of stroke and sepsis.
- Policies and pathways for the admission of stroke, fractures and chest pain and these were written in line with the national institute for health and care excellence (NICE) and RCEM guidelines.
- Food and drink was available to those who were in the department for any length of time.
- Management of pain and administration of pain relief had improved since our last inspection.

Evidence-based care and treatment

- There was a clear protocol for staff to follow with regards to the management of stroke and sepsis. The department had introduced the 'Sepsis Six' interventions to treat patients. Sepsis Six is the name given to a bundle of medical therapies designed to reduce the mortality of patients with sepsis. Bundles were also available for neutropenic sepsis.
- We reviewed the notes of three patients who were admitted with a query of sepsis. All were provided with treatment in line with the sepsis pathway recommendations.
- There was also now a dedicated sepsis trolley with all equipment and items needed for the management of sepsis being stored in one place. This was in line with best practice for the management of sepsis and was a positive improvement on last year. However there were no local audits which supported how effective this trolley being implemented had been.
- We reviewed the policies and pathways for the admission of stroke, fractures and chest pain and these were written in line with the national institute for health and care excellence (NICE) and Royal College of Emergency Medicine RCEM guidelines. NICE and RCEM guidance on sepsis, head injury and fracture neck of femur was not always being followed in the department because the care that was being provided was not being recorded.
- The fracture neck of femur pathway between the emergency department and the orthopaedic service had improved since our previous inspection. We observed one patient be placed onto this pathway and their care followed best practice recommendations.
- The department had not undertaken any new local audits from a medical perspective since our last inspection. This was because of a reduction in the number of medical staff which meant that the one department consultant no longer had capacity to look at audits of the service.
- There was no new learning from audits noted since our last inspection due to no new audits being undertaken.

Pain relief

- The Royal College of Emergency Medicine Pain in Children audit for 2014-15 was not available for this inspection.
- We spoke with five patients about pain relief as part of this inspection. All informed us that they felt that their pain was controlled well and they had no concerns. This was an improvement from our previous inspection.
- We observed the triage process for patients who arrived in the department on foot. We noted that pain relief was offered where it was deemed required.

Nutrition and hydration

- Food and drink was available to those who were in the department for any length of time. There were regular time slots for care rounding which included offering people drinks.
- It was very warm in temperature at the time of this inspection, and we noted that many patients were thirsty. However there had been no increase or changes to the times of care rounds. This we raised to the staff who assured us they would increase rounds for drinks when temperatures increased.
- Food and drink was also available to relatives who were waiting in the department.

Patient outcomes

- The consultant sign off audit showed that about 19% of patients were seen by a consultant and 42% of consultants discussed cases with patients which was better than the England average. Only 39% of patients were seen by a doctor ST4 level and above doctor which is worse than expected compared to the England average. However the overall result showed that the trust was in the upper England quartile for discussions with patients.
- The RCEM sepsis audit showed that of the eleven indicators the trust performed in line with the England average on six of the indicators. The trust scored worse than the England average eon five of the indicators including the administration of antibiotics and monitoring of urine output.
- The severe sepsis and septic shock audit dated October 2015 showed that the trust's performance had declined in five of the six key indicators. There was no plan to re-audit sepsis in the department.
- The RCEM mental health audit showed that of the eight indicators the trust performed similar to expected on six indicators and better than expected on two indicators.
- Of the 18 indicators in the national RCEM Asthma audit the trust performed worse than the England average in 15 of those indicators.
- The Asthma in children audit for 2013/14 showed that the trust scored in the lower England quartile for all but one measure where it scored between the upper and lower England quartiles for Treatment IV hydrocortisone or oral prednisone.
- The trust scored above the standard but below the England average for unplanned re-attendance to A&E for the whole time period January 2014 to January 2016.
- There was no local audit plan for the emergency department. We were told this was due to the lack of consultants within the department.

Competent staff

- All medical staff within the emergency team had gone through the revalidation process with the GMC.
- The appraisal rates for the department was 75%, which was below the trust target of 80%. However this was an improvement from 60% at our last inspection.
- The nursing leaders were aware that the nursing staff were going to be completing their nursing revalidation this year and were implementing support mechanisms for the staff to complete their revalidation process with the NMC (nursing and midwifery council).
- Agency staff working in the department completed a full induction including competency checks prior to being authorised to undertake specific tasks such as the taking of an ECG or administration of medicines.
- Competencies for staff were completed on items of equipment in the resuscitation area including defibrillators and echocardiograms (ECGs), we examined training and competency records for staff that used these items of equipment, which supported what we were told.
- There were opportunities to obtain further education and qualifications for role specific qualifications advanced nurse practitioners, nurse prescribers but their first key priority was the leadership skills development for nursing staff in the department.
- The medical leadership provided us with an example of training their own consultants through the DREAM programme which was linked to the college of Emergency Medicine for middle grade staff. This course which can take up to three years offers middle grade doctors progression opportunities to go to consultant level. The department had four middle grade staff on this scheme for development, which was positive.

Multidisciplinary working

- Nursing and medical staff were observed to work well together and with open lines of communication.
- We noted that there had been an improvement in the working relationship with the surgeons and medics who attended the department for referrals. We also noted a greater presence of surgeons and medics in the department, as well as gynaecology. This was an

improvement from our last inspection. Staff told us that there had been an improvement in the timeliness of reviewing patients by other specialities within the department.
- We spoke with four members of the ambulance service who reported that whilst there remained issues at the service from their perspective, they felt that the service was beginning to improve. However they cited that handover times still needed improvement.
- The team worked closely with the wards and the site management team and ensured that appropriate patients were referred over to the care of this service when needed. We observed this work well during the inspection.

Seven-day services

- The emergency department is open seven days per week and twenty four hours per day.
- Radiology services currently do not operate seven days per week but on call services were available for emergency cases when needed to support the service.

Access to information

- The records system used within the emergency department was disorganised because the service used a combination of paper records and electronic records. Access to all systems was not a concern as all information required to provide the care to patients was accessible at any time however it could be time consuming to locate when it was not all stored in the same place.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- The training records showed that 89% of staff had received training on the Mental Capacity Act 2005.
- Medical and nursing staff within the department had a clear understanding of the requirements of the Mental Capacity Act 2005 and Deprivation of Liberty Safeguards.
- Staff explained their systems for assessing people's mental capacity to give consent regarding treatment. Staff also referenced assessing children as 'Gillick competent'.
- All patients who arrive in the department over the age of 65 should have a dementia screening undertaken as part of good practice. The department did not undertake screening for Dementia routinely, though more were being undertaken this year compared to our inspection last year.
- We observed staff explain what they were going to do and asked for the patients consent before they proceeded.

Are urgent and emergency services caring?

Good

Urgent and emergency services were rated as good for caring because:

- The feedback received from service users was positive. We received feedback on site and through comment cards and the majority shared positive experiences of using the service.
- The friends and family test results were consistently above the England average.
- We observed positive and caring interactions between staff and patients throughout the inspection. Staff were caring and compassionate when they spent time with patients.

However there were some areas that could be improved because:

- We received feedback from three patients and relatives on comment cards about staff bedside manner not being appropriate, being too busy and not being kind.

Compassionate care

- Since April 2015 the trust has performed between 92% and 95% on the A&E Friends and Family Test, peaking at 97% with their highest score. The trust currently has a 93% score of patients recommending the service to others which is above the England average of 88%.
- Throughout the inspection we observed examples of care where doctors and nurses were kind and compassionate towards patients and treated them with dignity.
- We observed several examples of staff asking for the persons consent prior to entering their cubicle area, respecting their dignity.

Urgent and emergency services

- We received feedback through comment cards during the inspection, and of the seven cards received four provided us with positive feedback about the service and the staff providing the service. Including that staff were kind, they saw the patients quickly and were supported.
- Of the three comment cards which did not provide positive feedback the feedback related to staff bedside manner not being 'acceptable', patients not feeling listened to, and waiting too long to be seen after x-ray. The majority of the feedback however was positive about the care provided.

Understanding and involvement of patients and those close to them

- We spoke with four relatives regarding the care their family member was receiving. All felt that they were being kept informed and updated by the service on what was happening, and what they should expect regarding their relatives care. However two relatives said that they were waiting for a while before they were told anything.
- The staff working within the department were working to ensure that people did receive regular updates, however they acknowledged when the department was busy that this did not happen in a timely way.

Emotional support

- Clinical nurse specialists were available to provide support to patients in the department and we observed two occasions where the older persons specialist nurse and Parkinson's specialist nurse were consulted to attend the department and speak with patients.
- However there were concerns recorded on the trust's risk register regarding the availability of specialist nurses to attend wards and departments to support patients. Specialist support not being available could impact on the emotional support requirements of the patients.
- Whilst no specific counselling services were available patients and staff had access to the chaplaincy service who offered support to patients and staff seven days per week, and they walked through the department at least once per day, which we observed during our inspection.

Are urgent and emergency services responsive to people's needs?

(for example, to feedback?)

Requires improvement

Urgent and emergency services were rated as requires improvement for being responsive because:

- Whilst there had been a number of improvements in the department since our last inspection, performance in some key indicators had deteriorated.
- The trust was not consistently meeting the four hour standard. On review we found that this was not only affected by reduced bed capacity but in addition, delays in decision to admit times.
- The average total time spent in A&E between December 2014 and November 2015 was 163 minutes, this is longer than the England average 140 minutes.

However we also found:

- The service has significantly improved the working relationship and pathways, assessment and treatment for adults and children with mental health conditions.
- The service has access to both a dementia nurse and language line.
- The waiting area had an improved paediatrics waiting area including a separated play zone with toys and a chair demonstrating the department is responsive to the needs of children.
- A pilot scheme to assess demand on the department was in use with escalation procedures to enable effective dealing with pressure. We observed this utilised well within the department, which helped to improve their responsiveness.
- The trust received 23 complaints between November 2015 and April 2016.

Service planning and delivery to meet the needs of local people

- We saw that the trust had plans to work cohesively with other trusts to ensure responsive care. Links were being established with fellow hospitals and the rotation of staff to ensure demand was being met and that it is therefore responsive to the needs of local people.
- New and improved processes for onsite care of patients with mental health conditions had been established. This meant that the trust was being responsive to patient needs in a timely manner.

Urgent and emergency services

Meeting people's individual needs

- Staff had access to translation services, known as language line, when there is a need to communicate with a patient whose first language is not English.
- Staff had received training in understanding learning disabilities and complex needs. There was a named nurse for learning disabilities available Monday to Friday in addition to available information for staff on the intranet for further support with a patient with complex needs.
- The trust has a named nurse for dementia and the service had access to this person Monday to Friday when needed for advice and guidance. This nurse was an Admiral Dementia nurse and the trust was one of only five in England to have an Admiral Dementia nurse. During the inspection we observed the team in the department refer patients to this nurse, who attended to assess their needs.
- Mental health assessment and pathways had been significantly improved. The psychiatric liaison team now work with the team on a more enhanced basis, with a trial being undertaken where a liaison nurse was placed in the department overnight. The outcome of the trial showed an improved pathway with getting patients with mental health needs to their required place of care as soon as possible.
- We observed the liaison team within the department throughout the time of our inspection, and response times and the working relationship between the two services were much improved since the last inspection.
- Patients had access to leaflets in the waiting area providing information on a variety of health conditions. Further leaflets in alternative languages were also available.
- Whilst there were still notable delays in relation to Child and Adolescent Mental Health service patients (CAMHS), the working relationship between services had been improved since our last inspection.

Access and flow

- The trust has been consistently below the standard of 95% for patients being seen within 4 hours. Whilst bed capacity in the hospital was high during the inspection it was noted that patient records viewed in the ED revealed a delay in decision to admit (DTA) times therefore negatively impacting on flow through the department and onward to a ward.
- Data provided by the trust states that only between 4% and 11% of patients have a DTA within two hours. For the period of January 2016 to February 2016 the trust failed to meet the 95% target on 50 out of 60 days.
- This represented a deteriorating picture in the 4 hour treatment or decision to admit target.
- Median total time in the ED was consistently higher than the England average for all months. The total time in ED (median) between December 2014 and November 2015 was 163 minutes. This was greater than the England average of 140 minutes.
- Since July 2015 until shortly before our inspection the percentage of emergency admissions waiting four to 12 hours to be admitted from the decision to admit until being admitted has been below the England average. At the time of our inspection it was worse than the England average.
- The percentage of people leaving the department before being seen varied between June 2014 and November 2015. It was above the England average for three months between June 2014 and September 2014, but spent most of the time period below the England average with 10 out of the 18 month period. Most recent data suggests fewer patients are leaving before being seen.
- The department was trialling a new system for escalation at the time of our inspection. This draft process allowed the service to assess their status on a red, amber, green or black scale dependent on demand and capacity requirements four times per day. This process when acted upon regularly should alert the trust to any impending red or black alert status for the department. This would then allow the trust to request for additional support to meet service demands. For example additional surgical or medical support
- We observed that this worked effectively during our inspection, as we saw the department declare their black alert status to the trust twice during our inspection. However the process was not entirely followed at the time of declaring black alert. The draft procedure states that when black alert is declared the nurse in charge should call a 'stop the line'. We observed that this did not take place when one black alert was declared.

Learning from complaints and concerns

Urgent and emergency services

- The department received 23 complaints between November 2015 and April 2016. The most common themes of complaints were staff attitude, poor communication amongst staff and relatives and clinical issues.
- Patient responses to the A&E survey were found to be about the same as other trusts. These questions were in relation to responsiveness and included themes such as waiting times and privacy when in the department.

Are urgent and emergency services well-led?

Requires improvement

Urgent and emergency services were rated as requires improvement for being well led because:

- The risk register, identification or risk and management of risk was not yet embedded within the service.
- The quality of governance meeting minutes, and the undertaking of quality measurement and governance within the service was limited.
- There was 3.5 WTE consultants (with one long term sick leave and another about to leave the department) who, whilst dedicated to the service, was not able to deliver good governance due to the medical staffing concerns.
- There was a vision from the trust about this service and how the sustainability of the service would be delivered in the future. However locally the teams were less sighted or aware of this.
- There was an improvement plan in place for the service following our last inspection. Whilst some of the elements of the improvement plan had been implements and key elements of the service had improved, other areas of the service had deteriorated in terms of governance, quality and being effective or responsive.

However we also found:

- Nursing staff had been provided with some training in leadership, and the role of the nurse in charge was now supernumerary which supported their development.
- The leadership and governance for the children's emergency department had sustained good practice and further improved the children's service.

Vision and strategy for this service

- The trust overall has a vision for the emergency department. There were discussions regarding the future of the service and how a long term partnership with another trust in the region may improve staffing and care deliver. At the time of the inspection these plans were not yet formalised but discussions were taking place with the other trust.
- Locally there was limited understanding of the vision for the service and the future. The staff within the department were aware of the plans for a working partnership with a neighbouring trust but did not know at that time what this meant for their service, and were not seeing any visible benefits of a working partnership being in place at the time of the inspection. However the leaders were positive about the option of working with another service in the future and felt that this could be a positive in terms of learning, sharing and improving the service.

Governance, risk management and quality measurement

- The division had monthly governance meetings to look at risk management, governance and quality issues throughout the service. We examined meeting minutes for the last four meetings which demonstrated that issues around governance in the emergency department were discussed.
- The risk register for the service was a joint register with acute medicine though there were three registers within the division; an overall division register and one for medicine and one for emergency care.. The trust acknowledged that there was some confusing language within the division around the three risk registers.
- There were risks on the corporate board assurance framework, rated at 15 or higher, which was a significant concern that related to the emergency department. These were not listed on the emergency department's own risk register. For example mental health crisis response times were identified as a corporate risk. This showed that governance from ward to board was not yet robust.
- The trust wide risk register for January 2016 did not identify any risks relating to the emergency department, the lack of provision of a separate children's department was not identified or seen as a corporate risk, nor was the risks related to medical staffing levels.
- Local governance arrangements were limited. The governance meeting minutes quality was poor and did

not discuss a wide range of governance related matters. For example they did not discuss no or emerging risks or escalation or the lack of local audits taking place in the department.

- The service was not measuring quality within the service effectively. Whilst staff could verbalise where they had made improvements they were not able to demonstrate this through any definitive outcomes, reviews or audits to show the service had improved. For example the staff proudly spoke of their improvements regarding sepsis, and were planning to undertake an audit, however one had not been done despite the measures they had implemented.
- Following the October 2015 inspection there was a clear improvement plan for the service to make significant improvements. Local meetings were taking place to support improvement. However these were not all minuted, and locally the sense was that they were no longer taking place regularly.
- There was a risk that the service governance in its current format could demonstrate that the service was improving. In some key areas deterioration in the service was noted where as in October 2015 many of these areas were not of concern. We were concerned that the trust was not able to demonstrate sustainability in the service improvement.

Leadership of service

- The emergency department was led by an acting clinical lead, a senior sister who also covered the acute medical service, a lead nurse for children's services, and a divisional head nurse.
- The department had implemented a nurse in charge role and a doctor in charge role for each shift. This was identified as a concern at the previous inspection because the staff were not supernumerary or had oversight of the department. At this inspection we saw that the role of nurse or doctor in charge was supernumerary and therefore they now have oversight and are able to lead the department. This was an improvement from the last inspection.
- There was an interim clinical lead for the service following a change in lead since our last inspection. The interim clinical lead was an established consultant however they were challenged in being able to lead the department when they were the only trust consultant employed. There was also a high use of locum middle grades in post. This meant that improvements and sustainability were needed for clinical leadership support for the service.
- The nursing leadership for the adult and children's services had improved, with changes being noted and the nursing leads being more visible and accessible to staff, which was positive.
- The service matron who covered several services, still covered several services but were regularly in the department and was observed to be supporting the nursing staff with their leadership of the service.
- Each shift was led by band six nurses who at the last inspection were not all well developed in leadership skills. At this inspection we were provided with information which supported that these staff had received training and development support in leadership skills. Three band 6 nurses we spoke with told us that they found this course to be beneficial.

Culture within the service

- The culture in the department had continued to provide since our last inspection. There was a notable drive amongst staff and a desire to improve the services provided form a nursing perspective. This was evident through many changes the nurses had made to the service they were providing and this was positive.
- There had been a decline in the culture amongst the medical staff due to the number of changes, staff leaving and pressures to cover the rota with limited resources. We were concerned that the medical staff work group required additional support during this difficult period to try and encourage sustainability.
- Staff openly told us about what they were most proud of and where they felt improvements were still required. We assessed that staff were honest about their challenges and what they felt happened to the service following the last inspection. They spoke openly without fear which was positive.
- We observed the escalation process for capacity issues being used during the inspection. The draft procedure states that when black alert is declared the nurse in charge should call a 'stop the line'. We observed that this did not take place when one of the black alerts was declared. We asked why this was and were informed that the staff did not feel this was required.

- Staff were willing to make improvements, and change the service to deliver good patient care, and this was visible from the changes made since the last inspection. However further work was needed to sustain an all-round good culture amongst all medical and nursing staff in this service.

Public engagement

- The service takes part in the Accident & Emergency inpatient survey and also takes part in the A&E friends and family test. There were comments cards and feedback forms available throughout the service to engage the public in providing feedback or ideas for improving the service.
- All patients were given comment cards upon leaving the service to provide feedback specifically about how the service could improve and seek feedback to implement changes where needed.

Staff engagement

- The department did not undertake any local surveys of staff within the emergency department to understand how staff were feeling at any one time. However there had been an increase in staff meetings and sessions to share information.
- Following the last inspection there was a programme of engagement of the department staff taking place. This was part of an overarching improvement plan to improve the service. Whilst this was noted to have taken place and changes made with engagement of staff, this has not continued and has not maintained effectiveness. For example the medical staff were not all engaged in the service due to the lack and instability of the consultant workforce in the months prior to the inspection. Medical staff we spoke with during the inspection did not all feel engaged in what was taking place in the service.
- Nursing staff engagement was taking place through regular band 6 nurse meetings, which was a positive improvement since the last inspection. However we observed that not all band 6 staff were engaged in the processes for the department and escalation and further work to truly embed staff engagement across the workforce.

Innovation, improvement and sustainability

- The department was implementing a front door model of care in the future with the use of therapist support. The aim was to start early intervention and discharge planning before admission and will allow staff to focus on a clear endpoint at the start of the patient's acute journey.
- The matron had developed a trial escalation protocol for the department to recognise their trigger points for escalation at the earliest opportunities. There was positive feedback about this system and the support this brought the department.

Medical care (including older people's care)

Safe	Good
Effective	Good
Caring	Good
Responsive	Good
Well-led	Good
Overall	Good

Information about the service

The medical division had 19 884 admissions between September 2014 and August 2015with just over half being emergency and the majority of the rest being day case. The largest category of admissions was general medicine with 20% being medical oncology. We visited Apple Tree, Cherry Tree and Walnut Wards as well as the Acute Admissions Unit, Medical Short Stay Unit and the endoscopy unit.

We spoke with 29 members of staff and 21 patients and relatives. We reviewed records, conducted interviews and observed care being given and carried out several Short Observational Framework for Inspection (SOFI) observations of care on Walnut ward.

This was a follow up inspection following concerns identified at our inspections of September 2014, January and October 2015.

Summary of findings

We rated medical services as Good overall.

Learning from incidents was consistently shared with staff across the division and formal mortality and morbidity meetings had been introduced and we observed good infection control practices in relation to hand hygiene and the use of personal protective equipment. All patients had their allergies recorded on their medicines chart and medicines were stored securely though prescription charts were not completed fully for time critical medications such as paracetamol though the trust informed us they would be using new charts in the near future. Staff had a good understanding of safeguarding principles and how to make safeguarding referrals and mandatory training had improved compliance across the division. However, records and risk assessments were mainly correct however they did not always reflect the needs of patients and were not updated to reflect changing care or needs.

Patient outcomes were now measured including the reinstatement of stroke audit data. Local audits plans were comprehensive and had lead clinicians identified. Patient care and pathways followed national guidance and best practice and staff had good knowledge of the Mental Capacity Act 2005 and Deprivation of Liberty Safeguards. However, several patients had been identified as being at risk of malnutrition but we could not see that steps had been taken to address this.

Medical care (including older people's care)

We observed staff interacting in caring and compassionate ways with patients and relatives. Friends and Family Test (FFT) response rates were higher than the England Average and most wards scored highly on the test. Patients we spoke with told us that staff were caring and had kept them involved and up to date with their care and treatment.

The division was meeting referral to treatment times (RTT) and was actively engaging with sustainability and transformation plans and was working collaboratively with neighbouring trusts around the provision of some care including stroke care. There was now a speech and language therapist for patients suffering stroke and other service level agreements for therapy staff providing stroke care and patients had their individual needs met and we saw good practice in relation to dementia care on one ward. However, complaints and concerns were addressed locally. More staff were aware of learning from complaints but half of those we spoke with were unclear on this.

A number of changes in ward leadership and the introduction of a quality matron had become embedded since our last inspection. Governance and risk had been addressed with the implementation of mortality and morbidity meetings and that the findings of root cause analysis was more widely shared. The division was actively engaging with sustainability and transformation plans and collaborative working with other providers. However, we were concerned about the sustainability of some services due to a lack of key staff. Whilst locum staff were in place permanent recruitment had been difficult. The division was aware of these concerns and a review of some specialty care was underway.

Are medical care services safe?

Good

We rated medical services safety as Good because:

- Learning from incidents was consistently shared with staff across the division and formal mortality and morbidity meetings had been introduced.
- We observed good infection control practices in relation to hand hygiene and the use of personal protective equipment.
- All patients had their allergies recorded on their medicines chart and medicines were stored securely.
- Staff had a good understanding of safeguarding principles and how to make safeguarding referrals.
- Modified early warning scores were used consistently and patients reviewed in a timely manner when required.
- Mandatory training had improved compliance across the division.

However, we also found:

- Records and risk assessments were mainly correct however they did not always reflect the needs of patients and were not updated to reflect changing care or needs.
- Prescription charts were not completed fully for time critical medications such as paracetamol though the trust informed us they would be using new charts in the near future.
- There remained some vacancies in medical staffing with a reliance on locum staff in some specialties.

Incidents

- There had been 19 serious incidents (SI) reported between March 2015 and February 2016. The largest category with 9 incidents was pressure ulcers. There had been increases in the prevalence of pressure ulcers in April and September 2015 but this has since fallen. 4 Serious incidents were related to falls with the rest being made up of hospital acquired infection and delay in treatment.
- There had been no never events in the medical division. The definition of a Never Event has changed. Although

each Never Event type has the potential to cause serious patient harm or death, harm is not required to have occurred for an incident to be categorised as a Never Event.
- Trust data showed a reducing number of total falls and falls with harm.
- We reviewed four serious incident reports and found them to be detailed with a full investigation and recommendation for further actions including risk assessing patients routinely and further training. 7 staff we spoke with were aware of a serious incident that had happened within their area and could tell us about learning from the incident, for example, the enhanced monitoring of patients at risk of deterioration.
- 18 staff we spoke with told us they were able to report incidents and were able to discuss the last incident they reported. A new incident reporting system had been put in place and staff had training to ensure they could use it properly.
- Incidents were discussed at staff meetings and 'safety huddles' during shifts. We observed this happening on one occasion during the inspection.
- At our last inspection there was no mortality and morbidity meetings held within the medical division. At this inspection mortality and morbidity meetings were being held regularly. Minutes showed that a sample of cases were reviewed which considered all factors and identified any learning from the case being discussed.
- The Director of Nursing chaired a weekly meeting of any incidents graded moderate and above. Minutes showed there to be clear actions identified and that Duty of Candour was considered for each incident.
- All staff we spoke with were aware of their responsibilities under Duty of Candour. During our inspection, an incident was identified that may trigger this requirement. We saw that the trust took appropriate action to report the incident and spoke promptly with the patient and relatives and offered an apology and offered a face to face meeting. They kept them up to date throughout the course of our inspection.

Safety thermometer

- Safety thermometer data was displayed on all wards and was easily visible for patients and staff to view.
- Data available on Apple Tree ward showed that there had been one pressure ulcer which was attributed to community acquired, four falls and three medicines incidents.
- For Cherry Tree ward hand hygiene compliance had been 99% with no falls and no and no hospital acquired infections. For a previous month there had been 10 falls with no harm. Staff were able to tell us the action they took in relation to the number of falls. This included review by the falls lead for the trust. Investigation showed that the majority happened in the morning and additional safeguards were out in place.
- Walnut ward data showed hand hygiene compliance at 100%, five falls without harm and no hospital acquired pressure ulcers.
- This data was also presented to the board as part of the ward dashboards and exception reporting.
- Safety thermometer data displayed looked consistent with data supplied in board papers and to commissioners.

Cleanliness, infection control and hygiene

- Ward and clinical areas were visibly clean. There were separate cleaning rotas available which showed that areas had been cleaned each day or shift. Regular cleaning audits showed greater than 95% compliance for cleanliness.
- Curtains around the beds had the date when they were first used and were changed if dirty, were up longer than a given period or if there was risk of infection.
- We observed equipment being cleaned and sanitised properly between patient uses.
- "I am clean" stickers were affixed to equipment that had been decontaminated and ready for use.
- Staff used personal protective equipment appropriately when caring for patients or entering side rooms that were being used for the control of infection. Gloves, aprons and other equipment was readily available for staff and visitors as was alcohol hand gel.
- Compliance with hand hygiene and personal protective equipment usage for medical wards showed high levels of compliance of 95% and greater for all medical wards. .
- Patients with an identified infection or potential infection were appropriately identified and cared for in side rooms in line with trust policy and infection prevention and control guidance.

Environment and equipment

- Equipment was properly checked and maintained in line with manufacturers' guidance and recommendations.

- Electrical equipment that required portable appliance testing (PAT) was appropriately tested.
- Emergency equipment including resuscitation equipment was properly checked in line with policy. Regular audits were completed that showed emergency equipment was checked in line with trust policy.
- We checked emergency equipment on all wards and found it to be correct and in line with trust policy.
- The environment was well maintained though cluttered on some wards with trolleys and medical equipment. On one ward we saw an empty bed blocking a fire escape for 20 minutes whilst staff moved other furniture about. Staff told us it was left where it was as it was the only place to keep the bed " out of the way".
- The layout of side rooms on the wards made it difficult to observe patients, particularly if the door needed to be kept closed. This meant staff had to regularly attend patients to ensure their safety and comfort. The trust had risk assessed patients using side rooms due to these concerns.

Medicines

- All medicines were stored securely including controlled medicines.
- Lessons were learnt from medicine incidents and shared across the trust in order to improve patient safety. The introduction of a new system for recording medicine incidents had improved the overall quality of available information. The Medication Safety Committee identified any emerging themes in medicine safety. Information and learning was then shared across the trust in a Medication Safety Bulletin. Recent learning focussed on improving the prescribing of IV paracetamol (April 2016) and also learning points from recent insulin incidents (May 2016). We spoke with nursing staff on three wards who told us that there were definite improvements in learning from medicine incidents. For example, there was an increase in reported medicine incidents about particular insulin. A multidisciplinary team looked at the reported incidents for this medicine and assessed what changes could be made to prevent them happening again. This resulted in simplifying the prescription chart for insulin which was due to be made available on wards following further education and training.
- Checks to ensure that any known allergies or sensitivities to medicines were recorded accurately on patients' prescription charts within 24 hours of admission. This information is important to prevent a medicine being given in error and causing harm to a patient. We checked 14 patients' prescription charts and found that all 14 charts documented the patients' allergy status which followed the trust policy.
- At the time of the inspection the times for medicine administration were not always documented clearly on prescription charts. This sometimes made it difficult to determine at what time certain medicines had been given to a patient. Whilst for many medicines this is not critical there are some medicines such as pain relief where it is important to know what time the medicine was given. This is in order to determine whether a patient can safely be given another dose. However, we were informed that action was being taken with the development of a new prescription chart. Following the inspection the trust informed us they would be changing medicines charts to allow more consistent recording of administration times.
- The recent introduction of medicine waste bins on each ward ensured that medicines were removed immediately from medicine cupboards when they were no longer required. This prevented unwanted medicines remaining in clinic rooms.
- We observed the availability of a student newsletter dated May 2016 which reminded nursing students to follow hospital policy and NMC guidelines when administering medicines to patients.
- We observed the ward pharmacist checking a prescription chart for a new patient to ensure that the medicines were available on the ward and prescribed correctly. They also highlighted on the prescription chart that the patient was prescribed insulin as a reminder to nursing staff.

Records

- Records were stored outside patient bays and additional records at the end of the bed. Notes and records were not always secure and were stored in unlocked trolleys in corridors.
- Most records were kept up to date and accurately reflected the needs of patients using the service. All 17 records we reviewed on Apple Tree, Cherry Tree and the acute medical unit were up to date and reflective of care needs. However, on Walnut ward 5 records we reviewed were not always up to date and reflective of need. On

three records the patient had been identified at risk of falling but nor care plan had been put in place or the assessment reviewed. In 2 further records, pressure ulcer risk assessments had not been reviewed for over 2 weeks despite a change in the patient's condition and one did not take in to account a leg ulcer.

- In three records across the division, patients with complex wound care needs did not have a care plan updated regularly. Two of the care plans had not been updated or evaluated in two weeks. The last entry indicated that the patient still had a wound that required dressing.
- In 8 records risk assessments were completed but not always signed by the person completing the assessment.

Safeguarding

- Safeguarding information was available in ward and clinical areas. 17 Staff we spoke with were confident in the process of when to report a safeguarding and what constituted a safeguarding concern.
- Staff were clear of their responsibilities in reporting safeguarding concerns. All staff we spoke with knew the safeguarding lead for the trust and where to seek advice if required.
- The safeguarding lead was on a ward during our inspection. We saw them assisting staff with a Deprivation of Liberty application for a patient on the ward. Staff told us the safeguarding lead was visible and regularly visited wards.
- Latest available data showed that 97% of staff had completed safeguarding level 2 training.

Mandatory training

- Mandatory training included immediate life support, moving and handling and infection prevention amongst others.
- Senior staff told us that there had been additional mandatory training to ensure staff were up to date with training. Data available at the time of inspection showed that wards had greater than 90% compliance with mandatory training for staff. On Apple Tree ward the figure was 91%, Cherry Tree ward was 96%. Board level data confirmed an improvement in the number of staff completing mandatory training.
- Agency staff completed an induction checklist before commencing work. Two agency staff said that they had been orientated to the ward before commencing work. They worked regularly on the wards and were confident in the processes used. Checklists for agency workers were completed on two wards that were checked.

Assessing and responding to patient risk

- Modified Early Warning Scores MEWS) were used to monitor a patient's level of acuity and to respond appropriately if they were at risk of deterioration. Of 24 records reviewed, all had appropriately completed MEWS scores. Records showed that the patients were referred to the outreach team or hospital at night in the event of a high MEWS score. Patients were reviewed and a care plan put in place to manage their condition.
- Data provided by the trust indicated a falling number of falls with harm across medical wards.
- The Critical Care Outreach Team conducted audits on the usage of MEWS across the trust including the medical division in line with NICE CG50 guidance. Overall results showed improving compliance with MEWS
- All MEWS scores we reviewed during the inspection had been correctly calculated and escalated where appropriate. Observations were recorded at intervals as determined by the tool and/ or medical review.
- Critical care outreach offered a service during the ward until 8pm. Out of hours, support was offered by the clinical site team.
- The Situation Background Assessment Recommendation (SBAR) tool was used for sharing concise and focused clinical information between teams on medical wards.
- All patients in the acute assessment unit were reviewed daily. There were clinical pathways in place for patients to be transferred to other acute providers if they required specialist care, for example primary percutaneous coronary intervention where this had not been identified prior to admission at Hinchingbrooke.

Nursing staffing

- Wards had planned and actual staffing numbers displayed at the entrance to the ward. We found the planned and actual number of staff on duty to be accurate on all the wards inspected.

- We reviewed rotas for three months. They showed that staffing levels were maintained throughout the period with only occasional fluctuations. Ward managers told us that this was due to sickness with insufficient time to arrange cover.
- Nursing handovers were structured and gave the necessary clinical information to enable safe and effective care of patients between shifts.
- The safer nursing care tool (SNCT) had been used to evaluate staffing number in clinical areas which had seen a change in staffing in some areas.
- There were small number of nurse vacancies across the division with 12 whole time equivalent vacancies for qualified nursing staff. This was partly due to a staffing uplift on Cherry tree ward to manage an additional 4 beds.
- Senior staff told us that, wherever possible, they used agency staff that were familiar with the ward and had worked there previously. Agency staff received an induction to the ward they were working on. Records seen on the ward confirmed this.
- Staff were able to describe the process used to request additional staff and that most requests were authorised.
- Sickness rates were around 5% for most medical wards with the exception of Walnut ward that had a 1.8% sickness rate according to January 2016 board reports.

Medical staffing

- There were more consultants than the England average that made up 39% of the medical staffing. There were significantly less middle grade and registrars at 22% than the England average of 45%. There were more junior doctors at the trust at 40% compared to the England average of 22%.
- There were a number of consultant level vacancies across the division including stroke and acute physicians. Senior clinical staff and managers told us that they mitigated this by using long term locum's who knew the hospitals and the processes. Since our last inspection the trust had employed 2 locum consultants and advertised for a full time stroke consultant though they had been unable to recruit to this position. There continued to be vacancies for acute physicians.
- At our last inspection there here was 1.3 WTE respiratory consultants in place at the trust made up of two consultants who worked between the trust and a neighbouring trust. At this inspection there was an additional locum consultant to support the respiratory service. When on leave or sickness, the respiratory consultant cover could be reduced to three days a week. There was no respiratory cover routinely at weekends. During our inspection patients requiring non-invasive ventilation were cared for on the ward and we were told tracheostomy patients also were cared for on the ward. When no respiratory consultant was available, acute physicians cared for patients though the initiation of acute non-invasive ventilation was supervised by a respiratory physician or consultant intensivist.
- Medical Wards in the Trust had medically led handovers on a twice daily basis at 08:00 and 20:00 which gave appropriate detail and identified any patients who may be outlying on other wards.
- There were consultant led ward rounds daily for patients on medical wards. A 24 hour rota to manage emergencies in the endoscopy suite was in place. Junior medical staff we spoke with told us that they were well supported at the trust and they had access to good teaching. Two doctors told us they had received a comprehensive induction when starting at the trust.

Major incident awareness and training

- There was major incident policy in place for the trust and a business continuity plan also in place. This had been reviewed since our last inspection. At our last inspection staff were not fully aware of the policy and their responsibilities under it and this remained the same at this inspection.
- Staff in the Acute Assessment Unit (AAU) had a good understanding of the major incident policy as the AAU effectively became part of the emergency department in the event of a major incident. A major incident protocol was in place for the management of the unit as part of an emergency department.
- A winter escalation plan was in place and part of a wider health economy plan to manage capacity. This had been reviewed ahead of winter 2016 and took into account other work being completed such as the sustainability and transformation plans.

Are medical care services effective?

Good

Medical services effectiveness was rated as Good because:

- Patient outcomes were now measured including the reinstatement of stroke audit data.
- Local audits plans were comprehensive and had lead clinicians identified.
- Patient care and pathways followed national guidance and best practice.
- Seven day services were in place for a number of services and despite uplift in consultant cover there remained a lack of consultant cover in some specialties at weekends and out of hours.
- We observed correctly completed Mental Capacity Act (MCA) assessments. Staff had good knowledge of the MCA and Deprivation of Liberty Safeguards. Training figures had improved for this.
- There was effective multidisciplinary working both with hospital staff and staff in other services.

However, we also found:

- Several patients had been identified as being at risk of malnutrition but we could not see that steps had been taken to address this.
- Only 16% of middle grade doctors had received an appraisal.

Evidence-based care and treatment

- At our last inspection the Trust had a 2015/16 clinical audit plan but there is no evidence that this had been formally agreed or signed off by a board sub-committee. There was no indication of timeframes for completion of local or national audits within this plan. At this inspection there as a full audit plan in place for clinical audit which identified lead clinicians.
- At our last inspection local care pathways for stroke and cardiology followed best practice and NICE guidance including CG80 though potential conflicts with this guidance arose from the commissioning of speech and language therapy in stroke services. At this inspection, the reinstatement of speech and language therapy and physiotherapy meant that pathways within the medical division followed national guidance and best practice.
- There were specific pathways for patients in ambulatory care that followed best practice for example the cellulitis and pulmonary embolism.
- At our last inspection some policies were out of date. On this inspection policies had been reviewed and updated as required and signed off by the appropriate person and committee.
- Staff on both Apple, Cherry Tree and Medical Short Stay wards, discussed how local audits were completed; daily, weekly, bi-monthly and monthly for ward level data, including safety thermometer data, using the electronic audit system,. Staff were able to show us the results of local audit and describe any actions they had taken in response to audits. This included additional support with some staff one the S-BAR tool (a tool used for assessing a patient's condition and planning their care).
- The National Institute of Health and Clinical Excellence (NICE) guidance states that all patients, on admission, receive an assessment of venous thromboembolism (VTE) and bleeding risk. Trust data showed a compliance rate of 98% with the national average being 96%

Pain relief

- Pain relief was given in a timely way for all the patients we reviewed.
- A specialist acute pain team was available for patients requiring specialist input. This service was available Monday to Friday with an on call anaesthetist covering out of hours and weekends..
- Analgesia was administered in a number of ways to ensure it was able to meet the patient's needs. This included oral pain relief, via injection or through a pump or syringe driver.
- A pain tool was available to assess patients' pain. In 12 records we reviewed, only 2 had clear use of a pain tool to assess a patient's pain.

Nutrition and hydration

- Patients were assisted with their fluid and nutritional needs. Assistance was given promptly at mealtimes if required with additional staff available to help them. Patients who may need assistance were clearly identified.
- Patients who were not able to gain enough nutrition orally were supported by other forms of nutrition including enteral feeding via a percutaneous endoscopic gastrostomy (PEG) and total parenteral nutrition (TPN). TPN was prepared in pharmacy for administration on the wards.
- At our last inspection we found cases were mouth care was not carried out as often as required. The trust had

undertaken further teaching and mentoring of staff in this basic nursing skill. Patients we reviewed on this inspection had received appropriate mouth care and assistance.
- On Walnut ward we found 3 records where a patient had been scored as at risk of malnutrition. The care plan indicated that they should be referred to a dietician and other measures taken such as monitoring their food and fluid intake. There was no evidence in the records that this had occurred.
- The trust had identified that they required additional support for the instigation of feeding regimes and had ensured a dietician was in place to assist with emergency feed regimes.

Patient outcomes

- Readmission rates for the trust for elective admissions were better than the England average overall with medical oncology and general medicine having a much lower risk though medical haematology was above the England average.
- Readmission rates for non elective (emergency) admissions were slightly better than the England average.
- At our last inspection SSNAP audit data was not being collected. At this inspection the trust had reinstated SSNAP data collection and a full quarter was submitted between January and March 2016. This data was published in June 2016 and showed that, due to the size of the unit, there were too few patients added to the database to give a benchmarking score for this time frame. It did however demonstrate that the trust was again collecting this audit data.
- Myocardial Ischaemia National Audit Project (MINAP) data showed deterioration in performance between 2012/13 and 2013/14 for patients seen by a cardiologist and being admitted to a cardiac ward and a slight improvement in the number of patients being referred for angiography. The 2013/ 14 data showed that the trust performed better than the England average for patients reviewed by a cardiologist but worse than the England average for patients being admitted to a cardiac ward and number of patients being referred for angiography. Since this data, a number of new pathways had been created between neighbouring trusts to manage patients with heart conditions.
- The Joint Advisory Group on GI Endoscopy (JAG) had awarded the endoscopy unit accreditation in September 2015.
- National Diabetes Inpatient Audit (NaDIA) for 2015 showed that the trust performed broadly in line with the England average for most measures. The number of nurse specialists and consultant hours were better than the England average but the number of dietician hours for diabetic patients was worse than the England average. The number of diabetic patients who had a medication error was worse than the England average but the number of patients with a low blood sugar event (hypoglycaemia) was better than the England average.

Competent staff

- Completion of appraisal rates on Apple Tree ward was 78% in May 2016 though the rest of the staff had their appraisal booked. Walnut ward appraisal rate was 90% and Cherry Tree at 95%.
- In terms of medical staffing for the period 2014/15 83% of the Trust's 56 Consultants had achieved appraisal sign-off. 16% of Staff Grade, Speciality or Associate Specialist Doctors (11) had achieved appraisal sign off within the Trust's timeframe.
- Clinical nurse educators had been employed to work with staff proactively and also to work in areas where there had been identified concerns.
- There was a full induction programme for staff joining the wards. 1 new member of staff confirmed they had received induction, and felt well supported during their induction period.
- We saw that a number of competency assessments had been completed on wards such as intravenous and medicines competencies. On one ward a number of these assessments were dated June 2013 with no indication when they should be reviewed.
- A number of specialist nurses supported clinical services including cardiology and respiratory medicine. Additionally trained nurses from Apple Tree ward supported other wards with swallow assessments.

Multidisciplinary working

- Medical wards had a thirty minute daily 'huddle meeting' which was a mixed nursing and medical staff and allied health professional meeting in the doctor's office to discuss any concerns and plan discharges. This was in addition to the 08:00 and 20:00 handover meetings.

- White board rounds were completed daily by the MDT and this was also attended on occasion by community staff to discuss complex discharges and care.
- There were local and regional weekly MDT's to discuss complex patients and care planning. We attended one of the MDT meetings and found it to be comprehensive with treatment options discussed and plans made. The patient was considered as an individual throughout MDT discussions.
- Ward rounds routinely comprised members of the MDT to effectively manage patient pathways and plan discharges.
- Neurological multidisciplinary team meetings (MDT) took place every Wednesday. Meetings were attended by doctors, nurses, physiotherapists, community nurses and social workers, amongst others. The meetings enabled discharge planning, rehabilitation goals and referrals to be discussed and promote patient outcomes.

Seven-day services

- There were clear on call arrangements for medical staff. Medical and nursing staff we spoke with told us that that there were no problems calling in on call staff.
- There were a number of vacancies for consultant staff and limited cover for some specialties such as respiratory medicine and stroke care. These patients would be seen by acute physicians in the absence of these consultants who word a seven day rota with approximately one weekend in four. All patients that required consultant review at weekends were seen by the on call team.
- Physiotherapy staff worked seven days providing care to ward patients based on need. There was an on call physiotherapy service for patients requiring chest physiotherapy.
- The discharge planning team worked weekends with effect from April 2015 to facilitate timely discharges which staff told us contributed to the reduction in length of stay.
- There was on call pharmacy and radiology services over the weekend and out of hours. Staff we spoke with told us that all essential investigations and support could be ordered and carried out promptly out of hours. Pharmacy services were provided to the Medical Short Stay Unit for three hours on a Saturday morning.

Access to information

- Staff were able to access medical records as and when required which were available to ward staff.
- Test results including radiology and blood tests were usually received promptly according to the staff. Senior managers had expressed some concern over delays in pathology results though ward staff told us they available via an online system.
- During our last inspection a patient with complex needs was admitted from a nearby trust. The patient did not arrive with all the information required to manage their care which meant staff had to work with limited information. At this inspection we were told that the situation had improved and that all patients had the correct information when they returned from another trust. We reviewed two patients who had been repatriated from a neighbouring trust and found there to be a full handover and relevant documentation.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- 9 records reviewed showed that patients signed consent forms before procedures were undertaken. Five patients we spoke with told us they had been asked for consent prior to a procedure and where given the necessary information.
- We observed verbal consent being obtained before care and treatment was given.
- At our last inspection not all staff had received training for MCA and DoLS . At this inspection, 95% of staff had received training in MCA and DoLS. We spoke with 12 staff about the MCA. All had a good knowledge of the Act and their responsibilities,
- 9 Records showed that the Mental Capacity Act had been considered and properly applied. There was good support from safeguarding lead if required.
- We reviewed 3 deprivation of liberty applications and found them to be complete. Staff told us the problem with applications was timely review by the local authority.

Are medical care services caring?

Good

Caring was good within the medical division because:

- We observed staff interacting in caring and compassionate ways with patients and relatives.

- Friends and Family Test (FFT) response rates were higher than the England Average and most wards scored highly on the test.
- Patients we spoke with told us that staff were caring and had kept them involved and up to date with their care and treatment.
- Information received from comments cards were uniformly positive about the quality of care received. Over 40 comments received were positive.

Compassionate care

- Friends and family test (FFT) data for July 2014 to June 2015 showed the trust had a much higher response rate at 63% than the England average of 37%.
- The trust Friends and Family Test (FFT) records the percentage of patients who would recommend the service to their friends or family. The Friends and Family Test performance was 97% between January 2015 and January 2016, which is better than the England average of 96% with the exception of June 2015 and September 2015 where the trust scored less than the England average.
- Apple Tree Ward consistently scored 100% with the exception of October 2015 when it scored 89%. Walnut ward scored consistently above 95% with the exception of June 2015 when it scored 82%. Cherry Tree Ward results were variable with three occasions between July 2015 to January 2016 scoring below 90%. For April 2016, Walnut ward FFT was 91%.
- Patients we spoke with during the course of the inspection, comment cards and listening event were overwhelmingly positive about the care and treatment they received.
- We carried out a Short Observational Framework for Inspection (SOFI) observation on Walnut Ward at the trust. We observed positive staff engagement with patients though there were periods of up to 25 minutes when no member of staff entered the bay.
- Throughout our inspection, we observed patients being treated with compassion, dignity, and respect at all times. Staff drew curtains and respected patient privacy when supporting patients with personal care. Patients were greeted by name and staff introduced themselves. Staff asked patients consent before caring out personal care. Medical staff routinely used Chaperones.
- Patients consistently gave very positive feedback about the staff and the hospital. One Patient told us "the staff are tremendous". Another said, "they can't do enough for you, they are always there to help me".

Understanding and involvement of patients and those close to them

- Patients and relatives we spoke with told us that they were involved with their care and making decisions though one person said that despite daily ward rounds, they felt the plan changed each time.
- We observed staff discussing care and discharge arrangements with a patient and their carers.
- 21 patients we spoke to on Apple Tree Ward, Cherry Tree Ward, Walnut and the acute assessment unit (AAU) told us that staff are very positive and had time to explain anything they didn't understand and met all their personal needs
- Patients and their families told us that they were involved in making decisions around their care and that they knew what was going to happen to them.
- We observed staff discussing care plans with a patient and his carers. This involved a move to a neighbouring hospital for specialist care. The staff discussed how this would impact on the patient's family and found a way of ensuring that relatives could still visit the patient using a community transport service. Staff considered all aspects of the care the patient would receive and explained in detail what they could expect following the treatment.

Emotional support

- We spoke to five patients, three told us that staff always had time to talk with and support them.
- The hospital has an Admiral Nurse who is one of only five in the country. Admiral Nurses are governed and monitored by Dementia UK and provide crucial specialist support to people with dementia. This means thatthe patient and their family and cares can receive expert practical and emotional care and support in relation to dementia care.
- Patients had access to the trust Chaplain to support their spiritual wellbeing. All the patients we spoke with who had received a visit from the chaplaincy team spoke very highly of the service and how it supported them.

- Nurse specialists gave patients contact numbers so that they always had a point of contact when not in hospital.
- We observed staff moving a patient so that their bed was nearest the window. Staff told us the patient had been in for some time and felt that a view outside may improve their spirits.
- A member of staff told us of an occasion when two nurses gave up their lunch time to take an unwell patient to enjoy the sunshine in the garden during their lunch break.

Are medical care services responsive?

Good

Medical services were Good for responsive because:

- The division was meeting referral to treatment times (RTT) and there had been a reduction in length of stay over the last year.
- There was now a speech and language therapist for patients suffering stroke and other service level agreements for therapy staff providing stroke care.
- The division was actively engaging with sustainability and transformation plans and was working collaboratively with neighbouring trusts around the provision of some care including stroke care.
- Patients had their individual needs met and we saw good practice in relation to dementia care on one ward and an Admiral Nurse provided individualised care and support for patients living with dementia.
- The Admiral Nurse and the frailty nurse reviewed patients in the short stay unit to identify early any assistance or specialist care that patients may need.
- 'Nurse in charge' armbands were in use so patients and visitors could easily identify who was responsible for the ward.

However, we also found:

- Half of the staff we spoke with were unsure of any learning from complaints within their clinical area.
- There were 252 bed moves after 10pm at night though this included patients being transferred from the acute assessment unit.

Service planning and delivery to meet the needs of local people

- The trust was actively contributing to the Cambridgeshire sustainability and transformation plan. This included ongoing work to consider further collaboration and partnership with a neighbouring acute trust.
- Some pathways were being reviewed in conjunction with neighbouring providers to ensure skills were shared and that pathways offered the best possible care to patients. This included the stroke pathway.
- The ambulatory care unit provided care to patients directed there from the emergency department as well as GP referrals. It provided prompt treatment and had a direct impact on the reduction in the length of stay of patients at the trust.
- The division had a winter plan and contingency arrangements in the event of high demand for care and treatment. This included close working with other acute and community providers to manage anticipated demand.
- Meeting minutes showed that the division was managing delayed transfers of care (DToC) by utilising community beds closer to patient's homes when they did not require an acute hospital bed.

Access and flow

- The trust was consistently meeting Referral to Treatment Time (RTT) for medicine. Between February2015 and January 2016 showed all specialties were meeting referral to treatment standards at 100% including general medicine, gastroenterology, cardiology and dermatology.
- Data for June 2015 to March 2016 showed that the trust was reaching 80-89% compliance with the 62 day treatment target for cancer patients, delays were reported as due to radiology provision within the Trust, delays in report returns from the pathology and delayed referral receipt from neighbouring trusts. The trust had an action plan in place to address these issues.
- Between September 2014 and August 2105, length of stay for elective admissions was better than the England average at 3.5 days compared to the England average of 3.8 days. Length of stay was better than the England average for clinical haematology and medical oncology though slightly worse for general medicine.

- Length of stay for non elective (emergency) admissions was better overall than the England average at 5.7 days compared to the England average 6.8 days. General medicine was better than the England average with gastroenterology worse than the England average.
- Between February 2015 and January 2016, 82% of patients did not move wards during their admission, 14% had one bed move and 4% moved twice or more which means disruption to patient care is reduced, risk of spreading infections is reduced and patients become familiar and comfortable with the nursing staff providing their care
- There were 252 bed moves after 10pm at night though this included patients being transferred from the acute assessment unit.
- Trust data showed that length of stay had been reduced by one day in the over the last year. There were increasing delayed discharges and transfer of care. At the time of our inspection there were between 8 and 10 delayed transfers. Delayed transfers where validated in a weekly meeting and any barriers to discharge considered and action agreed. Whilst the number of delayed transfers were on a slightly reducing trajectory since January 2016, staff told us that they remained vigilant in the management of delayed transfers of care.
- The discharge and operations team met daily with the community services managers to identify patients able to go home and make arrangements for care to be provided at home where possible. There was a daily meeting with community providers to discuss patients who had been medically fit for discharge for more than 10 days. An escalation plan showed the steps to take such as further consultation with the CCG if delayed transfers were greater than 10%.
- Patients referred by their GP to the AAU and ambulatory care would then be transferred to the short stay unit (SSU) if they were expected to be discharged within 72 hours. However, during our inspection we found a patient who had been on the short stay unit for several weeks.
- Bed capacity meetings were held three times per day with attendance by doctors as required.
- The discharge planning team covered weekends. To help facilitate complex discharges out of hours.
- There were small numbers of medical outliers on non medical wards. Each patient remained under the care of their consultant and was reviewed daily unless otherwise agreed. Outlying patients were tracked through admissions as well as through handover. Out of hours, the on call team tracked outlying patients. Junior medical staff we spoke with were aware of the location of any medical patient's that were being care for on non medical wards.

Meeting people's individual needs

- Bariatric equipment was available within the medical division. If additional resource was required, staff told us it could quickly be arranged.
- A member of staff told us of an occasion when two nurses gave up their lunch time to take an unwell patient to enjoy the sunshine in the garden during their lunch break
- Physiotherapy staff had ensured that their rota meant that female staff were able to attend a patient who had specifically requested female staff.
- Patients who had dementia were identified by a blue butterfly picture above their bed to enable staff to quickly identify patients who may need extra support with personal care. The Admiral nurse, one of only five in acute hospitals in England, provided support for staff, patients and relatives in caring for patients living with dementia. They and the frailty nurse regularly attended the MSSU to identify patients who required additional support and to assess patients promptly to facilitate discharge.
- Staff had received training in caring for patients with a learning disability and there was a learning disability passport of care in use.
- Patients at risk of falling were identified by a leaf picture above their bed so that staff were easily able to identify patients who needed assistance with walking around
- Patients who needed assistance at meal times were given their food on red trays and water jugs had red lids to identify patients who needed extra support with eating and drinking. Staff prioritised these patients for assistance with meals.
- At our last inspection there was limited access to speech and language therapy for patients following stroke. On this inspection we found that a speech and language therapist had been recruited to manage dysphasia in patients suffering stroke and that 4 more nursing staff on Apple Tree ward had been trained to undertake swallow assessments and supported the rest of the hospital with tis if required. .
- At our last inspection a service level agreement for the commissioning of physiotherapy meant that care was

only commissioned for 10 days though staff told us they went beyond this to provide care. On this inspection physiotherapy was provided to all stroke patients for however long they required it.
- Telephone translation services were available and all staff we spoke with were aware of how to access them though we were told they were infrequently used.
- "You say, we did" boards were available on each ward. These included managing a noisy ward at night with the mitigation the ward had taken such as providing ear plugs.
- Staff told us that one theme that had persisted was that relatives and patients did not always know who was in charge of a ward. In response to this shift leaders now wore a red 'Nurse in charge' armband that clearly identified them as the shift leader.
- Frailty assessments were completed on the wards and older people's specialist nurses provided expert advice and care for older people. They formed part of the multidisciplinary team in planning the care and discharge of older patients.

Learning from complaints and concerns

- All the staff we spoke with were aware of the complaints policy and how to assist people who wished to make a complaint or raise a concern.
- We reviewed the most recent complaint on three wards and found that learning had been clearly identified from the complaints. We spoke with 16 staff about complaints. 8 staff told us they had received feedback about complaints that had happened in their area whereas 8 staff were unsure of the last complaint or learning from complaints.
- Two wards meeting minutes showed that complaints were considered as part of the agenda. Safety huddles were also used to consider any complaints and concerns received.
- On Apple Tree Ward, Cherry Tree Ward, Walnut and the acute assessment unit (AAU) the main patient complaints centred on noise in the wards in the evenings from call bells and patients being moved about. Nursing staff were encouraged to close bay doors at night to try to keep unavoidable noise contained
- We saw "you said" "we did" posters displayed in relation to complaints and comments from patients. These were discussed at daily whiteboard meetings.

Are medical care services well-led?

Good

Medial services required improvement in terms of being well led because:

- A number of changes in ward leadership and the introduction of a quality matron had become embedded since our last inspection.
- Governance and risk had been addressed with the implementation of mortality and morbidity meetings and that the findings of root cause analysis was more widely shared.
- Risk management was owned by the division. Senior managers had a good view of their current risks and there was a comprehensive risk register in place which was updated and risks mitigated.
- The division was actively engaging with sustainability and transformation plans and collaborative working with other providers.
- Staff spoke highly about the culture of the service and were positive about the changes that had been made in the preceding year.

However, we also found:

- We were concerned about the sustainability of some services due to a lack of key staff, such as a permanent stroke consultant. Whilst locum staff were in place permanent recruitment had been difficult. The division was aware of these concerns and a review of some specialty care was underway.

Vision and strategy for this service

- Senior clinical staff and managers were aware of the strategy for the division and the trust as a whole. There were plans to consider how the trust would work with a neighbouring trust to ensure services remained sustainable. All the staff we spoke with were aware of the early plans for this. Whilst some of the staff were concerned about the implications, most were positive about the plans.
- At our last inspection staff were able to tell us about the trusts vision but were not sure of a vision or strategy for the division and this remained the same during this inspection. The trust values and vision were displayed in a number of the clinical areas that we visited.

- Staff on some wards considered their own values and that of their ward. At a ward meeting on Cherry Tree, staff discussed how they would like their ward to function and what values they felt most important.

Governance, risk management and quality measurement

- Senior clinicians and managers were sighted on their main risks including medical staffing, inpatient falls and medication incidents. A comprehensive risk register was in place. Ward managers told us they felt able to raise concerns and have them included on the risk register.
- The division had reinstated audit data collection for stroke patients which allowed the trust to measure and benchmark their stroke services. There was a review of the stroke service and collaboration with a neighbouring trust to improve services.
- At our last inspection there were no regular morbidity and mortality meetings within medical services. At this inspection we found that morbidity and mortality meetings were now taking place. Minutes showed that there was discussion around identified cases and any learning identified. .
- The divisional quality matron received a copy of every incident form and attended a monthly risk meeting (the Quality and Risk Meeting) to discuss any issues and identify remedial actions. Minutes showed the items discussed, the outcome and who was responsible for completing the action.
- There was a comprehensive risk register in place. The division owned the risk register and senior managers were aware of the risks in their division. The risk regi9ster was regularly updated and we saw that mitigations had been identified for issues on the register. .
- A full ward dashboard was available to ward managers and matrons. This was also reported at divisional meetings and was fed though subcommittee to the board. All ward managers we spoke with had a good understanding of the data on their dashboard as did senior managers within the division.
- Clinical incident root cause analysis (RCA) reports were discussed with complaints within Governance minutes. At our last inspection how these were shared with all levels of staff. At this inspection we found that outcomes of root cause analysis was shared at ward level and senior and junior staff were aware of the last incident in on the ward. However, they were unable to tell us how they would share learning more widely if they identified a local concern on a ward other than saying they would feed it back to their matron. They were not aware of the process after this for sharing that information.
- Ward staff had access to audit data and were able to discuss the implications for the data for their area. They told us about themes identified and what actions were planned or taken to address any concerns.

Leadership of service

- The division was led by a clinical director, an associate director of nursing and a senior operations manager. They were supported by matrons and senor clinicians in the management of the service.
- There was increased stability in senior appointments since our last inspection. The chief executive had been in place for 9 months. Staff spoke highly of the executive team, one of which was a 'link executive' to each ward. Staff told us that the team were visible on the wards, particularly the link executive though two members of staff we spoke with were unsure as to the purpose of the link executive.
- Ward managers who had been in post for a short period at our last inspection in October 2015. At this inspection the managers had been in post for a longer period. Staff told us that they felt the wards and management were now more stable.
- There was some concern what the proposed joint working with a neighbouring trust might mean for local leadership at Hinchingbrooke. Staff told us they wanted to maintain the leadership at the trust and within the division.
- Quality matrons had been in place for a longer period in clinical areas and leadership on medical wards was more stable with ward managers being in place for more than 7 months. Ward staff told us they felt well supported by the ward managers

Culture within the service

- The 'Stop the Line' initiative was to encourage an open culture and give staff the confidence to report when there was cause for concern and ensured a senior manager reviewed the situation. This had been initiated by a doctor shortly before our inspection due to staffing concerns and volume of patients to be seen. This had

resulted in a board member attending reconsidering staffing across the trust to support the area. Several staff told us that 'stop the line' could be better promoted to patients.
- There had been additional 'stop them line' on Cherry Tree ward following a patient fall. Staff had recognised there was still risk in the area. They told us they received adequate support from the director who attended.
- A new 'Freedom to speak up' [Whistleblowing] policy was introduced in September 2015, which encourages staff to speak up about concerns.
- Senior staff told us they believed that junior staff felt more empowered to 'Stop the line'. Staff we spoke with told us they had called a stop the line previously.
- 4 staff we spoke with told us they were confident in raising concerns and felt they would be considered fully.

Public and staff engagement

- Staff spoke highly of the trust and the area they worked
- "Breaking the cycle weeks had been initiated. GP's had been invited into the hospital to understand how the trust worked and was managed. Senior staff described the relationship with GP colleagues to be much closer than previously.
- There was a detailed action plan in response to the national staff survey. There was general improvement in scores for the division. Data was broken down to ward and division level. Ward managers were aware of the findings of the survey and had contributed to the action plan. This included support from immediate managers and concerns about bullying.
- The trust continued to work with other groups such as Healthwatch to improve services and receive feedback about their services.
- There were ongoing audit plans to gauge patient experience including an audit of the 24 hour support line which was planned for summer 2016.

Innovation, improvement and sustainability

- We were concerned about the sustainability of some services due to a lack of key staff. Whilst locum staff were in place permanent recruitment had been difficult. The division was aware of these concerns and a review of some specialty care was underway including in stroke care.
- The trust was positively engaging with local transformation plans and where identifying service improvements in relation to this.
- The Admiral (dementia care) nurse who supported the medical wards was one of only five Admiral nurses working in acute trusts.

Surgery

Safe	Good
Effective	Good
Caring	Good
Responsive	Good
Well-led	Good
Overall	Good

Information about the service

Hinchingbrooke Health Care NHS Trust provides a range of surgical services including general surgery, elective and trauma orthopaedics, ear, nose and throat (ENT), urology and ophthalmology.

There are five wards and two main operating theatre suites in the surgery services. The Acute Trauma and Surgical Unit, Birch ward, Juniper ward, Mulberry ward and Daisy ward.

Juniper ward is a 30 bedded acute gastroenterology, general medical and colorectal surgery ward, the acute trauma surgical unit (ATSU) is a mixed specialty surgical ward for acute and trauma admissions. Specialties included orthopaedic, gynaecology and urology. Birch ward is the elective orthopaedic surgery ward and the Mulberry suite provides a separate facility for private patients.

The treatment centre accommodates Daisy ward, which has mixed specialty patients including urology, general surgery, gynaecology and orthopaedics.

There are seven theatres in the main hospital and five theatres in the treatment centre.

During our inspection we spoke with 14 patients, nine relatives, nine members of nursing staff, one member of the surgical staff (medical staff), and three managers. We visited Daisy ward, the Acute Trauma and Surgical Unit, Birch ward, Mulberry ward and theatres one and six, and we reviewed eight sets of medical records.

Summary of findings

Surgery services were rated as good overall.

Staff had access to an electronic incident reporting system and knew how to report incidents.

Scrutiny of mortality cases was regular and robust, with all cases being presented at dedicated meetings and actions for improvement being set. There was no increased risk of death for this surgery services at this trust, as the trust performed as expected in the two surgery specific mortality indicators, death in the low-risk diagnosis group and death after surgery. Good hand hygiene techniques and the use of personal and protective equipment such as aprons and gloves was consistent amongst all staff. Surgical site infection rates were low, with two cases being reported for large bowel surgery between April 2015 and December 2015 and zero cases being reported for other surgical specialties. Equipment was regularly safety tested and all equipment checked on our inspection was within date for the next safety check. Resuscitation trolleys were consistently checked with no omissions noted for the time period we checked (January 2016 to May 2016). Medicines were stored securely across surgical wards and access was limited to nursing staff. Learning from medicine related incidents was evident. For example, an insulin-related incident had led to a ward manager completing a course on insulin safety and cascading that learning to their team.

Surgery

World Health Organisation (WHO) surgical checklists were consistently used by the service and their use was audited. Overall training compliance for Mental Capacity Act and Deprivation of Liberty Safeguards was 92% for surgical services which was above the trust target of 90%. The service comprehensively audited its performance each year, including both local and national audits. There was an established pain team and provision was in place for this support to be provided out of hours. The trust performed in line with, or better than the England average in the national hip fracture audit, the national lung cancer audit, and the patient reported outcomes measures for groin hernia, hip and knee replacement and varicose vein surgeries. With the exception of theatres, staff appraisal rates were better than the trust average across the surgery services.

Friends and family responses were positive for surgery services, indicating that between 93% and 100% of respondents would recommend the service to their family and friends. Patients were involved and informed about their care, with a range of patient information leaflets and a hip and knee club for patient undergoing joint replacement surgery. Emotional support was available from an Admiral nurse (a specialist dementia nurse). The Admiral nurse was observed to provide dedicated care to a person living with dementia, ensuring they were settled and had their privacy and dignity respected. The service provided care within 18 weeks of referral in the majority of cases (90% of the time or more). Cancer treatment targets were consistently met or exceeded and the trust was amending cancer pathways with a view to bringing cancer targets down.

The service performed better than the England average in rebooking cancelled operations within 28 days. One theatre was available 24 hours a day, seven days a week for emergency or life threatening surgeries, in line with National Confidential Enquiry into Patient Outcome and Death (NCEPOD) guidelines. There was awareness at ward level of complaints and learning, with ward managers able to give examples of improvements made to their ward areas as a result of learning from complaints.

A clear plan was in place for the development of a surgery strategy that was linked directly to the development of the new trust values. The development of the strategy involved staff and was based on the results of the staff survey. There was good ward level understanding of risk, however the recording of scrutiny of risk and other clinical governance issues was inconsistent across surgical specialties. Almost half of incidents were not reported within 14 days of their occurrence. The acute trauma and surgery unit and Juniper ward consistently performed below trust targets for various infection control and patient safety measures.

The length of stay for elective trauma and orthopaedics was 1.5 days over the national average, and the overall risk of re-admission for elective patients was much higher than the England average at a score of 158 compared to an average score of 100.The service had not appropriately managed an increase in medical outliers. This had led to the displacement of emergency and elective surgical patients and ultimately the cancellation of joint surgeries at the time of our inspection, due to elective and emergency (or patients swabbed for Methicillin resistant staphylococcus aureus (MRSA) and those not swabbed) being placed in bays together.

Surgery

Are surgery services safe?

Good

Surgery services were rated as Good for safe because;

- Staff had access to an electronic incident reporting system and knew how to report incidents.
- There was regular and robust scrutiny of cases of mortality in the service. All cases were presented at dedicated mortality meetings and discussion took place around the care provided, with actions for improvement being set at these meetings.
- The trust performed as expected in two surgery-specific mortality indicators, meaning that there was no increased risk of death for surgery services at this trust.
- Staff were consistently observed performing good hand hygiene techniques and using personal and protective equipment such as aprons and gloves.
- Equipment was regularly safety tested and all equipment checked on our inspection was within date. Resuscitation trolleys were consistently checked.
- Medicines were stored securely across surgical wards and access was limited to nursing staff.
- World Health Organisation (WHO) surgical checklists were consistently used by the service and the use was audited monthly. The target of 100% compliance had been missed by between one and two percent and an action plan was implemented. This had led to a recent achievement of the trust target.

However:

- The acute trauma and surgical unit (ATSU) and Juniper ward consistently performed below trust targets for some infection control and patient safety measures.
- Safety thermometer assessments and reassessments did not always happen in a timely manner on ATSU.
- The quality of patient records was inconsistent across surgical wards.

Incidents

- Staff knew how to report incidents and near misses onto an electronic reporting system. This system was available on all computers accessible to staff. Ward managers were aware of their main incident trends, and incident numbers were presented on white boards on ward corridors for patients and visitors to see.
- The trust reported five serious incidents between February 2015 and March 2016, including one pressure ulcer, one allegation against a health care professional, one treatment or operation without consent and two confidential information leaks. A never event, which was a wrong site surgery, occurred in December 2015. The definition of a Never Event has changed. Although each Never Event type has the potential to cause serious patient harm or death, harm is not required to have occurred for an incident to be categorised as a Never Event.
- There was a process in place for investigating incidents and undertaking root case analyses (RCA's) to identify learnings. We reviewed one initial three day report from a serious incident occurring in April 2016 and the root cause analysis was in the process of being investigated.
- The average time taken to include incidents on the National Reporting and Learning System database was 20 days.
- Mortality was discussed at monthly mortality review meetings. Mortality cases were presented at the meeting and discussed to ascertain that the care provided was appropriate. This was consistently well documented in the meeting minutes. Each meeting had a set of actions to disseminate learning to the appropriate teams and people.
- A mortality summary report dated May 2016 showed that for the two surgical-specific mortality indicators, death in the low risk diagnosis group and death after surgery, the trust performed as expected. This meant that there was no increased risk of mortality within the surgical services.
- There was evidence of the duty of candour being used in a recent serious incident, where it was recorded that a consultant communicated with the family of a deceased patient.

Safety thermometer

- Patient safety thermometer data is a tool to measure and monitor harm in care and looks at falls, pressure ulcers, urinary tract infections in people with catheters in place, and venous thromboembolisms.
- Between May 2015 and May 2016, ATSU reported two new pressure ulcers, one falls with harm and two new urinary tract infections.

- For the same time period, Birch ward reported two new pressure ulcers, zero falls with harm, zero new urinary tract infections in people with catheters, and zero new venous thromboembolisms.
- For the same time period, Daisy ward reported zero new pressure ulcers, one fall with harm, zero new urinary tract infections in people with catheters, and zero new venous thromboembolisms.
- For the same time period, Juniper ward reported two new pressure ulcers, six falls with harm and one new urinary tract infection.
- For the same time period, Mulberry ward reported zero new pressure ulcers, falls with harm, new urinary tract infections in people with catheters and venous thromboembolisms.

- In all four sets of records checked on Daisy ward, patient risk assessments were completed on admission and re-assessments were completed thoroughly and within the appropriate timeframes.
- Out of four records checked on the acute trauma and surgical unit (ATSU), two had thorough safety thermometer checks reassessed within the correct time frame. This was indicative that the timeliness of safety thermometer checks was inconsistent on ATSU.

Cleanliness, infection control and hygiene

- Screening for methicillin resistant staphylococcus aureus (MRSA) was audited by the trust with compliance scored in a traffic light rag rating system. For the period January 2016 to February 2016 MRSA screening compliance was rated as green (compliance of 95% and above) for all surgical wards with the exception of ATSU ward with an amber rating of 90.07% and Juniper ward with a red rating of 92.7%.
- The trust's infection control policy stated that screening of MRSA was to be completed for all patients admitted for surgery or into surgical areas and specifically detailed high risk cases such as those requiring orthopaedic surgery.
- There were 5 cases of clostridium difficile (C Diff) for the period April 2015 to December 2015. This was better than the target of no more than four cases per month. There was one case of MRSA in November 2015, which was over the trust target of zero cases.
- Staff were observed using personal protective equipment (PPE) such as aprons and gloves.
- Staff were observed to be compliant with correct hand hygiene techniques on Juniper ward. There were metal sinks within each bay that had been declared not fit for purpose by the ward manager. The sinks were due to be replaced as part of a trust wide programme. This meant that all Juniper ward staff had to share the use of one hand washing sink in the corridor of the ward.
- Housekeeping staff were observed to be cleaning the wards throughout the inspection. One patient on Juniper ward stated that "the ward is cleaned continuously".
- There were two episodes of surgical site infections for the period April 2015 to December 2015, both after large bowel surgery. There had been no cases of surgical site infections following knee and hip surgery since the period April 2013 to March 2014.
- A peripheral intravenous cannula care tool had not been completed appropriately in one patient on Juniper ward. The patient had a second cannula fitted to replace an older cannula. The older cannula was not removed at the same time. Despite being told by the patient which cannula was new, a nurse started an infusion into the old cannula.
- The hospital measured visual phlebitis scores (VIP) by ward. ATSU, Birch and Mulberry wards were all compliant with completing peripheral vascular catheter (PVC) continuing care tools and achieved 100%. Daisy ward achieved 93.33% and Juniper ward achieved 68.75% for the period 1st February 2016 to 29th April 2016. Birch, Daisy and Mulberry wards were compliant with all patients having completed PVC insertions at 100%, 96% and 100% respectively. ATSU and Juniper wards achieved 43.75% and 83.78% respectively. A review of reported incidents for the service for the period August 2015 to February 2016 did not show any reported incidents relating to cannula care.

Environment and equipment

- Three pieces of equipment on Juniper ward, two pieces of equipment on Mulberry ward and two pieces of equipment in theatres were checked and all had 'I am Clean' stickers with the date of their last clean, of which they were all in date, and all were within date of their last safety test.
- Resuscitation trolleys on Juniper and Mulberry ward were checked. Log books were checked for January 2016 to the end of April 2016. Daily checks for the exterior of the trolleys, weekly checks for the interior of

the trolleys and monthly checks for airway bags were all signed and dated with no omissions. All trolley drawers were locked and secured with plastic tags marked with serial numbers which was noted in the log books.
- The environment in theatres was visibly clean and well maintained. A selection of equipment we reviewed was properly maintained and serviced in line with manufactures recommendations.

Medicines

- Medicines were stored securely with access limited to nursing staff.
- Green medicine bins for returns of medicines to pharmacy had been introduced. This helped to removed unwanted medicines from the cupboards and kept them clear and tidy.
- Medicine incidents were recorded onto a new electronic reporting system, which ensured staff could receive direct feedback after reporting a medicines-related incident.
- We spoke with two patients about their prescribed medicines. One patient was prescribed pain relief and told us ''I am in no pain. It is well controlled by the medicines''. The second patient commented '' although I am still waiting for my medicines from pharmacy I am very happy with the hospital. Please say it is very good''.
- Learning from medicine incidents was shared. One ward manager described learning from a recent medicine error which had highlighted the need for further training in diabetes. The ward manager had found an on line course about 'insulin safety' which had been shared with nursing staff.
- We observed the availability of a student newsletter dated May 2016 which reminded nursing students to follow hospital policy and Nursing and Midwifery Council (NMC) guidelines when administering medicines to patients.
- Allergies or sensitivities to medicines were recorded on patients' prescription charts. We checked eight prescription charts which had been correctly documented, signed and dated by the doctor. This followed trust policy.

Records

- The quality of patient records was inconsistent across the surgical wards. We looked at eight sets of records in total. We reviewed four sets of patient records on Daisy ward and found all records to have completed risk assessments, medical reviews and admission booklet checklists.
- However, a range of information such as the name and grade of doctor/nurse reviewing the patient, venous thromboembolism (VTE) risk reassessments, daily ward round reviews, antibiotic reviews, multidisciplinary team (MDT) input, assessment of nutritional status and notes being signed and dated were missing across three out of four records checked on ATSU.
- One patient record had no inpatient admission booklet checklist or baseline observations within their admission booklet, no admission checklist completed, their intravenous (IV) therapy form was not completed and their falls assessment was not re-done post operatively.

Safeguarding

- Staff were aware of the safeguarding lead nurse and said the nurse was accessible. An example was given of a concern raised by a staff nurse on Juniper ward to the safeguarding lead nurse who investigated the concern and the need to refer. Another example was given where a young adult was referred to the local safeguarding team. Staff were supported to liaise with social care and had input into the arrangement of a new care package.
- Training compliance across surgical services for safeguarding vulnerable adults and safeguarding children was above the trust target of 90% at 98% for safeguarding level 2 for children and 96.5% for safeguarding vulnerable adults at level 2.

Mandatory training

- The trust had a mandatory training target of 90% compliance. Mandatory training for staff covered fire safety, infection control, moving and handling, information governance, safeguarding children and vulnerable adults, equality and diversity, mental capacity assessment and deprivation of liberty safeguards, and PREVENT (counter-terrorism basic awareness).
- For the period April 2015 to March 2016, Birch ward and Daisy ward staff were compliant with their mandatory training with scores of 96% and 94% respectively. ATSU, Juniper ward and Mulberry Suite were not compliant with their mandatory training with scores of 83%, 82% and 87% respectively. Overall, theatre and anaesthetic

staff were not compliant with a score of 73%. Mandatory training compliance was listed on the service's draft improvement plan, although no actions were stated to address this.
- Information provided by the trust showed that agency staff received an induction to the area

Assessing and responding to patient risk

- The modified early warning scoring system (MEWS) was used to assess the condition and any deterioration of patients. The trust conducted a MEWS and escalation audit for the period October 2015 to December 2015. Juniper, Acute Trauma & Surgical Unit (ATSU), Mulberry, Daisy, and Birch wards were included in this audit.
- Correct documentation and calculation of the MEWS achieved an average of 91% across the trust. Juniper, ATSU, and Birch wards scored 100%. However improvement was required on Mulberry ward where only 80% of charts met the target. An action plan was in place and included named staff with responsibility for each action and set time frames.
- The five steps of safer surgery was used by the trust. Wold Health Organisation (WHO) surgical safety checklists (which is step three of the five steps) were used for all surgery undertaken within the division. We observed a WHO surgical checklist team briefing in theatre which followed the requirement of the checklist.
- A WHO checklist quality audit was carried out for the period June 2015 to February 2016 following a never event in March 2015. The trust set compliance targets at 100% and consistently achieved between 98% and 99% each month. Recommendations were put in place to improve these scores. Monthly snap shot audits showed overall compliance to be 99% for both February 2016 and March 2016, and 100% in April 2016. This indicates an improvement was starting to take place from the recommendations.
- Training was given to all registered nurses and health care assistants for recognising and responding to deteriorating patients. The target for compliance to this training was set at 60% of registered nurses and 40% of health care assistants. Overall, 66% of all health care assistants had completed the training and 61% of all registered nurses had completed the training across all surgical wards and the critical care unit.

Nursing staffing

- A safer nursing care tool assessment was completed in February 2016 to assess the sufficiency of the set establishment. The results of this were not available at the time of inspection.
- The sickness rate target was 3% or below. Sickness rates over the target on the surgical wards were 3.3% on ATSU and 5% on Juniper ward.
- The vacancy rate target was 5% or under. Staffing vacancies were covered by the use of bank and agency staff. Areas where there were significant gaps in substantive staff were Juniper ward with 72% of whole time equivalent (WTE) in post, and the acute trauma and surgical ward (ATSU) with 73% of WTE in post.
- Although Daisy ward had 97% of their budgeted staff in post, there was not sufficient staff in post to cover weekends. Daisy ward operating at weekends was an interim extension to the ward's opening times. This meant that there was a reliance on bank and agency staff to ensure that out of hours and weekend shifts were covered. This was acknowledged on the service's risk register and had been a live risk since February 2014.
- Mulberry ward had 134% of their WTE in post. Substantive nurses from Mulberry ward supported agency nurses on Daisy ward at weekends, and were backfilled by agency nursing if required. Birch ward had 96% of their budgeted WTE in post
-
- The turnover of staff target was 10% or below. Turnover of staff rates over the target on surgical wards were 21.9% on ATSU and 40% on Juniper ward. A surgical nursing recruitment and retention plan was in place at the time of our inspection to manage nurse staffing. The turnover of nursing staff on Juniper ward had decreased by 7% from our previous inspection although a long term positive impact could not be ascertained at the time of our inspection.
- Nursing handover was observed on ATSU. The handover was well-led, structured and robust. Data sheets were given to staff detailing the patients, their diagnosis and their needs, and staff were well informed of their caseloads for their shift.

Surgical staffing

- There were eight general surgeons, seven orthopaedic surgeons, four urological surgeons, two plastic surgeons, 13 anaesthetic consultants, three ears, nose and throat (ENT) surgeons, and five ophthalmologists supporting the surgical services.
- Handovers took place at 8am across all specialities. On-call rotas were supported by consultants.
- Electronic and verbal communications from clinical leads to surgical staff had led to an increase in consultant presence to ward rounds.
- General surgery was supported by nine junior doctors and eight middle grade doctors. Trauma and orthopaedics was supported by eight junior doctors. The musculo-skeletal service was supported by eight junior doctors and four registrars. The urology service was supported by four middle grade doctors.
- The surgical rota ensured there was an appropriate skill mix of senior staff out of hours and at weekends.
- There was enough doctors to ensure that patients were reviewed in a timely way.

Major incident awareness and training

- There was a major incident policy available on the trust's intranet for staff to access.
- One sister explained that more experienced nurses would be able to assess patients and decide who was well enough to be transferred in the case of a major event, and who was not.
- There was a site management team who would give clear direction for all staff with support from the senior sister of the day, in the event of a major incident.

Are surgery services effective?

Good

Surgery services were rated as good for effectiveness because;

- The service comprehensively audited its performance each year, including both local and national audits.
- Care pathways were evidence and guidance based.
- There was an established pain team and provision was in place for this support to be provided out of hours.
- Patients felt that their pain was appropriately managed.
- The trust performed better than the England average in the national hip fracture audit and demonstrated improvement from the previous year.
- The trust performed better than the England average for all three measures of the national lung cancer audit.
- The trust performed in line with the England average for the patient reported outcomes measures for groin hernia, hip and knee replacement and varicose vein surgeries.
- With the exception of theatres, staff appraisal rates were better than the trust average across the surgery services.
- Training compliance for Mental Capacity Act and Deprivation of Liberty Safeguards was above the trust target of 90% at 92% overall for surgery services.

However;

- The trust scored red (between 0% and 49%) against two measures in the national emergency laparotomy audit, six measures were scored amber and three measures scored green.
- The overall risk of re-admission for elective patients was much higher than the England average at a score of 158 compared to an average score of 100.

Evidence-based care and treatment

- Surgical care pathways were evidence-based. The hip and knee surgical pathway was underpinned by guidelines from the National Institute of Clinical and Healthcare Excellence (NICE).
- The colorectal surgical pathway was underlined by British Society of Gastroenterologists. The colon cancer pathway ensured that referrals met National Institute of Health and Care Excellence (NICE) guidelines and that the care was delivered as part of the Anglia Cancer Network.
- The hip fracture collaborative care plan was evidence based and followed guidelines from both NICE and the British Orthopaedic Association and Association of Anaesthetists in Great Britain and Ireland.
- Surgical services followed relevant national guidance and best practice as part of surgical pathways and care.

Pain relief

- A pain scoring tool used throughout the service and was included in care rounding. The Abbey pain scoring tool was used to ascertain pain levels in people living with dementia who were not able to verbalise.
- There was a dedicated pain team consisting of two pain nurses. If the team was required out of hours or at weekends then support was provided by recovery nurses and an anaesthetist.

- We spoke with two patients about their prescribed medicines for pain relief who told us ‘’I am trying to reduce the amount of pain relief I take together with help from the doctors”, “I have found the pain relief to be excellent” and one relative who told us that “the nurses are brilliant, they respond to my requests for my relative to have more pain relief”.

Nutrition and hydration

- Fluid balance charts were consistently completed in the eight sets of patient records we observed. In addition, three fluid balance charts were seen in recovery and all were completed thoroughly.
- Anti-sickness medication was prescribed in advance for surgical patients to be administered in recovery and on the surgical ward post operatively. This meant that patients could receive ant-sickness medication in a timely manner when required.
- Patients were supported with nutrition and hydration needs in a number of ways including the use of total parenteral nutrition (TPN) and percutaneous endoscopic gastrostomy as alternative methods of nutrition when patients could not take food orally. Hydration needs were met through the use of intravenous and subcutaneous liquids were patients need additional support.

Patient outcomes

- The trust performed better than the England average for six of the seven measures in the Hip Fracture Audit, 2014. Comparisons between the 2014 and 2015 results showed improvement against seven measures.
- In the 2015 hip fracture audit, the trust performed better than the England average in five of the seven measures. The trust scored very well against the standards, ‘patient received falls assessment’ (100%) and ‘bone health medication assessment’ (100%). This trust’s result for mean length of acute stay and mean total length of stay was higher than the England average in both the 2014 and 2015 audits. All other results were better than the England average in the 2015 audit.
- The percentage of fractured neck of femur patients seen within 48 hours was 84%, which was above the England average of 75.6% and above the regional average of 72.1%.
- This trust showed good performance in the National Bowel Cancer Audit in 2014. Trust performance for the number of cases submitted to the audit and data completeness for patients having major surgery was good, with a rate of more than 80% for both measures. The trust scores for patients being seen by a specialist nurse was 50% compared to the national average of 87.8%.
- Latest data for the National Bowel Cancer Audit 2015 showed the trust to be within expectations for all measures.
- The 2014 Lung Cancer Audit found that the trust was better than the England average for all three measures. Scores were a 100% for patients discussed at multidisciplinary team (MDT) level and percentage of patients receiving computerised tomography (CT) before bronchoscopy.
- Results from the Patient Reported Outcome Measures (PROMs) for Groin Hernia, Hip Replacement, Knee replacement and Varicose Veins were similar to the England average.
- The Trust had mixed performance in the 2015 national emergency laparotomy audit. The audit compares inpatient care and outcomes of patients undergoing emergency bowel surgery in England and Wales in order to promote quality improvement. The audit rated performance on a RAG rating (red-amber-green). A green rating indicated a performance result between 70%-100%, an amber rating was between 50%-69% and red rating were between 0%-49%.
- The trust scored green in three out of the eleven indicators including consultant surgeons being present and arrival in theatre in a timescale appropriate to the urgency of the case. The trust scored amber in six of the eleven indicators including consultant and anaesthetist presence together in theatre. The trust scored red against two of the eleven indicators which were ‘consultant surgeon review in less than 12 hours of emergency admission and anaesthetist and assessment by a medical crisis in older people (MCOP) specialist in patients aged over 70 years’.
- The trust had acknowledged these audit results on their improvement plan, with the aim of validating the percentages submitted to the audit. There were clear actions identified within the improvement plan to address shortcomings in audit data.
- There was a comprehensive audit plan in place for surgery services for the period April 2016 to March 2017.

This audit plan included both local and national audits and stated the aims and objectives of each audit, a named clinician leading the audit, and expected start dates and completion dates.

- The overall risk of re-admission for elective patients in surgical services at Hinchingbrooke Hospital between August 2014 and July 2015 was much higher than the England average at 158 compared to 100. A value below 100 is interpreted as a positive finding, as this means there were less observed readmissions than expected. A value above 100 represents the opposite. Most recent data indicated that the trust level readmissions were in line with the England average.
- Trauma and orthopaedics had a re-admission rate of 163 above the England average of 100. General surgery had a rate of more than double the England average with 220 compared to 100. Rates for non-elective patients were lower than the England average across all specialities.
- High readmission rates were on the surgical service's improvement plan, with a plan to review of how the mitigation for this issue was evaluated.

Competent staff

- With the exception of theatres, surgery services had exceeded the trust average of 74% for completing staff appraisals. Birch and Juniper wards achieved 97%, Mulberry ward achieved 96%, Daisy ward achieved 78%, and ATSU achieved 92%. However, theatres achieved 52%.
- Registered nursing staff competencies included epidural, patient controlled analgesia, nasogastric tube insertion and catheter insertion.
- There was a link on the staff intranet for revalidation advice and support, and clinical nurse educators were assisting nursing staff with their revalidation.
- Surgical staff (doctors) had their revalidation supported by the trust appraisal lead.

Multidisciplinary working

- There was physiotherapy, occupational therapy, and dietetic support on the surgical wards. Pharmacists were assigned to the surgical wards which meant that the provision of medicines took place in a timely manner.
- The trust had close working relationships with other trusts providing specialist care for conditions such as complex spinal surgery.
- Multidisciplinary teams for patients with complex conditions were supported by the specialist providers in the region.

Seven-day services

- All surgical specialities had a range of junior and middle grade doctors providing ward cover and on-call cover, between 8am and 8:30pm and 8:30pm and 8am on a rotational basis.
- There was a 'hospital at night' provision between the hours of 8pm and 8am.
- There was cover for emergency ophthalmology patients between the hours of 8am and 5pm Monday to Friday. Patients requiring emergency care outside of these hours were required to attend the nearest tertiary care provider.
- Pharmacy support to surgical wards on Saturdays was between 8am and 2pm, and on Sundays support was provided from an on call rota.
- Physiotherapy, occupational therapy and x-ray were all available at weekends. Physiotherapy and occupational therapy were provided through an on call system at weekends and the radiology service was an established seven-day service.

Access to information

- Nursing and surgical staff (doctors) had the access required to patient records, including medical histories, so that they could provide appropriate care. Staff also had access to computers to request and view blood tests and other investigations.
- Test results and results of radiology investigations were available on computer systems accessible to nursing and medical staff throughout the surgery service.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- We reviewed eight sets of medical records and consent was consistently recorded, including the planned surgery, possible risks of the surgery and signatures from both surgical staff (doctors) and patients.
- A doctor was observed on Birch ward clarifying consent with an elderly patient and their relative, talking through the treatment plan and gaining consent.
- Mental Capacity Act and Deprivation of Liberty Safeguards training compliance was above the trust target of 90%, with an overall performance across all surgery services of 92%.

Surgery

Are surgery services caring?

Good

Surgery services were rated as good for caring because;

- Friends and family responses were positive for surgery services, indicating that between 93% and 100% of respondents would recommend the service to their family and friends.
- Throughout our inspection, patients gave consistently positive feedback about receiving compassionate care and being involved in their care.
- Patients were involved and informed about their care, with a hip and knee club for patient undergoing joint replacement surgery.
- Emotional support was available from an Admiral nurse, or specialist dementia nurse. The Admiral nurse was observed to provide dedicated care to a person living with dementia, ensuring they were settled and had their privacy and dignity respected.

Compassionate care

- The trust had a 44.3% response rate in the Friends and Family test, better than the England average of 35.5% for the 12 month period from February 2015 to January 2016. Daisy Ward and Juniper Ward had the lowest response rates of 34%. The percentage of friends and family that would recommend the service ranged from 93% to 100% for most wards. The lowest score of 84% was recorded during September 2015 for Juniper Ward.
- Protected meal times were in place on surgical wards and ensured that patients could eat their meals with privacy and without interruption.
- Patients consistently gave positive feedback about their care throughout our inspection. One patient on ATSU stated "I feel valued here; they treat me as a person all the way from the doctors to the care staff". A patient on Juniper ward stated "my care has been good, I can't fault it, the staff treat me with respect". A patient on Birch ward stated "the staff have been brilliant, you ask for anything and they'll fetch it".
- We observed a consultant on Birch ward approach a patient with warm greeting and used body and verbal language that visibly put the patient at ease.

Understanding and involvement of patients and those close to them

- There was a hip and knee club for patients. Patients joined the club before their surgery and met other patients and staff for support, advice and information. A knee club patient advice leaflet was created by the orthopaedic physiotherapists with advice on basic exercises and contact details.
- One patient on ATSU stated "consultants talk and explain things to me and the staff are caring". A patient on Birch ward stated "the doctor keeps me informed of my progress". A relative on Birch ward stated "I feel that the staff take what I say about mum seriously". A patient on Juniper ward stated "I cannot fault the care at all, I have my questions answered and the staff talk to me and with me, not across me".
- A ward manager was observed helping a patient get back in bed who was experiencing pain. The ward manager discussed the cause of the patient's pain with them and demonstrated that they knew the patient's needs before being told. This shows that the ward manager was involved in, and had knowledge of, the needs of the patients on their ward.

Emotional support

- A specialist nutritional nurse and an Admiral nurse (specialist dementia nurse), were available to ward staff for advice and support, alongside clinical nurse specialists for specific specialities.
- We observed the presence of the Admiral nurse on Juniper ward. The nurse was supporting an agitated patient, and arranged for them to be moved into a side room to maintain their dignity, and came back to check on the patient throughout the day.
- The chaplaincy team visited all wards regularly to provide emotional and pastoral support to all patients and staff.

Are surgery services responsive?

Good

Surgery services were rated as good for responsiveness because;

- The service provided care within 18 weeks of referral in the majority of cases (90% of the time or more).

- Cancer treatment targets were consistently met or exceeded and the trust was amending cancer pathways with a view to bringing cancer targets down.
- The service performed better than the England average in rebooking cancelled operations within 28 days.
- One theatre was available 24 hours a day, seven days a week for emergency or life threatening surgeries, in line with National Confidential Enquiry into Patient Outcome and Death (NCEPOD) guidelines.
- Staff were made aware of patients requiring assistance at mealtimes by the provision of red trays and red lidded water jugs. This respected patients' dignity as only staff understood what the colour red meant at mealtimes.
- An Admiral, or specialist dementia nurse supported patients and staff with specialist care and advice.
- There was awareness at ward level of complaints and learning, with ward managers able to give examples of improvements made to their ward areas as a result of learning from complaints.

However;

- Complaints were not responded to in a timely way with an average of 75 days taken to give a full response to a complaint.

Service planning and delivery to meet the needs of local people

- Mulberry ward was part of a suite that included an outpatients department for private patients. This meant that private patients had a dedicated space for consultations; inpatient care and outpatient follow up care. Mulberry ward was also used for NHS patients if there was a shortage of beds in the main hospital and they had beds available on the ward.
- During our inspection, Birch ward was reallocated as a trauma ward from an elective orthopaedic ward due to increasing service demand, and Daisy ward was being used at weekends, in addition to its scheduled Mondays to Fridays, due to an increase in the number of medical outliers. Medical outliers received appropriate review from the medical team throughout each day.
- In October 2015 Juniper ward had started to use its five escalation beds within the main ward, increasing the number of available beds from 25 to 30, due to increase in demand. This was still the case at the time of our inspection seven months later.
- There was one spinal surgeon at the trust. This meant that patients presenting with acute spinal surgical needs, or patients who deteriorated after spinal surgery out of hours were taken to a neighbouring trust by ambulance service. This arrangement was in place until the planned decommissioning of the spinal surgery service in the summer of 2016.
- Bays in the surgical wards were single sex and each bay had its own bathroom facility. Single bathrooms were also available outside of the bays.

Access and flow

- Between February 2015 and January 2016 the percentage of patients waiting less than 18 weeks from referral to treatment (for the admitted pathway) ranged from 88% to 94.6% However during the full 12 month period trust performance was better than the England average for incomplete pathways.
- Patients waited less than 18 weeks in four of the five specialties. 89 percent of patients were treated within 18 weeks of referral within general surgery. Plastic Surgery was the best performing specialty, with 99% of patients seen within 18 weeks. General surgery is made up of several surgical specialties so numbers are a result of odd patients from all specialities in general surgery.
- All cancer targets were consistently met or exceeded. All individual cancer breaches were reviewed and actions taken to mitigate future risks were agreed and overseen at the cancer management group meeting. Daily tracking of all cancer patients was in place and weekly patient tracking line meetings took place. The trust was working to amend the pathways to bring cancer targets down.
- The average length of stay overall was slightly higher than the England average for both elective and non-elective patients. General surgery had the longest average stay for elective patients of 4.9 days, which was longer than the England average of 3.5 days. Non elective patients in trauma and orthopaedics' had an average stay of 10.2 days while the England average was 8.7 days.
- Single surgeons provided the spinal surgery service and the shoulder surgery service. Work was ongoing with the local clinical commissioning group, with notice given to decommission the spinal service, leading to a backlog. The trust aimed to work with the new provider to bring down the backlog ready for the handover of service in the future.

- The trust planned to expand the shoulder service once the spinal surgery service had been decommissioned. An associate specialist was currently undergoing training to operate independently from July 2016.
- For the period 1st February 2016 to 1st April 2016, there were 307 bed moves across the surgical wards. 33 of these bed moves occurred beyond 10pm. The trust stated that although they do not record the reasons for night time bed moves, this would only ever happen when there was clinical need.
- Discharges were planned from the point of admission, with staff having access to a discharge coordinator and social care input as required.
- Discharges were consultant led on Mulberry ward for private patents. Medications to take home were prescribed by the anaesthetist and discharge summaries were completed in the outpatient department within the Mulberry Suite where the private administrators were based. NHS patients on Mulberry ward had their discharges planned the same as the surgical wards in the trust.
- The trust's percentage of last minute cancelled operations was marginally higher than the England average for four of the seven quarters from quarter one of 2014 - 2015 to quarter three of 2015 - 2016. Last minute means on the day the patient was due to arrive, after the patient has arrived in hospital or on the day of the operation or surgery.
- From 4th January 2016 to 11th May 2016 there had been 246 operations cancelled. Of these 246, 66 (27%) cancellations were the responsibility of the hospital. Cancellation reasons were identified as being due to having no anaesthetist, equipment failures and administrative or other reasons. Compared to the total number of admissions this means that 1 in 67 operations were cancelled. Cancelled operations as a percentage of elective admissions were lower than the England average.
- When a patient's operation is cancelled by a hospital at the last minute for non-clinical reasons, the hospital should offer another binding date within a maximum of the next 28 days, or fund the patient's treatment at the time and hospital of the patient's choice. The trust cancelled nine operations in the period April 2014 to March 2015, and three in the period April 2015 to March 2016, where patients were not treated within 28 days. The trust's performance has been better than the England average since the period October 2014 to December 2016.
- At time of our inspection there were 14 medical outliers on the acute trauma and surgical unit (ATSU). Trauma patients had been moved from ATSU to Birch ward to accommodate these outliers. One staff member stated that elective or planned surgical patients had been screened for Methicillin resistant staphylococcus aureus (MRSA) and they were accommodated in bays with non-swabbed patients, leading to their surgeries were being cancelled to reduce the risk of potential MRSA transmission. However data provided by the trust showed that no orthopaedic operations had been cancelled for this reason in the period December 2015 to May 2016.
- Surgery patients moved between wards received appropriate review from the surgical team, and the trust took action to reduce the number of medical outliers, with 14 medical patients being moved to more appropriate beds during the time of the inspection.
- Elective theatre utilisation was at 111% at the time of our inspection. This meant that more surgeries were being performed at this time which was in line with the increase in service demand.
- A system was in place where attendance in theatre by consultants was based on clinical risk alone. This had also been identified in the national emergency laparotomy audit. The issue was taken to the theatre user group for discussion. Minutes of the last two meetings of the theatre user group meeting in December 2015 and January 2016 showed that discussion took place around the reordering and allocation of theatre lists.
- One theatre was available 24 hours a day, seven days a week for emergency or life threatening surgeries, in line with National Confidential Enquiry into Patient Outcome and Death (NCEPOD) guidelines.

Meeting people's individual needs

- Small sharps boxes with educational leaflets were available for patients who were being discharged back to the community who were required to inject specific blood thinning medication.

- Patients requiring assistance to eat and drink were identified by the use of a red tray and a red lid water jug. This ensured that staff could easily identify who required their help whilst maintaining the dignity of the patients.
- Staff had access to translation services for patients who were not able to speak English.
- There was a learning disabilities nurse available throughout the trust to provide advice and support in caring for patients with learning disabilities. A flagging system was in place on the electronic whiteboards that alerted ward staff to consider learning disability patients who may have additional needs.
- An Admiral (specialist dementia nurse) was available to staff and patients to provide specialist support when required.
- Patients for hip and knee replacements received patient information packs specific to their surgery. These packs contained information around their joint replacement and advice on the pre-admission phase and healthy living, with contact details for the orthopaedic practitioners.
- Ward welcome packs for elective patients were available. The pack contained information on the pre surgery stage, the stay in hospital and discharge home.

Learning from complaints and concerns

- There were 51 complaints for surgery between November 2015 and April 2016. 25 were around communications and staff attitude, 15 were around access to treatment.
- The average time to close a complaint was 75 days. 100 percent of applicable complaints were acknowledged within the deadline of three working days.
- Ward managers were aware of complaints trends and took action to improve the service. For example, on Juniper ward, the ward manager identified that complaints were usually related to poor communication between surgical staff and patients and families. More broad visiting times had been implemented so that families had more opportunity to speak to surgical staff (doctors) directly during ward rounds.
- The Patient Advice and Liaison Team (PaLS) team managed complaints that were not resolved at ward level. Staff told us that complaints generated on the wards were referred directly to PaLS if an informal resolution could not be reached.

Are surgery services well-led?

Good

Well-led was rated as good for surgery services because;

- There was a clear plan in place for the development of a surgery strategy that was linked directly to the development of the new trust values. The development of the strategy involved staff and was based on the results of the staff survey.
- There was good ward level understanding of risk.
- Ward managers understood the status of their wards at any given time and worked well with each other to flex their staff and support one another.
- Staff reported a positive change in culture, stating that the environment felt more open and honest over the past year.
- The leadership had actively engaged staff in the development of a new surgery services strategy.

However;

- Recording of clinical governance issues and risk was not consistent across all directorate management committee meetings.

Vision and strategy for this service

- The trust values were in the process of being developed at the time of our inspection and the plan was to have representation from 35 staff members from all services, including the surgical services, feeding into their development.
- A clear plan was in place for the development of the surgical strategy and involved the engagement of staff. The surgical division had created three main priorities based on the recent staff survey results and the surgery strategy was due to be developed out of these three priorities and the new trust values. The planning for this development was in its infancy at the time of our inspection so we could not assess its effectiveness.

Governance, risk management and quality measurement

- There was a clear assurance pathway for the escalation of clinical governance issues. Clinical governance was discussed in directorate management committees for

surgical services, which in turn fed into a divisional management committee. This committee fed into the executive performance meeting and then on to the appropriate sub-board committee.
- Despite a clear pathway of assurance being in place, the scrutiny of clinical governance issues was not robustly recorded. Minutes from surgical directorate management committees between May 2015 and February 2016 showed that some specialties recorded discussion of incidents, serious incidents, complaints, audits and risk registers. However some committees had no record that these issues were being scrutinised.
- Ward managers understood what the current risks were for their wards. For example, the ward manager for Juniper ward explained that the hand washing facilities in bays were not fit for purpose and were on a capital replacement programme. This was on her risk register as staff all used the hand washing facility in the main corridor of the ward. The ward sister on Mulberry ward stated that the risk register for the ward was available for their staff on the ward computer. Risks included the placement of NHS patients in side rooms on Mulberry ward (where all beds were in side rooms) who might require closer observation. This had been risk assessed and was managed by the ward staff by placing higher acuity NHS patients in side rooms located near to the nurses station.
- The division had a comprehensive risk register in place. Senior managers were clearly sighted on the risks in their division. The risk register showed that risks were regularly reviewed and that mitigation was put in place to address such risks.
- Divisional performance reports clearly showed performance as well as risk across the division and how these were shared across divisions and formed part of the board assurance framework.

Leadership of service

- The division was led by a clinical director, an associate director of nursing and a senior operations manager.
- Ward managers provided strong leadership to ward staff. Ward managers were aware of the status of their wards including their staffing numbers and requirements, incidents and complaints, and shared learning with their staff.
- A senior 'sister of the day' initiative had been implemented approximately three weeks prior to our inspection. The aim of the role was to provide senior sister leadership on a rota basis. The role helped in the development of band seven nurses, with staffing solutions, and attended ward meetings if required and spoke to patients and relatives when they had a concern.
- There was a standard operating procedure for staffing escalation in place. This set out clear leadership responsibilities from ward to executive level for ensuring the hospital remained appropriately staffed. This included a ward buddy system where nursing staff could flex to assist their buddy ward. This was confirmed to work in practice with substantive staff on Mulberry ward often supporting the agency staff on its buddy ward, Daisy, at weekends.
- The ward manager on Juniper ward was planning to implement the objectives for the ward into individual staff member's appraisals. This was a proactive way of engaging staff in the vision for their working environment.

Culture within the service

- Ward managers on both Daisy ward and the acute trauma and surgical unit stated that they felt there was "a more open and honest" working environment over past year.
- Staff felt that they worked well across the service and were willing to flex between wards to support each other as required.

Public and staff engagement

- Patient feedback was displayed on electronic whiteboard in ward corridors for patients and visitors to see.
- The 2015 staff survey had largely negative responses for the clinical support services and the musculo-skeletal directorates within the surgical service, in the areas of 'my job' (which covered motivation, satisfaction, support, and involvement), 'my manager' (which covered support, value, and feedback), 'my health and wellbeing' (which covered stress, pressure, incident reporting, feedback, and discrimination), 'my development' (which covered training, effectiveness of training and appraisals), and 'my organisation' (which covered the friends and family test, acting on concerns, and communications). The trust was in the process of addressing this by re-developing its values based on these results.

- 35 values champions were nominated trust-wide and included staff from the surgical services. The values champions had been nominated by their local and senior management, and were expected to take part in re-developing the trust values and feeding into their development. The work of the values champions was in its infancy at the time of our inspection.

Innovation, improvement and sustainability

- A surgery improvement plan was in draft form, covering a range of improvement initiatives relative to patient safety and experience, leadership and clinical effectiveness. The plan was incomplete at the time of our inspection regarding some actions to address concerns, expected outcomes and measures of these outcomes and dates for when the actions were expected to be complete.

End of life care

Safe	Good
Effective	Good
Caring	Good
Responsive	Good
Well-led	Good
Overall	Good

Information about the service

The end of life services at Hinchingbrooke Hospital comprised of a specialist palliative care team (SPCT) that provided support to staff caring for patients who were end of life in ward settings. The hospital also provided bereavement and chaplaincy services. The SPCT supported people affected by life-ending or life-limiting conditions and their families, including patients with cancer who required complex symptom management. The service received patient referrals from other hospitals, the local St John's hospice, and the community.

The bereavement team offered a comprehensive bereavement service that included mortuary services, and alongside the chaplaincy service, provided a wide range of support to families, relatives, and friends of the dying and deceased.

Between April 2015 and March 2016, the palliative care team received 745 referrals to its service. Fifty-three percent of referrals were for patients with a primary diagnosis of cancer and 46% none cancer, these conditions included, but was not limited to, respiratory diseases, heart and circulatory disease, degenerative nervous system diseases, and multiple sclerosis. Data provided by the trust identified 1% of patients with no specific condition recorded. Between April 2015 and March 2016, 553 patients died at Hinchingbrooke Hospital.

Patients older than 86 years accounted for 30% of referrals to the palliative care team, patients aged 81 to 85 years accounted for 18% and 61 to 80 years 43%. Patients aged 40 to 60 years accounted for 8% of referrals and less than 1% of referrals were for patients under 40 years of age. These figures reflected the local demography of the population the hospital served.

The SPCT provided a seven-day a week service between the hours of 9am and 5pm, on call advice was provided by consultants at the local St Johns Moggerhanger Hospice, with staff rotating weekend working. Weekend working also included community based palliative care nurses who would work at the hospital on a rotational basis to provide specialist palliative care services to patients.

The SPCT comprised of one whole time equivalent (WTE) practice development nurse and a 0.6 WTE lead palliative care consultant, complimented by a 0.2 WTE palliative care consultant. The team were led by a full time palliative care team leader, with two 0.8 WTE and one 0.6 WTE specialist palliative care nurses.

The mortuary team comprised of bereavement and mortuary manager, a senior bereavement officer and a bereavement officer providing an 8am to 4pm service Monday to Friday. There was provision for out of hour's services via an on call system where staff were rostered during evenings and available 24 hours a day over weekends to provide bereavement and viewing services.

The mortuary service had the capacity for 36 deceased patients and additional provision for two deceased bariatric patients; however, at the time of inspection, capacity was reduced to 34 due to four of the refrigeration units being out of service. The trust was due to carry out plans to significantly remodel and improve this area of its services at the time of our inspection, the team felt that the

reduction in capacity was not an issue at this time, as it would be a false economy to repair equipment that was to be replaced. The bereavement suite had dedicated areas to support people wishing to view deceased patients. These included a private toilet area, waiting area, viewing room with dedicated equipment, for example a child's bed, cribs, and homely furniture and fitments and linen to create a relaxed and homely viewing area and a memorial garden maintained by the bereavement staff.

The chaplaincy service provided a seven day a week multifaith support service operating from 8am to 6pm daily, with an out of hours on call chaplain available at all other times. The service had a dedicated multifaith area and 'seasons of life' quiet garden, where patients and families could visit and spend time on reflection, celebrate their religion or beliefs and leave messages of hope and reflection. The service had dedicated volunteers and provided chapel services for various religions, faiths, and beliefs at various times of the week throughout the year.

We visited the Cherry Tree and Apple Tree wards, the critical care centre (CCC), medical short stay unit (MSSU), emergency department (ED), acute trauma and surgical unit (ATSU), mortuary and bereavement services and multifaith chapel. We spoke with two patients during our inspection, unfortunately, other patients were too ill and it would have been inappropriate to approach them for interview, and at the time of the visit, we saw no relatives or family of patients. We spoke with four members of the palliative care team including the lead consultant for palliative care, practice development manager, and palliative care team leader and all of the bereavement and mortuary team. We spoke with 10 nurses, a deputy ward sister, health care assistants, and a chaplain. We looked at 15 sets of patient records, 11 prescription cards and 15 do not attempt cardiopulmonary resuscitation records (DNACPR) along with a number of polices, standard operating procedures and records relating to the delivery of the service.

Summary of findings

End of life care was good at Hinchingbrooke Hospital as patients received safe, effective, and responsive care that met their individual needs and protected them from abuse.

Infection, prevention, promotion, and control was good and patients benefitted from visibly clean environments that were routinely audited and cleaned. Staff knew how to respond to safeguarding concerns and reported these appropriately. Staff reported incidents using the trust electronic incident reporting system and learning from incidents was shared across the staff teams.

Equipment was appropriate for the patient's needs and the bereavement, mortuary, and chaplaincy team made use of a number of key environments to enable relatives and families to access private areas for reflection and practice their religion or belief. The mortuary team provided a caring and empathetic approach and created a homely and comforting environment for families to see their deceased loved ones.

The trust ensured staff were trained, appraised, and supervised appropriately. Improvements were seen in end of life training for all staff, particularly junior doctors, and the number of staff completing the Quality End of Life Care for All (QUELCA) training had increased. Patients were cared for using best practice guidance, for example, National Institute for Health and Care Excellence (NICE), and individual care planning promoted patient nutrition, hydration, and the effective use of pain relief to manage patients' symptoms.

Patient records were of a very high standard, reflected the patient's individual needs and choices, and demonstrated multidisciplinary (MDT) working to support patient outcomes. There had been improvements in the way do not attempt cardiopulmonary resuscitation (DNACPR) was recorded and the trust carried out audit activity to ensure quality was measured in key areas of its services. Patients were referred to the specialist palliative care team in a timely and professional way, this meant that patients accessed last days of life care and treatment that met their individual needs.

End of life care

Patients and their families were cared for with high levels of dignity, compassion, and respect throughout our inspection. Staff gave examples of good practice that enhanced patients' physical, psychological, and emotional wellbeing. Families were offered a wide range of information to help them deal with death and dying and the trust collaborated effectively with external providers, for example, funeral homes, counselling services and patient advice services.

The trust had a clear strategy and vision in place for end of life care with staff roles and responsibilities clearly set out within it. The culture across the service was one of support and mutual respect among the staff team and there was a significant focus on improving staff knowledge and competence in end of life care.

Are end of life care services safe?

Good

We rated the safety of end of life care services as good because;

- Incidents were reported and staff were trained to use the trust electronic reporting system, learning from incidents was shared with the staff team and improvements made.
- Infection prevention, promotion, and control (IPPC) was good within the specialist palliative care and mortuary teams.
- Specialist equipment was available for staff and was safe to use.
- Records were of a very high standard and reflected good communication within staff teams.
- Staff knew how to report safeguarding concerns for adults and children, and patients were safe from avoidable harm.
- Staffing levels were appropriate and staff were competent to carry out their respective roles.

Incidents

- There had been no 'Never Events' in the end of life services between January 2015 and February 2016. The definition of a Never Event has changed. Although each Never Event type has the potential to cause serious patient harm or death, harm is not required to have occurred for an incident to be categorised as a Never Event.
- There were 15 incidents recorded for "end of life and mortuary" care between November 2015 and February 2016 and all of the incidents were reported using the trusts electronic incident reporting system and had been fully investigated.
- Staff knew how to report incidents and all of the specialist palliative care team (SPCT) had received training in using the trust electronic incident report writing system.
- Feedback from incidents and investigations was given to the SPCT and mortuary team via team briefings,

discussed at the end of life steering group meetings, mortality and morbidity meetings and all staff that reported incidents could request a copy of any findings when making the initial notification.

- The duty of candour is a regulatory duty that relates to openness and transparency and requires providers of health and social care services to notify patients (or other relevant persons) of certain notifiable safety incidents' and provide reasonable support to that person. This was understood by the staff we spoke with within the SPCT and mortuary teams.

Cleanliness, infection control and hygiene

- Staff adhered to the trust hand hygiene and 'Bare below the Elbow' policy, and wore personal protective equipment such as gloves and aprons during care. Staff washed their hands in line with the World Health Organisation's "Five Moments of Hand Hygiene" guidance between personal care activities with patients.
- Data supplied by the trust showed that at the time of our inspection, 100% of the housekeeping and mortuary staff were up to date with their infection, control, prevention, and promotion refresher training.
- The mortuary infection, prevention, promotion and control (IPPC) audit was completed February 2016 and due for reassessment in June 2016, no major IPPC issues were identified on the trusts own audit.
- Staff could explain the protocol for patients with possible infectious disease and demonstrated they had good understanding of IPPC in their day-to-day activities with patients.
- Mortuary staff had access to specialist protective equipment including full body suits, facemasks, wellington boots, and other protective equipment for handling the deceased; these were stored appropriately in the mortuary store area. The mortuary area was visibly clean and we saw records of daily environmental hygiene checks displayed within the department that were up to date at the time of our inspection and been completed for previous weeks.

Environment and equipment

- Equipment required to care for patients at the end of their life was available when needed. Ambulatory syringe drivers met the current NHS patient safety guidance. This meant that patients were protected from harm when a syringe driver was used because the syringe drivers were tamperproof and had the recommended alarm features installed and working.
- The mortuary environmental risk assessment was reviewed and updated in April 2016, it clearly identified any potential risks and gave mitigating actions to minimise risks in the environment.

Medicines

- The trust had a comprehensive anticipatory prescribing policy. Staff told us that patients who required end of life care were prescribed anticipatory medicines and we saw prescription cards were visible, accurate, legible and that anticipatory medicine had been given timely and appropriately (Anticipatory medicines are medicines that are prescribed in case they are required).
- The SPCT gave advice to the ward team on anticipatory prescribing for patients when it was required. Prescription cards showed that anticipatory medication could be accessed in a timely manner for patients who had expressed a preference to die at home.
- Patients who expressed a preference to die at home had access to medicines to support them at the end of life, the SPCT would liaise with consultants, and community nurses to ensure these were in place.
- There was specific guidance for medical staff regarding anticipatory prescribing to ensure effective control of symptoms such as pain relief and nausea.

Records

- We looked at 15 records for patients who were at the end of their lives. Records were completed to a high standard, detailed, and recorded the information shared with relatives; the multidisciplinary team and the patient to ensure their individual needs and choices were met.
- There were explicit records within patient's notes of discussion with the family and patients around decisions made in respect of do not attempt cardiopulmonary resuscitation (DNACPR), and these were supported where necessary by mental capacity assessments, consent forms, and dementia checklists.
- Staff made written records with great empathy and care, often staff recorded rest in peace within records once a

patient had died, and recorded whether the patient died peacefully or in an agitated state. Staff recorded the support offered to family who attended at the time of the patient's death, as well as any patient last wishes or information of importance.

- The SPCT used a care in "the last days of life" document; this was a holistic document, which included an initial medical assessment and nursing assessment. Staff we spoke with on the wards were aware of the document and we saw that these were fully completed when carrying out our review of care records.
- All of the 15 records reviewed for patients requiring end of life care had a ceiling of care recorded. (This is a document that describes what not to do so as not to put patients through unnecessary procedures.) It is used in hospitals to provide continuity of care and good communication and should always include symptom relief.
- The trust carried out DNACPR audits and set a 100% completion rate target for the correct completion of the DNACPR form. The trust audit for the period January 2016 to March 2016 showed that 94% of DNACPR forms were dated and timed, 97% of patient information was completed correctly, and legibly, 99% of DNACPR forms were signed by the correct grade of staff and 97% had the principle diagnosis completed. We looked at 15 patient DNACPR forms during our inspection and found all of them completed correctly; however, one DNACPR form stated 'old age' as a contributory reason for the DNACPR. We brought this to the attention of staff and were assured this would be dealt with immediately.

Safeguarding

- Staff knew their roles and responsibilities in relation to safeguarding people at risk, and how to escalate concerns in relation to the abuse or neglect of adults or children.
- We saw the trust had safeguarding policies in place and clear procedures to follow if staff had concerns; safeguarding posters were visible across the trust site including how to make a referral and who to contact.
- Staff were aware of the trust's whistleblowing policy and knew how to raise a concern.
- Safeguarding training was included as part of the mandatory training package. The palliative care team told us they had completed training in safeguarding adults and children and data supplied by the trust showed that 100% of the team were up to date with level one and two child and adult safeguarding training.
- All of the bereavement and chaplaincy team were in date for their mandatory level one safeguarding children and adults training.

Mandatory training

- The trust includes end of life care in mandatory training to all nurses and health care assistants (HCA) as part of its essential staff training days and at induction to new starters.
- Trust mandatory training data provided for the four bereavement staff and one chaplain showed 100% had completed equality and diversity training, infection, prevention, promotion and control. Three staff had completed information governance, two required updates in fire safety, and two required updates in low risk moving and handling and three required PREVENT training (This is the government agenda to counteract terrorism and acts of violence and aggression against the UK). There were no significant concerns regarding the completion of mandatory training by the team.
- The specialist palliative care team was a small team, data provide by the trust at the time of our inspection showed that 100% of staff were up to date with mental capacity act training, equality and diversity, deprivation of liberty safeguards, fire safety and infection, prevention, promotion and control, adult basic lifesaving and information governance. One member of the team required an update in PREVENT training, and one in basic life support, there were no significant concerns regarding the completion of mandatory training by the team.
- A two day Advanced Communication Skills for End of Life Care course is offered to nurses and HCA by St John's Hospice. Since April 2016, end of life training has been an essential for all medical staff and training was provided to foundation years and core medical trainee doctors.

Assessing and responding to patient risk

- Staff used a patient referral form on the trust intranet system and faxed this to the SPCT when patients required end of life care. The referral forms gave staff an

urgency of referral rating, this enabled staff to identify if a patient needed a visit within 24 hours, two days, or three days. The referrals were accurate, legible and records showed that patients were seen in a timely way with urgent referrals usually seen the same day. Ward nursing staff confirmed the SPCT responded very quickly to referrals and records we saw corroborated this.

- The SPCT maintained a central a list of all patients who were at the end of their lives, showing the ward areas where they were accessing treatment. This enables the SPCT to quickly identify patients on the last days of life and provide them timely treatment and support.
- The trust utilised do not attempt cardiopulmonary resuscitation (DNACPR) documents for patients that were end of life and these clearly documented actions that should or should not be taken should a patient deteriorate at any given time.

Nursing staffing

- The team were led by a full time palliative care team leader, with two 0.8 whole time equivalents (WTE) and one 0.6 WTE specialist palliative care nurses.
- The team had been successful in obtaining Macmillan funding for a two year one WTE practice development nurse. The post holder commenced work in February 2016 to provide end of life care training and the trust had agreed funding for the post following the end of the Macmillan funding.
- The Association of Palliative Medicine for Great Britain and Ireland, and the National Council for Palliative Care recommends that there should be a minimum of one specialist palliative care nurse per 250 beds in a hospital. Hinchingbrooke currently has 266 beds, trust staffing meets this recommendation and were appropriate and sufficient for the service.
- The seven-day service meant that a staff roster was in place that included the community palliative care nurses in order to provide specialist palliative care support and advice across the hospital.
- The SPCT provided a seven-day a week service between the hours of 9am and 5pm. Weekend staff cover is provided from 9am to 5pm, face to face by the palliative care team in the hospital. Out of hours cover is provided for health care professionals via switchboard from the consultant on call rota at St Johns Moggerhanger Hospice. The hospital also have specialist nurse input out of hours.

Medical staffing

- The consultant leading on the care for the patient's condition managed the overall care of a patient.
- The trust had one 0.6 WTE lead palliative care consultant, this was complimented by a further 0.2 WTE palliative care consultant, working days were split between the consultants, who also worked at the local St Johns hospice.
- Out of hours cover (weekend and nights) was provided by the trusts own palliative care consultants and if necessary, the team could call the staff at the local St John Hospice for guidance and support.

Major incident awareness and training

- The trust had a major incident plan and service contingency plan in place to support its mortuary services should a major incident occur that would disrupt any of its services. The plan covered events like loss of power, access to buildings, computer system failure, and equipment failure. Staff were aware of the plan and how the key roles would come together in a major emergency as well as who to contact and the actions to take if a major incident was to occur. There were additional cooling blankets for emergency use if the mortuary refrigeration system was to fail and the trust had developed relationships with other services, for example, local undertakers, for storage capacity should the mortuary not have enough space or facilities.

Are end of life care services effective?

Good

We rated the effectiveness of end of life care services as good because;

- Care provided was based on national guidance and best practice in end of life care.
- Patient pain relief was prescribed in line with the trusts medicine policy and procedures.

End of life care

- The trust participated in the national End of Life Care Audit 2016 scoring above the national average in three of the five clinical indicators.
- The trust provided a seven-day palliative care service that was supported by specialist palliative care consultants.
- Staff routinely assessed the mental capacity of patients and sought their consent to treatment at the end of life and we saw good evidence of best interest decisions.
- Medicines were managed in line with the trust medication policy and patients accessed timely pain relief to manage their symptoms.

Evidence-based care and treatment

- The specialist palliative care team based the care they provided on the National Institute of Care and Excellence (NICE) quality standards in end of life care. These quality standards define best practice in end of life care for adults. We observed staff worked towards these standards, for example, the last days of life tool, which was a system to identify people approaching the end of life in a timely way, meeting quality standard one.
- The last days of life document along with individualised care planning, the provision of pain relief and nutrition and hydration met the recommendations set out in NICE guidelines, Care of Dying Adults in The last Days of Life (2015).

Pain relief

- Patient pain relief was prescribed in line with the trusts medicine policy and procedures. We reviewed 11 patient prescription cards and saw medication prescribed in a timely fashion; in line with trust policy and where medication was stopped, staff recorded full explanations for the stoppage.
- The trust last days of life care plan contained guidance for prescribing pain relief in end of life care, including anticipatory medication and who to seek help and guidance from. This was accessible on the trust intranet.
- The trust carried out a bereaved relative's survey between January and March 2016 asking relatives if the patient appeared to be in pain during their last week. Sixty-seven percent of respondents said that the patient didn't appear in any pain, 22% said some of the time and 11% said most of the time.
- A patient told us, "If I need oramorph, I don't have to wait long, maybe ten to fifteen minutes at the most, I have never had better care."

Nutrition and hydration

- We reviewed 15 patient records and saw that malnutrition universal screening tool (MUST) scores were used for patients. The last days of life document gave staff a prompt for planning nutrition and hydration for patients at the end of life.
- Nutrition and hydration needs were included in the patient's care plan and evidence of multidisciplinary support from dieticians, speech and language therapists, and physiotherapists was apparent in the records we reviewed. This included advice on the types of nutrition and hydration available for patients, how to improve a patient's posture to ease eating and drinking, and supplements that may be available to encourage hydration and nutrition.

Patient outcomes

- The trust participated in the national End of Life Care Audit 2016 scoring above the national average in three of the five clinical indicators, including documented evidence recognising that the patient would probably die in the coming hours, discussing this fact with those people important to the patient, and giving the patient an opportunity to have their concerns listened to.
- We reviewed 15 sets of records in relation to patients who were at the end of life, in all of the records it was clearly documented that the patient was end of life or receiving end of life care and the strategies staff should employ to achieve patient outcomes, for example anticipatory medicines.
- The trust scored below the national indicators with regard to documentary evidence of discussing the needs of the patient with those important to them and a lack of documentary evidence in the last twenty-four hours of life of a holistic assessment of the patient's needs regarding an individual plan of care. The implementation of the practice development nurse and staff training aimed to improve this score overall.
- In September 2015, the specialist palliative care team (SPCT) undertook a spot check audit to assess levels of general knowledge regarding access to the SPCT, last days of life documents and caring for dying patients.

The SPCT spoke to three nurses on each of the eight acute wards. They interviewed a mix of senior and junior nursing staff and identified that 100% of respondents knew they should keep relatives of end of life care patients informed daily or as needed, face-to-face or via the telephone. Ninety-six percent of staff said they felt comfortable having discussions with patients or relatives about end of life care. Ninety-two percent of staff were aware that completing last days of life documentation was both a medical and nursing responsibility. However, 25% of staff did not know how to refer patients to the SPCT, 29% did not know where to find last days of life documents or how to complete it, and 25% of staff did not know how to access out of hours advice. The spot check happened prior to the implementation of the seven-day service. During our inspection, staff we spoke to were confident to contact out of hours services and knew where to find key documentation including end of life documentation and referral forms to refer patients to the SPCT showing improvement over time.

- The trust carried out an audit of the 'amber car bundle' from July 2015 to December 2016. The audit identified improvements in the medical plan being agreed in patient notes, escalation plans being documented, conversations with patients and families documented and personal plans of care completed. The trust identified that at that time documented decisions in the do not attempt cardiopulmonary resuscitation (DNACPR) had declined. Of the 15 DNACPR forms we reviewed during inspection, all had discussions with patient or relatives documented, or the reason why they were not included in the discussion.
- The trust carried out DNACPR audits and set a 100% completion rate target for the correct completion of the DNACPR form. The trust DNACPR audit between January 2016 and March 2016 showed that 94% of DNACPR forms were dated and timed, 97% of patient information was completed correctly, and legibly, 99% of DNACPR form signed by correct grade of staff and 97% had the principle diagnosis completed, showing the trust was slightly below its 100% target of completion.

Competent staff

- The trust had made significant efforts to improve its end of life training to all staff including junior doctors. All staff completed end of life training on their induction to the trust and it was part of the essential training programme for all other staff. We saw a newly designed training workbook created by the lead palliative care consultant used to train staff in end of life care. This demonstrated an understanding of the previous issues faced by the trust and showed how they were aiming to raise awareness of end of life care and increase competence amongst the staff team.
- Trust data showed that the palliative care team had all received appraisals within the last twelve months. Staff told us that appraisals were a positive experience and enabled them to discuss their performance and training needs. Clinical supervision for the SPCT was provided where appropriate and could be accessed at any time if required, however staff plan for this on a monthly basis.
- The bereavement and mortuary manager had attained the gold standard for bereavement training and seeking consent in paediatric and perinatal pathology in order to offer high standards of bereavement care, guidance, and support. We saw the bereavement team staff had attended a

number of other relevant courses that enabled them to provide support, care and a professional service for patients at the end of life, for example care of dying for different faiths. .

- Between September 2015 and April 2016, 49 staff received training in the safe use of the McKinley T34 Syringe Driver to ensure staff were competent in its safe use and could support patient's pain management and comfort at the end of life. This meets standard four of the National Institute of Care and Excellence (NICE) quality standards in end of life care by ensuring that services are available and systems are in place to meet the physical and specific psychological needs of people approaching the end of life, including access to medicines and equipment, in a safe, effective and appropriate way at any time of day or night
- Nurses were offered training on the one week Quality End of Life Care for All (QUELCA) course at St John's Hospice in order to help them create compassionate, end of life care focussed environments on the wards they lead. Data provided by the trust shows that during 2015-16, ten band six nurses and ten band five nurses successfully completed this training.

- The mortuary team no longer delivered an introduction to the mortuary staff and its services during new hospital staff induction. We were informed that the reason for the removal from the induction schedule was due to some staff finding the experience too upsetting. The bereavement team felt they should be included in the process and they could adjust their induction session accordingly to ensure staff were not upset, as the team felt it was a key part in raising new staff awareness of the roles of the mortuary and bereavement team.
- The bereavement and mortuary team staff accessed supervision on a four weekly basis from a psychologist to help them deal with their emotion and any trauma after supporting the deceased and their families.

Multidisciplinary working

- There were regular multidisciplinary team (MDT) meetings to discuss patient care needs on the wards. We saw evidence of MDT working recorded in patient notes to coordinate care towards patient outcomes and ensure care was of a consistently high standard.
- The SPCT had good links with end of life care services in the community. For example, they had worked together with the community palliative care nurses to organise a rota that provided seven-day specialist end of life care support and advice across the hospital as well as community nurses working weekends as part of the seven-day service.
- The trust used an electronic recording system to enable the recording and sharing of people's care preferences and key details about their care, on a care performance indicator (CPI) flagging system. This ensured care was co-ordinated and delivered in the right place, by the right person, at the right time. The system was accessible by all staff that could see the CPI flag and clearly identify if a patient was seen by the SPCT.
- Staff knew they could get support from the SPCT when required and said they would get this via calling the team on the hospital pager system or via emails. All of the medical and nursing staff we spoke with told us the SPCT team were always supportive, shared their knowledge and expertise, and gave professional advice on the care of dying patients.

Seven-day services

- The SPCT were available for face-to-face consultations in the hospital seven days a week from 9am to 5pm, weekend were covered on a roster, and the community palliative nurse team played an active part in providing the seven-day service at weekends.
- The chaplaincy service provided 24 hour, on-call support seven days a week for staff, patients, and their representatives.
- The mortuary and bereavement team provided an 8am to 4pm service Monday to Friday. There was provision for out of hour's services via an on call system where staff were rostered on call during evenings and on call 24 hours a day over weekends to provide bereavement and viewing services.

Access to information

- All SPCT staff had access to information that the trust held in order to assist in the planning of care for individual patients, medical notes and nursing notes were easily accessible within clinical area when required. All members of the MDT documented in the same place within the records, which meant that all members of staff could access and follow all the records appropriately.
- Records written specifically by the SPCT were available in the patients' notes for staff caring for the patient to read.
- Staff could access the trust intranet system to access a wide range of information to enable them to perform in their roles; this included training materials, signposts to alternative services and referral pathways.
- The staff provided a great deal of information in the form of leaflets and advice guides to patients and relatives. This was evident in the bereavement and mortuary area where relatives and friends could access guidance on a range of issues in relation to death and dying.

Consent, Mental Capacity Act and Deprivation of Liberty Safeguards

- All staff we spoke with during the inspection were aware of their role and responsibilities in relation to the Mental

End of life care

Capacity Act 2005 (MCA) and where appropriate we found that MCA assessments for patients lacking capacity had been completed correctly and in line with the trust policy.
- Individual patient records clearly documented where consent had been sought for various activities from the patient and where necessary as part of a best interest decision involving other professionals.

Are end of life care services caring?

Good

We rated caring of end of life care services as good because;

- Mortuary and bereavement staff and the specialist palliative care team demonstrated compassion and respect for patients, relatives, and carers.
- We saw evidence that patients and relatives were involved in decisions about end of life care.
- Chaplaincy staff were visible within the trust, and religious representatives from all denominations could be accessed when required. The mortuary and bereavement team supported the needs of patients of various faiths and beliefs.

Compassionate care

- The trust participated in the End of Life Care Audit – Dying in Hospital, National report for England 2016. The trust scored better than the England national average for the questions: Is there documented evidence within the last episode of care that health professional recognition that the patient would probably die in the coming hours or days (imminent death) had been discussed with a nominated person(s) important to the patient and is there documented evidence that the patient was given an opportunity to have concerns listened to?
- The mortuary staff assured us they rarely had any concerns relating to how patients were treated at ward level following their death. If they had concerns, for example, a patient transferred inappropriately from the ward to the mortuary, they reported these as incidents via the trust electronic incident reporting system, and we saw one incident report that confirmed that staff had used this system to report an incident.
- The trust had an up to date policy on care of the deceased patient, including last offices (the term last offices relates to the care given to a body after death) and a protocol for the removal of deceased patients from wards.
- During our inspection, we visited the mortuary and spoke with the mortuary manager and bereavement officers. Staff gave examples of where they had demonstrated compassion and respect. For example, staff explained how they preserved the dignity and privacy of patients following death by keeping private body areas covered at all times, limiting the amount of people who see the deceased and using the deceased own clothing.
- The mortuary team encouraged ward staff to leave intravenous lines intact with the deceased, as removal often caused issues later in the preparation of the deceased due to staining or fluid loss.
- The trust carried out a bereaved relative's survey between January and March 2016. The survey asked how much of the time was the patient treated with dignity and respect in the last week of life, 67% or respondents said all of the time, 22% most of the time and 11% most of the time.

Understanding and involvement of patients and those close to them

- The National Care of the Dying Audit (May 2014) showed the trust scored 92% in relation to health professional's discussions with both the patient and their relatives and friends regarding their recognition that the patient was dying, which was better than the England national average of 75%.
- The survey also showed the trust scored 64% in communication regarding the patient's plan of care for the dying phase, which was better than the England average of 59%.
- Staff told us that following bereavement, families could view deceased relatives out of hours; mortuary staff were available 24 hours a day, seven days a week as part of an on call system to support viewings.
- We looked at 15 sets of end of life patient records throughout the wards we inspected, and saw evidence that on all occasion's patients and their families were involved in making decisions about their end of life care.

End of life care

- In the bereaved relatives survey carried out by the trust between January and March 2016, relatives were asked if they felt the health care team involved them in care decisions. Sixty-seven percent of respondents said yes all of the time, 22% said some of the time and 11% said no, they were not involved.
- The mortuary and bereavement team had developed a wide set of resources for supporting various faiths and beliefs. These included respecting various faiths practices, for example, washing of the deceased and working with local funeral homes who offered specific services for ethnic communities.
- Staff offered families the opportunity to take a small angel charm, to either keep themselves, or place with the deceased, in their hand, or in a pocket. Often families of deceased children would request photographs of children holding the charm and the team supported the families to access this process.
- The mortuary team no longer used shrouds and wherever possible dressed the deceased in their own clothes or items supplied by the family to promote the deceased maintaining their identity after death.

Emotional support

- The specialist palliative support team (SPCT) received specialist communication training to enable them to have difficult discussions with patients and their families at the time of a patient dying or moving onto the last days of life.
- The viewing of deceased patients was by appointment in a dedicated room within the mortuary. The viewing room was non-denominational and people were afforded privacy to pay their respects to their loved ones in a way that respected their religion or beliefs.
- Mortuary and bereavement staff described how they prepared and supported relatives before taking them to the viewing room to see their loved one, sometimes by walking in the memorial garden or waiting in the quiet waiting room and reading a book of prayers or listening to music.
- The trust had a chaplaincy service that was available for patients and their families or carers to use. There was a chapel within the hospital. The chaplain told us they could access religious representatives from all denominations as required. There was a separate dedicated prayer room for Muslim men and women if required.
- The chaplaincy service had access to lay and ordained volunteers who were able to support families in the hospital and in the community. The chaplaincy staff offered bereavement support to relatives, as well as spiritual support to patients and families. This service was provided 24 hours a day by employed staff working flexible hours during the day and by on call volunteers out of hours.
- The trusts bereaved relatives survey results showed that between January 2016 and March 2016 100% of relatives said the healthcare team dealt with them in a sensitive manner after their relative had died.

Are end of life care services responsive?

Good

We rated responsiveness of end of life care services as good because;

- Patients were referred appropriately and in a timely way to the palliative care team. In addition, the amber care bundle was embedded in the service.
- Care was planned for patients on an individual basis using the last days of life documentation.
- The trust had increased the number of staff working in the palliative care team to meet the needs of patients, and the use of community palliative care nurses encouraged communication and team working.
- The trust had completed audits on the last days of life and preferred place of patient death.
- Staff were aware of the trust complaints policy and were able to show examples of how this was used, and learning from complaints.

Service planning and delivery to meet the needs of local people

- Between April 2015 and March 2016, the specialist palliative care team (SPCT) received 745 referrals to its service. Fifty-three percent of referrals were for patients with a primary diagnosis of cancer and 46% none cancer, these conditions included, but was not limited

to, respiratory diseases, heart and circulatory disease, degenerative nervous system diseases, and multiple sclerosis. Data provided by the trust identified 1% of patients with no specific condition recorded.

- Patients older than 86 years accounted for 30% of referrals to the palliative care team, patients aged 81 to 85 years accounted for 18% and 61 to 80 years 43%. Patients aged 40 to 60 years accounted for 8% of referrals and less than 1% of referrals were for patients under 40 years of age. These figures reflected the local demography of the population the hospital served.
- The SPCT had 191 referrals between 1 January 2016 and 30 April 2016. The SPCT had developed a referral form for ward staff that gave ward staff an urgency of referral rating to the SPCT, this enabled ward staff to identify if a patient needed a visit within 24 hours, two days, or three days. Eighty-nine patients were seen within 24 hours of referral, which is a 78% compliance rate. Forty-seven patients were seen within two days of referral, which is an 81% compliance rate and 14 patients were seen within three days, which is a 74% compliance rate. The team reviewed individual cases to identify any issues that had led to a delay in referral in order to reduce this happening again in the future where possible.
- The trust preferred place of death audit in April 2016 included 58 patients, 45% of patients died in their preferred place of death and 8.5% of patients did not, often because of waiting for community discharge. Patients' who's preference for place of death was unknown accounted for 46.5% of the audit figures; this was for a number of reasons including the patient deteriorating suddenly, patient dying before being seen, or discussions with the patient not being appropriate. The trust monitored this data and specifically discussed each case to identify any learning from events that affected the preferred place of death in order to improve performance and meet individual requests at the end of life.
- Patients requiring end of life care were cared for throughout the trust. There were no designated beds or wards for patients who required end of life care. However, staff told us that wherever possible, side rooms would be used for patients who were in their last days of life. The SPCT also kept a central register of all patients receiving end of life support including ward location, to reach patients who may need their support.
- The SPCT numbers had increased in response to the need to cover seven day working and the use of community palliative care nurses at weekends had encouraged team working and a better understating of the needs of patients both in the hospital and in the community setting. Staff felt this new working relationship was extremely positive for the team and for the patients who could now access a full seven-day end of life care service.
- The trust carried out a bereaved relatives survey between January and March 2016 asking relatives if they were told the patient was likely to die soon, 78% of respondents said yes, 11% said no and 11% didn't give a response.

Meeting people's individual needs

- We saw from patient records and data supplied by the trust, that patients were referred appropriately and in a timely way to the SPCT and that the amber care bundle was embedded in the service.
- Following the Liverpool Care Pathway (LCP) removal, the trust introduced the Last Days of Life care plan on 10 July 2014 and this was active from this date. It was fully implemented with the End of Life Care Strategy that was launched in October 2015. The last days of life care plan, along with individualised care plans written by ward nurses, ensured that each patient was assessed and individualised care delivered. Both last days of life forms and individualised care planning were seen in all clinical areas inspected.
- The chaplaincy in the hospital recognised people of all faiths and beliefs. The hospital's chaplain told us they had excellent links with pastoral care from lay staff. The chaplaincy also had a 'seasons of life' quiet garden, which was wheel chair accessible and enabled people to sit quietly and engage in personal prayer or reflection.
- We did not see any patients where English was not their first language, however staff told us that translation services were available within the hospital.
- Staff in the bereavement office told us that they had numerous resources available to support people of all ages, faiths, and beliefs following the death of a patient.

We saw they had numerous guides for children of all ages who had suffered a bereavement. There were also many services for families affected by suicide, sudden infant death, and teenage bereavement.

- Chaplaincy staff were visible within the trust, the chaplain told us that they could access religious representatives from all denominations as required and they supported people who preferred not to follow a particular faith or belief.
- The bereavement and mortuary area had a private room where relatives could be seen in private and a memorial garden where people could take time to reflect or spend time alone.
- Free parking and food was available for visitors to the bereavement office. There was a large amount of information available to relatives including a booklet called 'guidance following bereavement'. Staff were skilled in dealing with those affected by bereavement and we saw them supporting a family dealing with the recent death of a child, showing high standards of compassion and respect.
- The trust used a staff buddy system, which enabled staff during ward handovers to be aware of a patient who is end of life and support them nominate a named nurse or health care assistant to be their buddy. This member of the team would then act as the patients and family's main contact point for discussion on any points in relation to the patients care or treatment.
- The water cooler for drinking water had been removed from the mortuary area, staff were concerned that this decision had taken away fresh drinking water from relatives who often needed water at times of distress.
- Mortuary facilities included a private toilet area, waiting area and viewing area for relatives. The bereavement team had considered the environment and used 'homely' equipment to make it less clinical. For example, the staff used soft bed linen, coloured homely blankets, a child's bed and wicker cots, soft toys, art work and statues to create a more relaxed and homely feel in the relatives viewing area.
- The memorial garden to the side of the mortuary was a well-kept, calming area used by staff to help relatives take air and have privacy at times of distress or quiet reflection, the bereavement team cared for this area. All of the ornaments and flowers in the memorial garden were purchased through voluntary donations or by the mortuary staff buying items themselves

Access and flow

- Staff at ward level referred patients requiring end of life care and support. All staff we spoke with were clear about the referral criteria for the SPCT, how to make a referral using the fax system and staff told us that patients were seen in a timely manner.
- The specialist palliative care team completed daily ward rounds. We saw the team on a ward round and observed the team involved in decisions about patient's end of life care, including offering advice and support around relief of symptoms and appropriate pain relief.
- The mortuary service had the capacity for 36 deceased patients and additional provision for two deceased bariatric patients; however, at the time of inspection capacity was reduced 34 due to four of the refrigeration units being out of service. The trust was due to carry out its plans to significantly remodel and improve this area of its services. The team felt that the reduction in capacity was not an issue, as it would be a false economy to repair equipment that was to be replaced.
- The trust's End of Life Care Strategy describes how they aims to engage with other service providers, patients and the public to influence the development of future services, including monitoring discharges and fast-track discharges. End of life patients are discharged by fast track continuing care, the hospital have not set a target internally so cannot report data on this process. The hospital have however, increased the number of patients facilitated to die at home since introducing the seven day end of life service.

Learning from complaints and concerns

- There were six complaints to the end of life care services between January 2016 and April 2016 including complaints in relation to poor staff attitudes and communication issues.
- Staff told us that complaints about the service did not happen often, but if they did, they were made aware of the nature of the complaint and any actions taken by the trust team to ensure the issues that led to the complaint did not happen again.

- The bereavement and mortuary team were able to talk us through a recent letter of complaint and discussed it with the team to identify where to make improvements in the service.

Are end of life care services well-led?

Good

We rated well led of end of life care services as good because;

- The trust produced a new end of life care strategy that comprehensively set out the vision for end of life services until 2019.
- End of life services had a dedicated risk register that was up to date and reflected current risks associated with the delivery of end of life services.
- Staff were clear on the roles and responsibilities of managers and leaders within the service.
- There was a culture of mutual respect amongst the staff team, and ward staff particularly welcomed the specialist palliative care team (SPCT) guidance and support.
- Following the trusts last inspection it had implemented a bereaved relative's survey based on the national care of the dying hospitals audit 2014.
- We saw evidence of engaging with patients who may be at risk of isolation due to their criminal and social background, to promote quality care at the end of life.

Vision and strategy for this service

- The trust had produced a new end of life care strategy for 2016 to 2019. We saw that there had been significant improvements in this area of the trust end of life provision and that the strategy laid a corner stone for the future development of its end of life services. The strategy clearly identified strengths and weakness of the trust's end of life service along with setting six key priorities to ensure the service meets the needs of the local population whilst adopting the National End of Life Care Strategy (DoH, 2008) and Leadership Alliance's Five Priorities for Dying Patients (2014).
- Knowledge of the trust end of life strategy was still in its infancy amongst the staff team, due to the document and strategy being introduced at the end of February 2016. However, most of the staff we spoke to were aware that the trust had developed an end of life strategy and of its commitment to delivering the best end of life care.
- The vision for end of life at Hinchingbrooke hospital had six key priorities, personal needs and preferences, coordinated care, rapid access to specialist advice and clinical assessment, high quality care and support in the last days of life, services that treat people with respect, in dignified ways and offering appropriate support and advice for carers and their staff.
- The vision had clear milestones to measure achievement over time and was equality impact assessed to ensure it did not discriminate patients against any of the nine protected characteristics set out in the Equality Act 2010.

Governance, risk management and quality measurement

- End of life had a dedicated risk register that was up to date and reflected current risks associated with the delivery of end of life services. The specialist palliative care team (SPCT) knew about the risk register and the risks associated with the delivery of services.
- The SPCT team carried out a number of quality audits, including spot checks, amber care bundle audit, last days of life and staff development to measure the quality and effectiveness of the service.
- Significant improvements had been made since the last inspection in the way that staff identify patients on the last days of life including the use of information technology. Care performance indicators (CPI) flags were used on the trust IT systems to identify patients at end of life and an electronic patient record system was accessible to both hospital and community staff enabling staff from both the hospital and community to track patients in need of end of life care support.

Leadership of service

- The trust had identified a dedicated lead for its end of life services and strategy, this was the Director of Nursing, Midwifery and Quality who also attended various quality meetings and forums in relation to the quality auditing and leadership of end of life care. The

end of life care strategy was being disseminated across the trust via divisional clinical forums; the palliative care teams practice development nurse was leading this process, and the clinical lead for end of life care.

- Staff were clear on the roles and responsibilities of managers and leaders within the service and we saw posters and information displayed around the hospital advising staff on various roles and responsibilities within end of life care.
- The end of life care strategy referred directly to a number of national directives in order to inform the development of its end of life services, these included National Institute for Health and Care Excellence (NICE) guidance, and the NHS Ombudsman's report on the failures in end of life care, death without dignity (2015).
- The new practice development role within the SPCT had begun to implement training evaluation and analysis of staff competencies within end of life care to identify areas of weakness and deliver training to drive improvement across the teams. This mirrored the strategic actions set out in the end of life strategy to undertake a baseline review of end of life education activity.
- The SPCT were clear on the vision and strategy for end of life services.

Culture within the service

- The SPCT were positive about their roles and the impact they were having on end of life services across the trust. It was clear there was a culture of mutual respect amongst the staff team, and that ward staff particularly welcomed the SPCT guidance and support.
- The team ethos and team working was excellent amongst the bereavement and mortuary team, we found the culture to be one of mutual respect, learning, and support to ensure the services offered to the deceased and their families were of a very high standard.
- Multidisciplinary team (MDT) working was at the heart of the culture within SPCT and patients benefitted from a wide range of professionals working jointly towards offering high quality services.

Public engagement

- The trust gained people's views about services in a number of ways, including generic feedback requested from the friends and family test questionnaires. These were available in locations throughout the hospital. Following the trust's last inspection, it had implemented a bereaved relatives survey based on the National Care of the Dying Hospitals Audit 2014, the audit stated that all hospitals should undertake local audit of care of the dying, including the assessment of the views of bereaved relatives, at least annually.
- At the time of our inspection, the SPCT had a public engagement stall in the hospital main reception area, offering the public an opportunity to discuss a wide range of services with the SPCT team.
- The trust was utilising a number of computer screen savers across the departments to advertise that it was 'dying matters week' at the time our inspection. This gave advice and information to staff regarding dying matters including organised events, learning materials and how they could get involved.

Innovation, improvement and sustainability

- Staff described how they were working with Little Hay Prison where consultants review patients that are at the end of their lives and work with prison and hospital staff to ensure that patients were safely admitted to the hospital or referred to the local St Johns hospice. This was evidence of engaging with patients who may be at risk of isolation due to their criminal and social background to promote care quality and equality at the end of life.

Outstanding practice and areas for improvement

Outstanding practice

- The trust employed an Admiral Nurse to support people living with dementia, their relatives and carers as well as staff. This was one of only five Admiral Nurses in acute trusts in England.
- Staff worked with a local prison where consultants review patients that are at the end of their lives and work with prison and hospital staff to ensure that patients were safely admitted to the hospital or referred to the local hospice.

Areas for improvement

Action the hospital MUST take to improve

- Ensure that there are sufficient numbers of suitably qualified, skilled and experienced medical staff on duty in the emergency department. Also ensuring that there are robust contingency plans and which forecast shortages and ensure that sufficient cover is provided.
- Ensure that the time to treatment from a clinician in the emergency department is reviewed and times to treatment are improved.
- Ensure that the triage process for ambulance arrivals is received to ensure that the pathway for patients is safely and times of assessment accurately recorded.
- Ensure that infection control practices within the emergency department are improved.
- Ensure that the processes for the checking of equipment, particularly blood glucose and anaphylaxis boxes, in the emergency department is improved and safe for patients.

Action the hospital SHOULD take to improve

- Review the observation and seating arrangements for the children's area to ensure parents and children only sit in this areas.
- Should ensure that fridge temperatures are routinely checked.
- Should allow staff to attend and receive updated mandatory training.
- Review the need to monitor the culture of staff within the emergency department.
- Review the environment and provision of children's services and where children are treated.
- Ensure that records are used in a consistent way across wards, that they are contemporaneous; reflect patient needs and appropriate actions taken following risk assessment.
- Review the relative risk of readmission for surgery patients as data shows this to be significantly above the England average.
- Review the complaints process and the time taken to provide people who complain with a full response.
- Should ensure that audits are undertaken locally within the emergency department to improve quality measurement and assurance.
- Should ensure a consistent monitoring of preferred place of death for patients receiving end of life care.
- Should ensure that there is a clear target for fast track discharge of patients requiring end of life care and ensure consistent monitoring of the timeliness of these discharges.

Care Quality Commission

Peterborough and Stamford Hospitals NHS Foundation Trust

Peterborough City Hospital

Quality Report

Bretton Gate
Peterborough
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Website: www.peterboroughandstamford.nhs.uk

Date of inspection visit: 18 and 19 May 2015
Date of publication: 27/07/2015

This report describes our judgement of the quality of care at this hospital. It is based on a combination of what we found when we inspected, information from our 'Intelligent Monitoring' system, and information given to us from patients, the public and other organisations.

Ratings

Overall rating for this hospital	Good
Urgent and emergency services	Good
Medical care	Requires improvement
Services for children and young people	Good
End of life care	Good

Summary of findings

Letter from the Chief Inspector of Hospitals

Peterborough and Stamford Hospitals NHS Foundation Trust was one of the first wave of NHS trusts to be authorised as a foundation trust in April 2004. The trust has approximately 633 beds and over 3,500 staff spread across two sites, Peterborough City Hospital (611 beds) and Stamford Hospital (22 beds). Peterborough City Hospital is a new building funded under the private finance initiative (PFI); it became fully operational only in December 2010, combining services previously supported on three separate sites. It provides acute health services to patients in Peterborough, Cambridgeshire and Lincolnshire.

In addition, the trust provides a range of community services including community midwifery and Macmillan nursing as well as domiciliary visits undertaken by consultants. The trust provides rheumatology and neurology services at the City Care Centre and services in support of Sue Ryder in Peterborough, at HMP Peterborough and in local GP practices. We did not inspect these services during this inspection.

This was a follow up inspection to the comprehensive inspection of March 2014. This inspection was focused and specifically considered the core services of urgent care and medicine and looked at all key questions and considered the responsiveness of children's services as well as the effectiveness in end of life services. The inspection took place on the 18th and 19th May 2015.

Overall we found a trust that is improving and had addressed most of the issues we noted during our inspection in March 2014.

Our key findings were as follows:

- There had been a recent improvement in the performance of the emergency department against the four hour wait and treatment target.
- A new medical admissions unit had improved patient access and flow through the emergency department and the rest of the hospital whilst also reducing the numbers of outliers.
- Safeguarding procedures in the emergency department were more robust with appropriate checks made by staff regarding children's attendance in the department.
- Medical and nursing staffing had improved across the clinical areas we inspected since our last inspection in 2014 but there remained shortfalls in some areas and there had been an acuity review during this period with an uplift in staff in some areas.
- There were some concerns about storage of medicines in medical wards, specifically the monitoring of temperatures.
- Whilst there was evidence of a learning culture, this was not embedded across the whole of the medical directorate.
- Leadership was visible at trust and directorate level. Most staff felt valued and supported by their managers.
- The majority of staff were caring and compassionate when providing care and treatment but we observed a small number of interactions that were not caring.
- The service had made significant improvements in relation to the provision of same sex accommodation and services for adolescents. The service had engaged adolescents in service development and improvement. We saw a number of patient feedback stories from adolescents giving their opinions on the service, one of these had even been presented to the trust board.
- The Amber Care Bundle had been successfully rolled out to all areas and there was a more consistent approach to managing pain relief in end of life care patients.

We saw several areas of outstanding practice including:

- The trust had thoughtfully engaged with children and young people in the service development and improvement of children's services.

Summary of findings

- A new transition projected had been agreed and was being supported by a CQUIN target for this year called “Ready Steady Go”. This project aimed to build confidence and the understanding of children, younger people and their families’ when transitioning into adult services.
- The trust was now meeting face to face increasing numbers of patients to discuss concerns or complaints.
- The Quality Assurance Committee was open to some external stakeholders including Healthwatch.

However, there were also areas of poor practice where the trust needs to make improvements.

Importantly, the trust must:

- Ensure records are accurate and updated to reflect the needs of patients and that care is given in line with records.

In addition the trust should:

- Ensure that learning from incidents is disseminated consistently across the medical directorate.
- Ensure that patients are adequately supported with nutritional needs on medical wards.
- Ensure that medicines are stored correctly in all areas.
- Ensure that call bells are answered in a timely way.
  - The trust should ensure that there are appropriate measures in place to further reduce falls and pressure ulcers.
  - The trust should ensure effective admission to the stroke unit for patients requiring specialist care.

Professor Sir Mike Richards
Chief Inspector of Hospitals

Summary of findings

Our judgements about each of the main services

Service	Rating	Why have we given this rating?
Urgent and emergency services	Good 	At our previous visit in March 2014 we found some areas of urgent care that required improvement. This inspection was to review and report on those issues. In 2015 the trust was meeting the four hour waiting time target for treatment and discharge from emergency department (ED). The performance on this target was improved due to the implementation of a medical admissions unit two weeks prior to our visit. In the quarter January to March 2015 the Trust had seen 84% of the 21,867 patients within four hours against the target of 95%. The Trust had improved patient flow through the hospital to achieve the target in the weeks prior to our visit. Activity was recorded in detail and showed approximately 7% increase on the previous year at the time of our visit. Medical and nurse staffing had been improved since our last visit. A review had been undertaken to revise the nurse staff complement. There was still much use made of agency nursing staff but this was to ensure safe staffing. Locum cover for consultants was minimal due to effective recruitment into senior posts. Arrangements to care for children had been improved since our last visit. There was a designated paediatric area. This was closed after 9:30pm with children moving to main ED bays. There was only two paediatric registered nursing staff in the ED however, other staff received additional training to mitigate the risk. There were checks made of children under five attending against social services risk databases. Staff working within the department generally felt well supported by management and thought that they worked in an open and transparent environment.
Medical care	Requires improvement 	In 2015 we returned to this service to follow up on issues identified at our last inspection. In 2014 the service was found to require improvement in relation to all five domains. In 2015 we found that whilst some improvements had been made to focus

on aspects such as falls prevention, pressure ulcer care and patient flow there still remained areas of concern which resulted in the service still requiring improvement in all areas. Incidents remained high, with learning not widespread, records, documentation and medicine storage required improvement. Timely admission to the stroke unit remained an issue as did consultant staffing and auditing within the respiratory service. There were also some incidences of poor interactions between staff groups and staff and patients.

Services for children and young people

Good

In 2014 we found that children's and young people's services were provided in a clean and hygienic environment in line with recognised guidance, which helped protect patients from the risk of infection, including hospital-acquired infections.Children's care and treatment followed best practice guidance and monthly audits were carried out regarding patient safety, patient experience and the environment. Parents we spoke with told us that they felt that their child received good-quality care and that they were informed about any treatment required.

In 2014 we found that staff were responsive to people's individual needs; however, staff were unaware of the trusts guidance for staff on the ward areas when they needed to make a decision concerning same-sex accommodation. There was also limited support from the child and adolescent mental health services out of hours. There was leadership at all levels within children's and young people's services and staff felt well supported well supported by their managers. A clinical governance frame was also in place.

In 2015 we returned to the service to assess whether or not improvements had been made in relation to the responsive domain where in 2014 the service was found to require improvement. This was specifically in relation adolescent service provision and the use of single sex accommodation. It was also identified that improvements were needed in relation to joint working with child and adolescent mental health services (CAMHS). We found that

these improvements had been made and that the service had worked extremely hard to develop and progress projects and plans to meet the needs of the children and young people using this service.

End of life care

Good

In 2014 we found that the trust had a strong focus on end of life care. The trust had used CQUINs (Commissioning for Quality and Innovation targets agreed with the local commissioning groups) to develop and improve the service provided to patients at the end of their life.

The trust was clear with regard to the actions required to review and replace the Liverpool Care Pathway. The Amber Care Bundle was being piloted on two wards. The action plan demonstrated that it would then be rolled out across the trust to meet the Department of Health's guideline timeframe of July 2014.

The palliative care team was very committed and provided a service seven days a week. The team was alerted immediately to any admission of a terminally ill patient. There was very good multi-agency working and close working with both the community team and the local hospice.

Staff were clear about 'do not resuscitate' policies and documents viewed were appropriately signed. Equipment was available and clean, appropriate checks had been made and staff understood how to use the equipment.

The care provided to those who had died was excellent and led by a very passionate bereavement centre manager. In addition, the chaplaincy service and the faith centre provided support to both patients, their families and friends and staff of all faiths and cultural backgrounds.

The purpose of our follow up inspection in May 2015 was to check that the Amber Care Bundle had been rolled out throughout the trust, that pain management was being prescribed and administered effectively and communication over the preferred place of death had been improved. We found that a new lead for palliative care had been put in place and that they had supported and empowered the palliative care team to drive forward improvements and positive change. This meant that the effective domain had gone from requiring improvement to being rated as good.

Peterborough City Hospital

Detailed findings

Services we looked at
Urgent and emergency services; Medical care (including older people's care); Services for children and young people; End of life care;

Detailed findings

Contents

Background to Peterborough City Hospital

Peterborough City Hospital has 610 beds and provides medical and surgical services to Peterborough and the surrounding counties. Peterborough City Hospital is a new building funded under the private finance initiative and became fully operational only in December 2010, combining services previously supported on three separate sites.

Our inspection team

Our inspection team was led by:

Head of Hospital Inspections: Fiona Allinson, Care Quality Commission

The team included five CQC inspectors and four specialists in A&E, medicine, children's services and governance processes.

How we carried out this inspection

To get to the heart of patients' experiences of care, we always ask the following five questions of every service and provider:

- Is it safe?
- Is it effective?
- Is it caring?
- Is it responsive to people's needs?
- Is it well-led?

However at this inspection we reviewed only the areas where Peterborough City Hospital had been rated as requires improvement. These were:

Urgent and Emergency Services : Safe and responsive

Medical care including older peoples care: Safe, effective, caring , responsive and well led

Children's and Young people's services: Responsive

End of life services : Effective

The inspection took place between 18 and 19 May 2015.

Before visiting, we reviewed a range of information we held, and asked other organisations to share what they knew about the hospital. These included the clinical commissioning group (CCG); Monitor and the local Healthwatch.

Detailed findings

We did not hold a listening event but some people shared their experiences with us via email or by telephone. We also received feedback from the local Healthwatch organisation.

We carried out an announced inspection visit on 18 and 19 May 2015. We spoke with a range of staff in the hospital, including nurses, junior doctors, consultants, administrative and clerical staff.

We talked with patients and staff from ward areas and urgent care services. We observed how people were being cared for, talked with carers and/or family members, and reviewed patients' records of personal care and treatment.

We would like to thank all staff, patients, carers and other stakeholders for sharing their balanced views and experiences of the quality of care and treatment at Peterborough City Hospital.

Facts and data about Peterborough City Hospital

Key figures:

• **Beds**: 610

– 610 General and acute,

- 23 Maternity

- 16 Critical care beds.

• **Staff**: 3,500

– 438 Medical

– 1,080 Nursing

• **Annual turnover: £250.1m**

• **Surplus (deficit): (£38.5m) as at 31 March 2015**

Activity summary (Acute)

Activity type 2014-15

Inpatient admissions 52,238

Outpatient (total attendances) 402,808

Accident & Emergency 93,500 (attendances)

Our ratings for this hospital

Our ratings for this hospital are:

	Safe	Effective	Caring	Responsive	Well-led	Overall
Urgent and emergency services	Good	Good	Good	Good	Good	Good
Medical care	Requires improvement	Requires improvement	Requires improvement	Good	Requires improvement	Requires improvement
Services for children and young people	N/A	N/A	N/A	Good	N/A	Good
End of life care	N/A	Good	N/A	N/A	N/A	Good
Overall	Good	Good	Good	Good	Good	Good

Detailed findings

Notes

In our inspection report of 2014 we were not rating effectiveness within the Urgent and Emergency care services. At this inspection we reviewed all key lines of enquiry and feel now able to rate this element.

Urgent and emergency services

Safe	Good
Effective	Good
Caring	Good
Responsive	Good
Well-led	Good
Overall	Good

Information about the service

The Emergency Department is made up of major injuries (majors) including rapid assessment bays, minor injuries (minors), the paediatric area, and a resuscitation area. There were triage rooms where patients had initial assessment after checking in at the waiting room reception.

The Trust has a separate waiting area for children with a route through to the designated children's emergency rooms without passing through the main waiting area. This was open from 9am to 9:30pm with children being cared for in other main ED areas outside of these times. There is a separate paediatric bay within the resuscitation area.

Next to the Emergency Department was the Medical Assessment Unit. This had been open just two weeks prior to our visit. Patients attending directly from their GP were assessed as safe to be transferred and then taken straight to this unit for detailed assessment by the medical teams and later admission. Stay on the unit was for just 24 to 48 hours for the assessment, diagnostic tests, and stabilisation of condition if needed. Some patients on the admission unit were managed by doctors from the Emergency Department if they were expected to be discharged after stabilisation or test results.

We spoke with 14 staff and 10 patients and relatives, including on the Medical Admission Unit.

Summary of findings

At our previous visit in March 2014 we found some areas of urgent care that required improvement. This inspection was to review and report on those issues.

The Trust was at the time of our visit meeting the four hour waiting time target for treatment and discharge from Emergency Department (ED). The performance on this target was improved due to the implementation of a Medical Assessment Unit two weeks prior to our visit. In the quarter January to March 2015 the Trust had seen 84% of the 21,867 patients within four hours against the target of 95%. The Trust had improved patient flow through the hospital to achieve the target in the weeks prior to our visit. Activity was recorded in detail and showed approximately 7% increase on the previous year at the time of our visit.

Medical and nurse staffing had been improved since our last visit with recruitment to a number of posts.

A review had been undertaken to revise the nurse staff complement. There was still a high use of agency nursing staff but this was to ensure safe staffing. Locum cover for consultants was minimal due to effective recruitment into senior posts.

Arrangements to care for children had been improved since our last visit. There was a designated paediatric area. This was closed after 9:30pm with children moving to main ED bays. There were only two paediatric registered nursing staff in the ED. There were checks

made of children under five attending against social services risk databases. However the bespoke risk assessment checklist for safeguarding children of all ages was not completed in around 80% of cases.

Staff working within the department generally felt well supported by management and thought that they worked in an open and transparent environment.

Are urgent and emergency services safe?

Good

Incidents were appropriately reported and investigated with learning feedback given to staff. Mortality and morbidity meetings were held monthly to identify key learning. The department was clean with good infection control practices by staff. In 2014 we had reported concerns identified in safeguarding children and checking child protection registers. In 2015 we saw that this had been addressed with a more robust system in operation.

There had been on-going recruitment of nursing staff in the department though there was still significant vacancies being supported by agency and bank staff. The department was not always meeting national guidance in relation to paediatric nursing support in the emergency department however the risks to patient safety had been mitigated through increasing the skills of nurses in the Emergency Department, including extra training in children's nursing and paediatric life support, and access to paediatric advice and support from the children's ward staff.

Safety in the past

The Emergency Department had systems in place for recording and monitoring performance. A dashboard was used to rate performance against key indicators and performance was colour-coded as red, amber or green to enable management to see at a glance those areas that required improvement.

In 2014 we reported that during a 13 month period from July 2012 to July 2013, there was a total of 302 incidents reported to the National Reporting and Learning System by the hospital: these included seven "moderate harm" incidents. Other incidents reported during this period were categorised as minor or insignificant or as having had no adverse outcome. Patients either admitted with a pressure sore or acquiring a pressure sore within the first 72 hours of admission accounted for the highest number of incidents (in approximately half of these, there was an indicator that the patient had been admitted with the

sore). These are reported by the Trust but attributed to the community. Patients experiencing a delay in their treatment comprised the second highest number of incidents.

In 2015 we found there had been six serious incidents relating to the Emergency Department in the past year from May 2014. We looked at the serious investigation reports from incidents and saw that there had been full investigations. Mortality and morbidity meetings were held monthly with reporting into the clinical management and governance meeting for the department. All staff were aware of the Duty of Candour regulations.

In 2015 other patient safety indicators were monitored, for example the National Early Warning System (NEWS) and the Paediatric Early Warning System (PEWS). These are tools designed to help nurses monitor whether a patient may be experiencing a sudden decline, and they aim to improve patients' clinical care. We saw that compliance with using the monitoring tool for adults had not been met for quarter 3 but had been met in January 2014. Overall achievement was much lower for paediatric patients: the target had been met for October 2013 but not since.

Learning and improvement

In 2014 incidents were reported using an online tool. The staff we spoke with told us that they reported incidents they may have been involved in or witnessed. Staff told us that they were confident in using the system and were encouraged to report incidents as they occurred.

The staff we spoke with told us that they had learned from incidents once the investigation into the incident had been completed. Staff told us that they received feedback directly from the matron about some of the incidents they had reported; we saw examples of this.

We were told that lessons from serious incidents were shared and communicated through various meetings within the department, the directorate or the trust, depending on the nature of the incident. We were told that incidents relevant to the Emergency Department were discussed at staff briefing meetings and senior nurses meetings; we were shown examples of minutes from these.

We reviewed the investigation into a serious incident that had occurred in 2013. The report detailed a chronology of events, considered the learning points and listed recommendations in response to the findings. The investigation was supported by an action plan, and the plan indicated that actions for completion by the Emergency Department had been implemented.

Systems, processes and practices

We observed that the design and layout of the department were conducive to providing care to patients in accordance with their needs. The department was visibly clean on the day of our inspection and the department scored highly in cleaning and hand-washing audits.

In 2015 we found there was good prevention and control of infection, the department was visibly clean and well-ordered and that we saw staff used appropriate personal protective equipment. There was safe management of medicines and we saw that medicines were stored correctly and securely and that medicines that required refrigeration were kept a temperature checked fridge.

Staff had access to IT systems that enabled them to track patients, report incidents and access policies, among other things. We were told by staff that equipment was always available and well maintained. We observed that the resuscitation trollies contained all the required equipment.

In 2014 the hospital had systems in place to ensure that safeguarding concerns were shared with the relevant local authorities' safeguarding team. A dual system was in operation to share concerns: if a member of staff suspected that a child or vulnerable adult may have been subject to abuse, they would make a direct referral to the relevant safeguarding team. If they had concerns about a child's general welfare, they could complete a 'cause for concern' form; we saw examples of this happening. In addition to the above reporting arrangements, children under the age of five were routinely checked to establish whether they were on the local authorities' child protection register. However, responsibilities for making checks had changed recently and staff were not clear about who was responsible for making them. The records we reviewed for children under five who had attended the Emergency Department had not been checked against the child protection register in accordance with the hospital's policy.

In 2015 there were procedures to respond to signs or allegations of abuse. The systems for safeguarding of children were in place but could be more timely when checking children over five years of age. There were potential delays in the checking of children against 'at risk' registers. The hospital serves Peterborough and the surrounding counties. When a child attended from the Peterborough or Cambridgeshire area the register was checked automatically by the clerk on registration as there were electronic links to social services database. However for many children who attend from other counties the register would be checked on the next working day. We received advice from a CQC specialist advisor who told us that this was acceptable practice.

In 2014 clinical records for children included a checklist to remind staff to assess the risk of abuse to children. Staff advised that they would complete this assessment for children of all ages. We saw that this checklist was not completed on all the clinical records we reviewed.

In 2015 we found flow of patients through the department had been improved by implementing a Medical Assessment Unit which allowed more space and time to care safely for patients with emergency conditions. Information and data reviewed showed that patients were seen more quickly than previously and the department was performing consistently better against the four hour target for admission and treatment.

Monitoring safety and responding to risk

Staffing was monitored throughout the day and a daily staffing sheet was used to record staff allocations. Shortfalls were addressed by the nurse in charge in the first instance and bank and agency cover obtained as required. If cover could not be sourced, this was escalated to the Lead Nurse and subsequently to the directorate operational lead for that area. The situation would then be assessed and staff moved within the department according to demand and associated risk.

In 2014 the department was fully staffed for healthcare assistants but had a vacancy rate of approximately 10% for nursing staff. Approximately 7% of nurses were also on maternity leave. This meant that the department frequently relied on bank and agency nurses to provide cover. We were told that recruitment of nurses for the emergency department was on-going and that new initiatives were being considered to reduce the number of vacancies; these included the recruitment of nurses from abroad which was currently taking place.

In 2014 the trust had seen a dramatic improvement in consultant posts being filled within the department during the past 18 months. The lead clinician had developed a recruitment campaign and we were informed that six consultants were currently in post with a seventh post having been successfully filled. The deanery had advised the department that it needed an additional two consultant posts and a business case was being prepared to request these. The staff we spoke with had mixed opinions about whether the department was adequately staffed. Some staff thought that the department could become very busy and that they did not always have sufficient staff on duty. Other staff told us that there were adequate staffing arrangements in place. During our visits we found that the department was busy but adequately staffed.

In 2014 we saw that the number of 'safe staffing level' incidents reported had increased from two in quarter 1 to 11 in quarter 3, with the highest number of 'safe staffing level' incidents reported in November 2013. We were informed by the matron that if a member of staff reported a staffing shortfall it did not always mean that the department was unsafe: this was because cover may have been sourced after the staffing incident had been reported. We reviewed the nursing rotas for November and December 2013 and found that, according to the rotas, there was a shortfall in staff for most shifts in November.

December 2013 was much improved, with almost all of the shifts having the required number of nurses and healthcare assistants in accordance with the departments agreed levels.

In 2015 we found the staffing levels were appropriate to cover the different areas of the department. We saw that patients were always appropriately monitored and supported. Staff requirements had been reviewed and expected levels had been increased to match the revised department layout. There had been a 40% vacancy rate but this had been reduced due to recruitment. There were approximately 80 registered nurses with 21

vacancies at the time of our visit. This vacancy included additional staff to meet the estimated needs for the new arrangements and uplift in staffing numbers. There was an on-going recruitment programme for staff.

In 2015 the nursing staff levels were supported by agency and bank staff. In February to April 2015 there were up to 15 agency staff on each 24 hour period with around 3500 hours covered each month by bank and agency registered nursing staff. This equates to over 70 twelve hour shifts covered per week. There were on-going efforts to recruit staff including experienced nurses from abroad.

Children should ideally be cared for in an area separate to the adult ED patients. At the time of our visit in 2015 the paediatric area was open from 9am and closed at 9:30pm. Children were then moved or treated in the main minor's area. This was to improve monitoring and maintain safety through the night. A survey of children's attendance had shown children were still in the department until after midnight. This had been noted by managers and we were informed that they planned to keep the children's area open until midnight from July 2015. There were only two paediatric registered nurses on the team for the ED. This meant that general ED nurses cared for children without paediatric support immediately available. There was a paediatric assessment unit next to the ED for advice when needed.

In 2015 there was consultant presence in the ED until 2am with middle grade medical staffing through the night. There were two consultants through the day and two on the late shift. There were plans to ensure the rapid assessment bays were supported by consultant medical staff. Due to effective consultant and middle grade recruitment there were sufficient consultants to cover and provide for senior clinical decision making. There were systems in place to support and mentor medical staff, and provide review and check of clinical records and diagnostic reports.There was safe medical staffing cover in the ED. Locums were used to cover shifts to maintain adequate staffing. There had been effective recruitment of consultant staff meaning consistent senior support. In February to March 2015 only 377 hours were required to be covered by locums at consultant level, out of a total of 4,773 hours for all medical staff locums.

In 2014 we spoke with staff about safeguarding policies and procedures. The staff we spoke with all talked confidently about how to recognise the different types of abuse and what they would do if they suspected that a vulnerable person may have been subject to some form of abuse. We observed patient handovers and found that suitable information was transferred between staff during handovers.

In 2015 one patient we spoke with told us some concerning information about their care. We discussed this safeguarding issue with the ward manager who said they would follow Trust procedures for reporting. Senior managers told us that these concerns had already been raised with the matron for the area, investigated and were unsubstantiated.

Anticipation and planning

In 2014 we found the trust had an internal major incident plan, developed in accordance with the Civil Contingencies Act 2004. The plan set out internal responsibilities and links with external services; each delegated role was supported by a separate action card that specified individual responsibilities. The hospital was also a training centre for major incidents and took part in practical exercises every three years as well as annual theoretical exercises. The most recent practical exercise was undertaken in November 2013, after which an action plan was developed to make improvements for future exercises or eventualities.

In 2014 during the preceding 12 months, one major incident had occurred. An incident report had been written following the event, detailing the timing of events and actions taken. An operational debrief had taken place and perceived strengths and weaknesses had been documented. The Emergency Department had a separate escalation policy to cope with a large influx of patients, as well as for dealing with relocation issues in the event that a particular area within the department could not be used. The plans set out clear lines of responsibility and actions to follow. A proportion of the staff working in the emergency department was currently funded and employed by the military. This arrangement was due to cease in July 2014 and the trust was aware of the need to increase its number of staff and fund these positions. We were told that the staffing levels within the emergency department would remain the same and that there was a trust-wide plan to provide for this.

In 2015 we found there were clear patient flow and assessment processes in place. All patients including children who attend as emergencies were assessed by a

triage nurse or an experienced nurse receiving patients from ambulance staff. Patients attending by ambulance were assessed in a rapid assessment bay then taken through to the appropriate bay in majors, or medical assessment unit or other area such as minors as needed. This meant patient's conditions were assessed appropriately and made safe prior to waiting for medical assessment and treatment.

In 2015 patient observations included the early warning score for patient's condition. This was recorded on observation charts with a specific paediatric version on children's charts. Senior staff and medical staff were advised if the score changed indicating deterioration in the patient's condition. The service had audited the completion scores on records. Adult score completion had reduced from 90% to 70% from September 2014 to March 2015. The Paediatric Early Warning Score (PEW's) completion had reduced from 100% to 63% from December 2014 to March 2015. This had been raised at governance meetings with resulting reminders to staff to maintain monitoring for adults and children.

In 2015 the ED staff implemented a regular check on patients who needed to stay in the department for more than four hours. The checklist included checking for pain, hydration, position and skin integrity. Staff noted that this had not been used since the medical admission unit had opened two weeks prior to our visit. Patients who were elderly with complex needs or who were frail were cared for by the team responsible for care of frail and elderly patients from the medical admission unit. There were 49 beds on the unit allowing such patients to be fast tracked from ED for review by this team. The department had focussed on improving the antibiotic support for patients. Governance processes had led to additional information and reminders to medical staff to check and provide treatment for patients to avoid the risk of sepsis.

In 2015 results of x-rays that showed an abnormality were all reported to consultants for checking and follow up treatment. When patients left without being seen after having diagnostic tests such as x-rays the results were checked by a consultant to ensure patients were recalled if there was a clinical need.

Are urgent and emergency services effective?

(for example, treatment is effective)

Good

In 2015 we found that the department practice was evidence based and following national guidance and standards. Local and national audits were carried out to measure outcomes and identify areas for improvement which were acted upon. The unplanned readmission rate was slightly worse than the England average. Medical and nursing staff told us they were well supported in their work and received regular appraisals and teaching. There was effective multidisciplinary working, particularly with the new medical assessment unit, to improve the patient journey through urgent care services.

Evidence-based guidance

In 2014 we found that a clinical audit plan had been developed that would run over a three-year cycle; 2013/14 was to be year one. The audit plan for the current year included four audits: three had not yet started as there had been a delay in receiving guidance from the College of Emergency Medicine. An audit on transient loss of consciousness had been completed; this was to establish whether guidance set by the National Institute for Health and Care Excellence (NICE) had been followed. Results were awaited at the time of our visit. A further four audits were scheduled for years two and three of the audit plan. Two audits, as well as a clinical audit plan, had been agreed for August 2013. The hospital had an urgent care action plan that reflected external audits of issues within the department. The trust had invited the national Emergency Care Intensive Support Team (ECIST) to review its systems and processes in the ED to help improvements continue and to assist in achieving the 4 hour targets set f or treatment for patients.

The Emergency Department had developed fast-track pathways for a number of specialist areas, including diabetes, nutrition, cardiac arrhythmia and neutropenic sepsis. We reviewed a sample of patient files against selected protocols and found that patients had been treated promptly and in accordance with the correct protocols.

In 2015 we found there were good arrangements to provide and to audit care and treatment based on best practice and according to national evidence-based

standards and guidelines. The ED was the trauma unit in the region so standard procedures for managing patients with severe trauma were used from a regional manual (TEMPO) that all other units used.There was a checklist for patients with fracture of the hip. However there was no comprehensive fast track system for these patients.

In 2015 care was provided using 'Clinical Standards for Emergency Departments' guidelines produced by the Royal College of Emergency Medicine (RCEM). There was routine audit of standards to check performance with feedback to teams through clinical governance meetings and staff briefings. The ED consultants reviewed and revised pathways of treatment such as for a limping or fitting child or NICE guidance on head injury to meet national standards.

Monitoring and improvement of outcomes

In 2014 the emergency department monitored trust-wide targets, some of which were set nationally and others through local agreement: these included targets relating to infection rates, the number of falls, the number of incidents and complaints.

Data for the above was collated monthly and summarised on a balanced scorecard. Performance was reviewed and discussed at meetings in accordance with the committee structure. Operational staff within the department were kept informed through the team briefings.

In 2015 we found audits were undertaken in 2014 to review performance against the RCEM standards. Older People Care in Emergency Departments, Severe Trauma TARN (Trauma Audit & Research Network), Mental Health Care in Emergency Departments and Initial management of the fitting child. There were plans for the audit in 2015 of sedation in adults, vital signs in children and the risk of clot formation in lower limb immobilisation.

In 2015 we reviewed RCEM audit results for 2014/2015. For management of the fitting child, the emergency department was in the upper quartile for the fundamental standard related to blood glucose monitoring meaning it was amongst the best results in the country. Other results were broadly in line or slightly better than other emergency departments with only one benchmark being in the lower quartile (children being given antipyretics).

The RCEM audit for mental health showed that the emergency department was close to or at the upper quartile for two fundamental standards but was at the lower quartile for one standard (provisional diagnosis recorded).

The RCEM audit for assessing cognitive impairment for older people showed the emergency department to be above the lower quartile for one fundamental standard. Other results were mostly in the upper quartile of results and so better than many other emergency departments.

Trauma audit results showed that in 2013/14 there was an improvement in survival rate of the severely injured patients attending the Peterborough ED patients compared to 2011/12 and this was above the national average.

The unplanned re-attendance rate within seven days for the ED showed that the trust was performing just above the target of 5% for the year to February 2015 at 5.8%.

Staffing

In 2014 we were told that staff had annual appraisals. The staff we spoke to told us that they felt supported by management and found their appraisal a helpful process. We were shown evidence that 66% of staff within the directorate had completed their appraisal for the year. Staff had mixed views about the training they had completed. Staff talked confidently about safeguarding arrangements but had less knowledge of other aspects of patient care, for example caring for people with dementia. We reviewed training records and found mixed results across mandatory training subjects. We saw that some mandatory training sessions had high attendance and completion rates: for example, safeguarding children training had been well attended by all staffing groups. Other mandatory training sessions, for example adult basic life support, had been completed by 39% of medical staff but by 93% of other staff working within the emergency department. Medical staff had undertaken Advanced Life Support training which includes Basic Life Support at induction. Training in moving and handling had not been attended by any medical staff; equality, diversity and human rights also had a low attendance rate among the medical staff but had been well attended by other staff.

In 2014 staff we spoke with were aware of the Mental Capacity Act and associated deprivation of liberty

safeguards; most staff told us that they had completed training in this area. Staff responses were mixed about whether they had completed training on supporting people with dementia.

In 2015 we found medical staff were well supported and followed an induction and training programme. Induction training included infection control, management of blood transfusions and safeguarding arrangements for adults and children who may be vulnerable. New medical staff were supernumerary until competence had been tested. Medical staff used workplace based assessment booklets to check and record competence.

In 2015 consultants and other medical staff said that they mentor and worked together on audits against clinical guidelines to develop awareness and improve adherence to standards.Ten nursing staff were emergency nurse practitioners and another ten were experienced staff who could take coordination roles when on duty. There were over 60 other registered nurses in the ED team. There was also a clinical educator member of staff who supported competency checks and ensured adequate induction of new staff.

Multidisciplinary working and support

In 2014 we observed handovers between shifts and found that information shared between staff changing shifts was adequate to ensure patient safety.

The mental health crisis team was contacted for adult patients who attended the Emergency Department due to mental health needs. This service is run by the local mental health trust. The crisis team attended once the patient had been stabilised. We were told that there was frequently a delay in the crisis team attending, and that this may impact on the patient's well-being. We reviewed a sample of patient notes and saw that staff from the emergency department had informed the crisis team of patients in their care but the crisis team had not responded promptly.

Children and young people who attended the Emergency Department with mental health needs were supported by the child and adolescent mental health (CAMHS) team. This service is run by the local mental health trust. We were told that this service was only available during office hours and that there was frequently a delay in the CAMH team responding. This was supported by patient notes and through a conversation with one patient's relative. We were told that the emergency department would admit the child or young person until they had been seen by the CAMH team.

In 2015 we found there was close working and integration between ED and the rest of the hospital. All admissions were assessed in ED at rapid assessment prior to transfer into the medical admission unit. This meant good flexibility to manage patients as either emergency or routine admissions. If there was overflow from the Medical Admissions Unit back into ED the emergency room medical staff managed patients to ensure rapid assessment and treatment.

Are urgent and emergency services caring?

Good

In 2014 we found that most people thought that staff in the emergency department were caring. In 2015 we found that most patients spoke highly of the care they received. We saw positive interactions between patients and staff. Patients told us that they were given information about their condition, care and treatment and that staff answered their questions. The Friends and Family Test for the department had improved since 2014 with 90% of patients recommending the service.

Compassion, dignity and empathy

In 2014 patients in the majors department were accommodated either in side rooms or in beds that were semi-partitioned; this was sufficient to protect their privacy and dignity while enabling staff to observe the patients easily. Staff told us that curtains were always pulled round patients when they received personal care or discussed information. A number of beds on the emergency department were in side rooms, while other beds had a partition wall separating them from other patients. The staff and patients we spoke with liked the layout of the emergency department, which meant that people could be cared for in privacy as well as being observed easily by staff.

Staff working in the Emergency Department did not undertake comfort rounds to ensure that patients had

had their continence needs met, were comfortable and not in any pain, and had a drink if they needed one. We were told that this was because the patients were in the department for only a short time and were well cared for. We observed that call bells were positioned on the wall behind the patients' beds and were not within reach. The patients we spoke with were mostly satisfied with the care they had received; however, two of the patients told us that their continence needs had not been met. Some patients described incidents where care had been protracted and unsatisfactory.

In 2015 we observed staff asking patients about their pain. Staff checked patient comfort, pain levels and we saw that analgesia was administered where needed. Patients told us they were comfortable and had been asked about pain.

Involvement in care

In 2014 most of the patients we spoke with were satisfied with the communication during their time in the Emergency Department. We observed positive interactions between staff and patients although we did observe one member of staff who was abrupt when speaking to a patient. The relative of one patient also told us that some of the doctors could be rude but that the nursing staff had been very caring.

Most patients told us that staff communicated well with them: for example, one patient told us that they had remained in the department for approximately eight hours but that staff had regularly updated them and provided an explanation. This was not always the case: another patient told us that they wanted pain relief but were not able to have any because the hospital did not have sufficient information about them. The patient told us that they did not know what this meant and did not understand why they could not have pain relief.

Most of the patients we spoke with were happy that they were listened to if they asked for something. The relative of one patient told us that their relative was going to be discharged but the relative did not think the patient was well enough to be discharged and so they requested that a specialist should review the patient. This request was granted, the patient was re-evaluated, and both the patient and their relative were satisfied with the outcome.

We spoke to another patient and their relative who were dissatisfied because the patient had been discharged in the early hours of the morning and had been brought back by ambulance two hours later.

In 2015 we spoke with sixteen patients and all said they had been provided with good information and support. Patients were included in their care and supported to make decisions about care and treatment. The most recent NHS inpatient survey results for the trust showed patients felt they were given good information and had sufficient privacy in the ED.

Trust and respect

The NHS Friends and Family Test results show that patients attending the ED were likely to recommend the department to their family and friends. The results in 2014 were significantly above the England average.

When we visited in 2015 the most recent NHS inpatient survey results for the trust showed patients felt they were given good information and had sufficient privacy in ED. The survey from September 2014 and January 2015 was answered by 392 patients at Peterborough and Stamford Hospitals NHS Foundation Trust. Those responses relating to the ED showed eight of ten patients said they were given enough information on their condition and treatment, and nine of ten patients said they were given enough privacy when being examined or treated. The friends and family test for ED had improved from around 50% in April 2104 to 90% in March 2015 for patients who would recommend using the service.

The nursing staff we spoke with told us that they had attended equality and diversity training. One member of staff told us that Peterborough was a multicultural area and that they had an understanding of the different cultures and religious needs.

We observed that patient records were stored securely and that patient notes were written in a clear and concise manner. Care and treatment required were well documented.

In 2014 we saw that discussions between staff and patients were undertaken at their bedside. Side rooms were available for some patients, while others had their privacy and dignity respected because there was a partition between beds and curtains could be pulled round as required.

Urgent and emergency services

In 2015 patients told us they were well informed and supported by staff. Patients we spoke with in cubicles and the waiting area had been given good information about waiting time and their treatment. We saw that triage staff responded quickly to ensure patients had minimal time to wait before seeing a clinical member of staff.

Are urgent and emergency services responsive to people's needs?
(for example, to feedback?)

Good

In 2014 we were concerned at the lack of a separate children's emergency department. In 2015 we saw that this area had been opened and provided an appropriate area for the treatment of children though we were aware that it was only open until 9.30pm. Staff received training in caring for people with learning disabilities but staff told us they had received limited training for caring for patients living with dementia. There was a dedicated team for responding to and caring for frail patients who supported the emergency department.

The department had seen an improvement in its performance against the four hour decision and treatment target year on year but was still below the target for January to March 2015 at 84%. Data we reviewed on inspection showed that the department was recently meeting the 95% target after the opening of the medical assessment unit two weeks prior to our inspection. There were no 12 hour waits for 2014/ 2015.

Meeting people's needs

In 2014 the hospital had not consistently met the national target of all patients attending the emergency department being admitted, transferred or discharged within four hours. Over the previous year the hospital had failed to meet the target on a significant number of occasions. The breach rates were higher for admitted patients; typically, the highest number of breaches were for medical patients, the most likely cause of which was a lack of beds. The second and third most likely causes were long waits for a specialist or waiting for an assessment respectively. We were shown evidence that bed occupancy for medical beds frequently exceeded 90%.

In 2014 the Emergency Department did not meet the target for the number of patients who had left the department without being seen (September 2012 to August 2013), but met the target for patients having their initial assessment within 15 minutes of being brought in by ambulance. The EMU, which was introduced in November 2013, had a proportion of beds on the ESSU. The purpose of the EMU was to assess patients referred by their GP who had a suspected emergency medical condition; once stable, patients could be discharged, admitted for a short stay or transferred to a specialist bed. However, we were told that the beds on the EMU had not been protected and were frequently filled with other medical patients. This impacted on the performance of the Emergency Department because the available beds had not been used for their intended purpose.

In 2014 the trust had set up an internal urgent care board (UCB) with responsibility for overseeing key actions to improve patient flow through the hospital. Meetings were held weekly. We reviewed a sample of action notes and saw that there were different actions for specific work streams. These included actions to establish a surgical assessment unit; actions to improve the timeliness of patient assessments by the Emergency Department team as well as by different specialties; and plans to improve the protection of the number of EMU beds and to improve ward-based discharge arrangements, among other things.

In January to March 2015 the Trust had seen 84% of the 21,867 patients within four hours against the target of 95%. The Trust had improved patient flow through the ED, MAU and the hospital to achieve the target in the weeks prior to our visit. The new MAU had improved patient flow through the ED and also improved discharge times for patients who did not require admission to the hospital. Activity was recorded in detail using a reporting system developed at the Trust. There was real time feedback to department managers and clinicians to show performance against targets and reasons for any delays. We examined detailed analysis for a day during our visit which showed clinical reasons for the delays.

At our inspection in 2015 there had been no breaches of the four hour target for diagnostic reasons in the year to March 2015. The system showed approximately 7% increase on the previous year at the time of our visit but

the level of breaches of the four hour target was less than 2014. Ambulance turnaround times were improved as a result of the Medical Assessment Unit with the hospital performing better than many in the region according to data reviewed. The average time to treatment target which shows how long patients wait for definitive treatment for their condition was within target from February 2015. There were no 12 hour trolley waits in 2014 to 2015 at this service.

In 2014 the hospital did not have a separate Paediatric Emergency Department. There had been a series of external visits to the hospital by the ECIST as well as by the NHS East of England Area team. The final outcome of these visits was the recommendation that a Children's Emergency Department should be re-established because care of children had become fragmented due to the lack of a central unit. We were told that a proposal had been drafted and that it was planned that the paediatric emergency department would be re-established in July 2014.

On inspection in 2015 we saw that there was a separate area for children and young people within the ED which had opened in July 2014. This area was closed after 9:30pm each day and was not always staffed by paediatric trained nurses though Emergency Department staff had additional paediatric training to mitigate this. We saw that in the paediatric emergency care area there were play specialists as part of the team for some shifts. These staff may support children and families during the urgent admission to relieve the stress for the child and encourage rapid compliance by the child with any treatment needed.

In 2014 we were told that patients attending the Emergency Department received a cold meal (usually cereal or a sandwich); this was because they were meant to be in the department for only a short period. We were told that patients did not receive hot meals even if they had been in the department for more than four hours. The patients we spoke to were satisfied that they had received sufficient nutrition and hydration during their visit to the Emergency Department.

In 2015 we found there were good arrangements for staff to provide ED patients with drinks or food if this was required while waiting for treatment or admission.

Access to services

In 2014 we saw the Emergency Department was open 24 hours a day, seven days per week. We were told that the department never 'closed' its doors. If capacity was stretched, the trust would be placed on alert and the hospital's escalation policy would be followed.

In 2015 we found consultant staff were available to provide patient care and advice until 2am each day. The department was staffed at night by the middle grade medical staff within the team rather than using any unfamiliar locum staff.

In 2014 when the hospital was close to capacity, the escalation policy was followed. Staff could observe current capacity using an online patient tracking system; this information was discussed at capacity meetings that were held twice a day routinely, and increased to three times per day as required. The level of concern regarding capacity was rated as green, amber, red or black, with black being the highest state of alert. Black alert was frequently reached.

We were told that patients could access an interpreter service if they were unable to communicate in English; we were also told that a number of staff were able to speak a second language. However, staff were not aware of an advocacy service if patients required an advocate. We were told by the lead for patients with learning disabilities that contact details of an advocacy service were available on the intranet.

In 2015 we saw that the four hour target had been met consistently since the changes in configuration of ED and MAU two weeks prior to our visit. The department had not been meeting the four hour waiting time target for the previous year however we saw that patients were managed appropriately to their needs as quickly and efficiently as possible. Systems were in place to maintain effective flow through to ED or the medical assessment unit. We saw that board rounds were undertaken in the Medical Assessment Unit to ensure active management of patients diagnostic tests and decisions to admit. Staff noted that patients were being placed in the appropriate specialty ward as a result of the assessment period spent on this unit.

In 2015 GP admissions were managed in the assessment unit which meant that part of the ED major's bays were available as overflow areas if required. All patients were

assessed as safe to move across the admission unit when they arrived by ambulance.The trust had also established a separate ambulatory care unit (ACU). This was staffed with experienced nurses and medical staff running clinics. There were five junior nurses, five senior nurses and six advanced nurse practitioners. The staff provided prompt care for urgent and returning patients. Patients were directed to this unit from ED if their condition was stable and suitable for treatment in the unit. Patients attending with suspected thrombosis and low risk chest pain were managed as urgent cases in the ACU. The specialist nursing staff had additional training and competencies to provide technical investigations and procedures, including drainage of fluid from the abdomen and linings of the lung.

Vulnerable patients and capacity

In 2014 the Emergency Department did not have a specialist dementia nurse. We were told that the ESS had one dementia champion who could be contacted when they were working a shift. One member of staff told us: "There is no dementia champion on the emergency department. We could call upstairs to the ward for support but we never have. I haven't completed any training on dementia; we ask the patient's next of kin for support."

Staff told us that if a patient with a learning disability attended the emergency department and they were unable to speak for themselves, the staff would talk to their carer or relative. Staff were unclear about how they would support or communicate with someone if they did not have a carer or relative with them. Staff were also unclear about how to arrange for an advocate for a person. There was no mandatory training for staff on caring for people with a learning disability; however, the disability and equality lead adviser provided ad hoc training to wards or teams of staff if requested.

We spoke to the disability and equality lead adviser who told us that staff could access guidance on the intranet on caring for people with a disability and that this includes details of how to arrange an advocate. We were also told that a new strategy was being drafted to provide staff with guidance on how to care and support people with a disability; this was in the process of being finalised.

In 2014 staff told us that the crisis team would be contacted for adults with mental health needs and the CAMH team would be contacted for children with mental health needs who attended the emergency department. We were told that this did not always work well as the mental health teams did not always respond quickly, so patients frequently had to wait a long time for them to arrive.

In 2015 we found that staff in ED had attended training about the care of patients with learning disabilities but there had been no specific training relating to care of patients living with dementia. We spoke with the dementia specialist nurse for the Trust who provided regular visits and support to the Medical Assessment Unit. There was also a team responsible for care of the frail and elderly based in the adjacent admissions unit for support. Staff told us they had not attended training for caring for patients living with dementia. There was however training for supporting patients living with learning disabilities.

In 2015 the dementia specialist nurse was available to support ED staff if required and advised they planned to develop dementia link nurse roles for staff in ED. Patients attending with mental health problems were cared for by the ED team who could ask for specialist psychiatric nurse advice. The trust was implementing additional support to work more closely with the ED. This was in response to patients with mental health needs who were waiting long periods in the ED or admission unit for assessment. Patients in severe mental health crisis who needed a place of safety were transferred to the nearest dedicated unit in Fulbourn, Cambridgeshire. The ED and psychiatric team of the hospital, and police when appropriate, provided support until patients were transferred.

In 2014 the emergency department provided a service to a diverse population. We saw that there was signage in the department and patient information leaflets had been written in a number of different languages.

In 2015 we observed staff interacting with patients. Staff gave easily understandable explanation to support patients in making informed choices. We saw that staff asked for consent before undertaking patient's treatments. We asked staff about assessing mental capacity when required. Staff explained they knew when this would be recorded and the appropriate documentation from the computer system to be used.

Urgent and emergency services

Leaving Hospital

The department failed to meet the target for unplanned re-attendance in the year to date being at least 1% above the national average in this category and year to date around 6.2% This meant that a higher than expected number of patients re-attended the emergency department within a given time frame, having previously been discharged.

The emergency department can access the GP notes through a clinical records viewer system. GP's are able to see patient results through an IT system known as ICE. We were told that a handwritten letter would be sent out to the GP if needed (if the patient required an urgent appointment, for example).

Learning from experiences, concerns and complaints

Patients attending the emergency department had a range of routes they could follow to provide feedback about the care and treatment they received. All patients had the opportunity to complete the Friends and Family test; this asks questions about the level of satisfaction with the hospital experience. The results for the A&E department was significantly above the national average scoring 62 as opposed to the national average of 56.

Patients could also make a formal complaint or contact the Patient Advice and Liaison Service (PALS) to provide feedback or for help in making a complaint. We were told that complaints were responded to according to trust policy. The complaints-handling process was devolved to individual directorates for investigation of the complaint; this had caused a delay in response times. The matron for the emergency department maintained a log of all complaints and used this information to monitor trends and learn lessons. The department received between two and 10 complaints per month on average. The matron showed us an example of a complaint that had been responded to. We were also told that, depending on the severity of the complaint, the matron and/or lead nurse for the emergency department met with the complainant to discuss and address their concerns directly. One patient we spoke with told us that they had previously made a complaint and that they were satisfied with how this had been handled: a meeting with trust staff had been arranged, which they were pleased about.

Are urgent and emergency services well-led?

Good

In 2014 we found the emergency department to be well led. In 2015 we found then department continued to be led by senior staff with a clear vision for the service and evidence of meeting milestones in the strategy such as the recruitment of consultant staff. There were appropriate governance arrangements in place with regular audits and learning from incidents.

Staff spoke positively of senior leadership and told us they felt able to raise concerns and that they would be listened to. There was clear evidence of working with external stakeholders such as the CCG and other trusts to improve the quality of care and the flow through urgent care services. The identification of new pathways through the directorate, such as the newly opened medical admissions unit, demonstrated a commitment to improving services.

Vision, strategy and risks

In 2014 staff understood the trusts vision and values and were able to demonstrate these in their work. A risk register was maintained for the Emergency Department. High and significant risks fed into the directorate and trust-wide risk registers. Each risk had an owner as well as an executive lead. Risks were rated, monitored and reassessed each month, and each risk was linked to an action card. We saw that some of the high or significant risks for the emergency department had been reviewed in line with the date agreed; however, some of the medicine actions within the same document were overdue.

Quality, performance and problems

In 2014 there was a clear structure for reporting lines at operational level within each of the units in the emergency department. We were told that the shift was always led by a band 7 nurse. Concerns could be reported to the lead nurse for the Emergency Department and out of hours there was a site manager who could be contacted in the event of an emergency. In such cases, the duty manager would be called. A clear committee structure was in place, with each member having responsibilities relevant to their teams.

In 2014 staff were aware of the department's key targets, including the four-hour target, and told us about the importance of meeting this target, but that patient care must always come first. However audits were not being undertaken as planned, as guidance was awaited, and this meant that the department could not benchmark performance against others. We saw that performance against target was monitored using a balanced scorecard. The scorecard specified targets and achievement against target each month or quarter. Achievement against target was colour-coded using red, amber and green. Services for children had been reviewed and plans were in place to meet the national guidance available. However at the time of our inspection these were not in place and the services for children and young people were limited.

In 2015 we found there were established systems to ensure good clinical governance and monitor performance. There were a number of audits carried out and we saw from minutes that mortality and morbidity meetings were regularly held. We saw that actions following from incidents, audits and other checks were followed up by the ED team and directorate board overseeing the service. This included ensuring clear audit plans, checking rates of attendance at mandatory training and staff sickness and retention.

Leadership and culture

In 2014 the department had a clearly defined structure and patient pathway. Staff told us that they felt well supported and were able to share concerns as they arose, through either whistleblowing or incident reporting. We were told that there were fast-track pathways for some specialties. We reviewed a sample of patient notes and found that these had been followed. We were told by staff that inter-department working for obtaining a specialist opinion or a bed on a ward varied between the different wards and specialties. Data relating to reasons for breaching the four-hour target indicated that a significant percentage of breaches were due to lack of availability of beds as well as to waiting for specialist opinions.

The Emergency Department supported its staff following serious incidents and we were told that, where necessary, debrief sessions would be held with staff; we were told about a recent example of this. Lessons learned from incidents and complaints were discussed with the individuals concerned as well as being shared at the staff team briefing. Team briefings took place and could be used to encourage and support staff and to boost morale when needed. We were told that patient accolades were also monitored and shared with staff. Staff had access to formal counselling via occupational health if required.

In 2015 we found there was effective leadership of the ED. There had been a change of manager and a matron for the ED. There were clear messages to staff about the expectations of the managers and support available to staff. Medical leadership was effective with consistent support for middle grade and junior staff by the clinical lead and team of consultants. There had been long term plans to increase consultant numbers which had been achieved. This was in response to the growing patient attendance to ED and the need to provide specialist urgent medical care.

In 2015 staff said they felt the Trust Chief Executive visited the department and was aware of issues in the ED.

Patient experiences and staff involvement and engagement

In 2014 the staff we spoke with told us that they felt supported and listened to by management and that their line manager, the lead nurse and matron were all very approachable. The trust had a policy called 'Raising concerns in a safe environment'; the staff we spoke with told us they were aware of the policy and felt confident in reporting concerns if they needed to. One member of staff told us how they had shared concerns in the past and that they were happy with how the information they had shared had been managed.

Patient feedback was sourced through a variety of mechanisms and the Emergency Department used the feedback to make changes. We were told that pain management on arrival into the department had featured as a concern for a small number of patients; as a result, the department had incorporated a medicines cabinet in the Emergency Department reception area. A qualified nurse worked on reception, which meant that patients treated for minor injuries could access pain relief promptly on arrival. The noticeboard within the Emergency Department displayed details about recent performance against key indicators as well as details of recent action taken following patient feedback.

In 2015 staff told us they felt they were able to raise concerns and issues and there was good communication

about changes. Staff told us the new manager and matron were visible and supportive. Senior staff told us they felt they were working in a trust that supported them to make changes to improve the service.

Learning, improvement, innovation and sustainability

In 2014 we saw that staff were given positive encouragement by management within the department, which promoted good team working. The number of accolades each month was recorded and also shared with staff individually. Staff briefings were also used as a forum to congratulate staff on achievements. We were shown an example of this: the December meeting recorded in the action notes a 'thank you' to everyone for achieving the four-hour target.

In 2015 we saw the department consultants and lead managers had worked with partners in the health economy to manage patient flow issues. The Trust had worked with ambulance services and with clinical commissioning groups on improving ambulance turnaround times and reducing delayed transfers of care from the hospital. The changes supported the achievement of the four hour target at the time of our visit.

In 2015, within the ED and Medical Admission Unit there were increased therapy staff support to improve the assessment and preparation of patients for discharge. Any delays identified at board rounds were escalated immediately to reduce diagnostic delays and promote flow of patients through ED, the admission unit and to appropriate ward areas.

Medical care (including older people's care)

Safe	Requires improvement
Effective	Requires improvement
Caring	Requires improvement
Responsive	Good
Well-led	Requires improvement
Overall	Requires improvement

Information about the service

Peterborough City Hospital's medical care service has 11 wards catering for the specialisms of cardiology, renal care, gastroenterology, general medicine, stroke care, respiratory care and care of the elderly and an isolation ward. Linked to the hospital's accident and emergency service (A&E) is the emergency short-stay (ESS) ward, with 49 beds provided, and an ambulatory care unit (ACU), which has the capacity for up to 30 patients seen as day cases. The hospital had introduced an emergency medical unit (EMU) last autumn within the A&E department; this has the potential capacity of using up to 16 of the A&E or ESS beds when the EMU is operating effectively.

In 2015 the hospital opened the medical admission unit (MAU), in place of the ESS and EMU, with 49 beds receiving patients from A&E and direct from GPs for assessment. The ambulatory care unit (ACU) had increased capacity from 30 patients to 50 patients daily to reduce the need for admission.

Overall, the hospital's medical care service has 307 beds. The bed occupancy for general and acute departments (including the medical care service) for the period from July to September 2013 was 90.7% across the 561 beds available. This is above the England average of 86.4%, indicating a higher than average demand on the beds available.

In 2014 the cardiology care service saw 3,600 people as inpatients in the past year and also had 1,200 people seen as day cases in the same period. The cardiology service also provides diagnostic angiography, simple permanent pacing, transesophageal echo assessments and a full range of cardiac investigations. Rapid-access chest pain and heart failure clinics with one-stop diagnostics are held weekly.

In 2014 the stroke care ward had 580 admissions in the past year. The stroke service provides a thrombolysis service using an in-house staff team during weekdays and a telemedicine service at night and weekends. High-risk transient ischaemic attack (TIA) patients are assessed within 24 hours. There is also a one-stop neurovascular clinic for low-risk TIA patients. Stroke follow-up clinics are provided with some nurse-led follow-up.

Care for older people is provided by two 29-bedded wards with one specialising in Parkinson's disease and the other in delirium/dementia. Outpatient clinics for falls, Parkinson's disease and general medicine are also provided.

During our inspection in 2014 we visited 10 out of the 11 wards in the medical care service and spoke with 24 patients, 48 staff and four people visiting relatives. We also looked at the records of eight people.

In 2015 we visited nine wards and spoke with 39 staff, 15 patients and seven relatives. We were supported by one specialist advisor during this inspection. We also observed care and treatment and examined the records of 21 people using this service.

Medical care (including older people's care)

Summary of findings

In 2014 we undertook a comprehensive inspection and found that overall medical care services at this hospital required improvement. During that inspection we found that, while staff had effective handovers and access to the appropriate guidance available to care for people safely, a large proportion (40.7%) of safety incidents reported were from the medical care specialties. These incidents related to patient falls, pressure area care and infection control.

In 2014 Some staff and patients told us that they felt staffing levels were unsafe at night and at weekends and we saw that there were significant nursing vacancies in some ward areas. However at our unannounced evening visit on 10 March 2014 we found there to be sufficient staffing on the three medical wards visited. We found that targets set nationally and locally for patients were not always met. This included the transfer of patients to specific wards and effective discharge planning. The respiratory ward was not carrying out one national clinical audit (BTS emergency oxygen). National audits from the previous year were removed from the list for 2013/14. The stroke unit was under-resourced at consultant level. The cardiac unit did not have cardiologist cover during the weekend.

In 2014 the interactions we observed between staff and patients were all positive and supportive and the staff responded to patients' needs, including for emotional support. Patients and visitors told us that staff were caring and kind at all times. However, we did see instances when staff were too busy to respond appropriately to calls for assistance and the call bell reports showed that over 20% of call bells were not responded to within five minutes. Ward managers monitored complaints and incidents and looked at themes; we saw evidence that actions had been put in place as required to address the areas of concern.

In 2014 governance arrangements were in place across the medical care service but not all clinical audits as recommend by the National Institute for Health and Care Excellence (NICE) were being carried out across all wards. Each ward followed trust wide processes for monitoring incidents and accidents and significant areas of risk were placed on the hospital's risk register.

Junior staff told us that there was a lack of effective change management and leadership and that key messages were not effectively cascaded down the organisation. .

In 2015 when we returned to this service to follow up on improvements we found that there had been significant effort to address falls management and pressure care. However incident numbers remained significantly high with an emphasis on individual feedback. Further improvements were required to ensure learning was widespread to reduce risks to patient safety. Staffing was improved, with staff recruited from overseas; however there remained a reliance on agency and bank staff. Records and documentation were poor, with records lacking in detail and not updated consistently. Temperature recordings in areas where medicines were stored were not completed appropriately.

In 2015 in order to deal with effective discharge planning the trust had implemented discharge trackers and opened a medical assessment unit to improve patient flow throughout the hospital. We found that timely admission to the stroke unit remained an issue as did consultant staffing and auditing within the respiratory service. The majority of staff treated patients with compassion and care however this was not consistent and there were some incidences of poor interactions which were brought to the attention of ward managers. Data from Jan-March 2015 showed response to call bells under 5 minutes as averaging over 80%.

With the exception of a few areas, staff felt communication was good and that there was a positive move from the trust to be more open and core values were beginning to be embedded.

Medical care (including older people's care)

Are medical care services safe?

Requires improvement

In 2015 safety in the medical service remains as requires improvement because the trust has made insufficient progress since our last inspection to ensure that patients are protected from potential harm or abuse. In 2015 we found that medicines were not always stored correctly due to inconsistencies in monitoring fridge temperatures. We saw that infection control practices were not always followed and gel dispensers were found to be empty or not working on a number of wards including A wards 8, 9 and 10. The C. Diff target had been missed with a total of 41 cases for 2014/15 against a target of 31. Nursing records were not always well completed with gaps in assessments and observations were not always recorded when they were scheduled. Staff told us that they were concerned that they could not cope with the acuity of some patients, however the trust had completed the safer nurse staffing tool and levels of staffing were in line with the outcome of this audit tool.

Incident reporting remained high and this was seen as an indicator of a positive reporting culture. The trust had previously redefined the reporting of falls without harm and this had caused a rise in the number reported. There had been a programme to reduce falls and pressure ulcers though rates remained consistent on data reviewed. There had been a drive for nurse recruitment across the medical directorate and we found that staffing was being maintained on wards with use of agency and bank nurses. Staff told us they were supporting large numbers of new and overseas nurses.

Safety and performance

Our inspection findings in 2014 were that for the period from December 2012 to November 2013, medical care specialties had the highest number of patient incidents: 123 incidents out of a total of 302 reported across the hospital (40.7%). These incidents related to patient falls, acquisition of pressure areas within 72 hours of admission and infection control issues. Pressure ulcers within 72 hours of admission are reported by the Trust but attributed to the community. We found a culture of reporting incidents across the medical wards.

Learning and improvement

In 2014 we found that the hospital had protocols in place to monitor and assess risks to patients in the key areas of pressure ulcer care, catheter-acquired urinary tract infections, infectious diseases and falls with harm. We saw appropriate documentation on patients' files regarding the above and effective care plans in place.

In 2014 the hospital recategorised the harm from falls to include all falls which resulted in injury in July 2013. This has led to a spike in reporting which shows the hospital as being above the national average. Whilst the trend is downwards it remains above the national average. We heard that there had been increase focus on fall prevention and saw that aids were in place to reduce the risk of harm from falls. A large proportion, over 50 % of rooms were single rooms which presented challenges for nursing staff to reduce the risk of falls. However the hospital raised the awareness of steps staff could undertake to reduce the risk of falls and this was clearly working on the medical wards. We saw effective assessments of risks for venous thromboembolism on patients' files; 94.3% of these assessments had been completed against the target of 95%. Staff we spoke to were aware of the key risk areas for the hospital.

In 2015 we found that incident reporting remained high. Skin integrity and falls prevention was a focus throughout the trust but remained an area for improvement. The rate of patient falls, pressure ulcers and catheter related urinary tract infections (UTIs) between December 2013 and December 2014 remained consistent with only slight fluctuations month on month. The number of new pressure ulcers, developing after 72 hours of admission, had increased in January – March 2015 to 2%. The trust had recruited a Falls and Fractures Prevention Specialist Nurse in April 2014 to lead on activities to reduce the number of falls. There were tissue viability link nurses identified in ward areas to promote care and provide training for staff. A scrutiny panel met monthly to discuss all serious incidents and review action plans.

In 2015 B6 was identified as a ward with a high number of falls (100 were reported between Jan - Dec 2014). Information regarding falls was provided to staff on a falls prevention notice board which included details such as the number of falls on the ward and identified medication that increased the propensity to falls. Staff told us that that were getting better at identifying the risks but now needed to

make improvements with understanding what they need to do to mitigate risks. Several staff stated that issues would be investigated and raised with individuals concerned. The general feedback was that the focus was on individual learning and feedback. The wider opportunity to learn from incidents was not evident across many of the medical areas.

Systems, processes and practices

In 2014 we saw effective handovers taking place to ensure that staff had appropriate guidance to manage the care of patients. We saw that incidents were recorded and reported effectively and that action plans to reduce risks were in place. There were effective infection control protocols in place. Staff told us that night staff cover was a concern at times and that sometimes they felt that staffing levels were unsafe. However at our unannounced visit on 10 March 2014 we found that there was appropriate staffing in the evening on the three wards we visited. Patients and visitors told us that the wards seemed short-staffed, especially at the weekends. Some wards had significant nurse vacancies and some staff reported that a high staff turnover affected staffing cover. Safeguarding training had been provided to staff and they were able to tell us of the procedures for reporting concerns. Medication systems were robust and secure, apart from one instance when there was no capacity assessment or care plan in place for self-administering of medication.

In 2015 we found that on the majority of medical wards a full multidisciplinary team handover took place twice a day at the white boards to enable all staff to communicate concerns and changes in a patient's condition. On B14 the handover occurred however staff referred directly to the electronic (ETrack) system. This was updated throughout the day and staff could print off the details for the patients they were looking after. However this meant that not all paper documentation was up to date for the patients as the reliance was on the electronic system. Having two systems could increase the risk to patient safety as it was not always clear what the current status of a patients care was.

In 2015 nursing staffing numbers, both predicted and actual were displayed on each ward. Staffing was divided into three teams on each ward with a sister or deputy co-ordinating. Ward managers were supernumerary and in addition to staff numbers when working. During our inspection there were sufficient staff numbers with typically one trained nurse and one health care assistant to eight patients. There was a trust wide recruitment drive underway and nurses were being recruited from overseas. There were vacancies for a variety of staff grades on several of the medical wards which were being advertised. To cover gaps agency and bank staff were in use in all areas. Staff told us they were supporting a lot of new starters and overseas nurses who needed support. Patients said that their impression was that there was sufficient staffing during the day but this varied at nights and weekends. However, rota's indicated that actual staffing numbers were being maintained to those planned for out of hours.

In 2015 temperature recording on drug fridges and areas where medications were stored was inconsistent across the medical service. On A8 ward records showed that fridge temperatures were not always recorded each day between January and April 2015. Staff on the ward could not confirm if temperatures had been checked during this period. On four wards the fridges were noted to have passed the date for the next service to be undertaken which was the end of April 2015 and no actions had been taken to organise the next service. This meant there were insufficient systems to ensure that medicines were stored at temperatures that kept them in optimum condition. During this inspection we found that infection control practices were not always consistent and required improvement. On ward A8 a member of staff was observed entering multiple patient rooms with prepared intravenous preparations. The member of staff was not wearing the appropriate personal protective equipment (PPE). This was brought to the attention of the deputy charge nurse at the time.

In 2015 the trust had failed to reduce the number of cases of C. difficile(C Diff) to 31 or fewer, with 41 cases occurring in 2014/15. On B6 staff informed us that there had been several outbreaks of C Difficile every two months. Ward B6 had outbreaks of diarrhoea and vomiting in February, August and November 2014 and January 2015.The trust had initiated a bed cleaning programme and the ward was given a deep clean in November 2014 and had not had an outbreak since. All staff completed training following the last outbreak and were aware of reporting actions and as soon as a patient was experiencing symptoms they were put into a side room for isolation.

Gel dispensers were situated at regular intervals throughout the wards. However these were battery operated units and found to be faulty on a number of

wards including A8, A9 and 10. On the second day of our inspection we saw that notices had been affixed indicating they were not working and that additional gel dispensers were now in place. It was noted as a recommendation following an unannounced infection prevention and control audit on 9 April that a system for checking of gel dispensers regularly and replacing batteries should be developed.

Monitoring safety and responding to risk

In 2014 we found that staff were not using a low rise bed for one patient who had had a fall; such a bed had been used on previous wards as the patient had a history of falls. When we spoke to the relatives of the patient, they were concerned about why the low riser bed was not being used. The ward responded by providing a low rise bed but we found on the second day of the inspection that the falls risk assessment and care plan had not been updated to reflect the fall and the risks to the patient.

In 2014 we found one person had not had their fluid and food intake charts and positional change charts updated for over four hours; the staff told us they had been very busy. This could have had an impact on the care and treatment of the patient as their records did not reflect their current status. Staff showed appropriate understanding of the deprivation of liberty safeguards and in caring for people with reduced capacity to consent.

During our inspection in 2015 our findings were that there was specialised equipment available and in use, for example pressure relieving pads on chairs, repose boots, pressure relieving mattresses and low rise beds for patients at risk of falls. The en- suite bathrooms were spacious and well equipped with mobility aids. Patient said that grab bars were helpfully positioned.

In 2015 clarity and detailed documentation was lacking across all medical wards. For example 21 nursing notes were reviewed and there were gaps noted with risk assessment, skin integrity checks, catheter care bundle and clinical observations were not always recorded when scheduled. One patient with a NEWS (national early warning score) of three required monitoring 4-6 hourly but had a ten hour gap where observations had not been taken. Care planning lacked detail for example "needs assistance with washing and dressing" was written but no further specific details. A mobility care plan stated "due to illness patient is dizzy" and a nutrition care plan stated "not tolerating much milk".

In one set of nursing notes a patient had a DNACPR (do not attempt cardio pulmonary resuscitation) in place from April 2015. It had been documented that the relatives had not been in attendance though there was no evidence that the patient lacked capacity to make decisions. Records indicated that staff had agreed to discuss this with the patients family but that it had not been done. We brought this to the ward managers' attention, who spoke with the consultant and medical team. It was arranged that they would speak with the relative regarding this the following day.

Anticipation and planning

In 2014 staff told us that each ward had an escalation procedure in place for staffing levels but that some wards were frequently on 'red' status as bank or agency staff were not always available. Staff could be brought in from other areas but staff told us that at times they were under pressure due to the lack of appropriate staffing levels.

In 2015 Staff informed us that they felt that there was not always enough staff depending on the acuity of the patients but were able to explain the escalation process that would be undertaken. On several wards there were additional staff allocated where a patient required one to one care. These additional staff were often requested via the hospital bank or agency. Additional staff employed to care for patients on a one to one basis were in addition to the usual staff numbers on the shift.

Are medical care services effective?

Requires improvement

The effectiveness of the medical service remains as requires improvement because the trust has made insufficient progress since our last inspection to ensure that patients receive an effective service by the monitoring of quality and provision of a service in line with national guidance. In 2015 The stroke unit was continuing to miss the target of patients admitted to the stroke unit within 4 hours at 51% against a target of 80%. The numbers of audits in respiratory medicine had improved since 2014 with 3 of 5 audits continuing at the time of our inspection. An additional consultant had been appointed to the stroke

service though there were concerns at the amount of cardiology cover out of hours. Patients who required support with nutrition and hydration did not always receive this help or adequate support.

There had been progress in the stroke service with a new stroke pathway in line with national guidance and a consultant led telemedicine service out of hours. A stroke coordinator was in post providing a 24 hour seven day service. Generally there was effective MDT working including managing discharges, however we saw two occasions when this did not occur.

Using evidence-based guidance

In 2014 we found that the stroke ward's pathway for care and treatment were not in line with national guidance as occupational therapy and physiotherapy input did not meet national guidelines for the level of support patients required. Due to capacity and demand issues, patients were also frequently placed on other wards; however, they did receive medical reviews as required. The trust participated in the Myocardial Ischaemia National Audit Project (MINAP) which showed that the trust was performing in line with other trusts apart from the number of referrals to angiography which was lower than expected. The trust are reviewing this issue with the cardiologists. The trust currently has no mortality outliers.

In 2015 there had been some progress made within stroke services but further improvement was required in relation to the four hour admission target and number of outlying patients. Ward B11 was a 28 bedded hyper acute stroke ward with one trolley bed allocated for urgent admissions. 7 additional beds could be used on ward B14 if required. These patients remained under the care of the stroke clinicians. There was a stroke pathway in place which was in line with national guidance using a recognised tool for patient assessment. There was a consultant telemedicine service out of hours.

In 2015 a stroke coordinator role had been developed and there was a team of six staff in place providing this service 24 hour seven day service. The stroke co-ordinator assessed patients, liaised with the wider team such as the emergency department, wards and other staff groups and helped to arrange bed availability.

In 2015 NICE guidelines (national institute of clinical excellence) recommend that all patients with non-ST-segment-elevation myocardial infarction (NSTEMI) or unstable angina are offered coronary angiography within 72 hours of first admission to hospital. Between January and April 2015 the Trust achieved an average of 74% for patient receiving angiogram within 72 hours. In order to address the low referrals to angiography, an internal audit had been carried out and it was found that all high risk patients were transferred to the nearby specialist trust for treatment. It was reported by a member of staff that this would account for the lower figures.

Performance, monitoring and improvement of outcomes

In 2014 we found that only 65% of patients were transferred to the stroke ward within four hours. One patient and relative we spoke to said it had taken eight hours to be admitted to the stroke unit as there was a lack of available beds. Data to monitor the number of patients admitted to a stroke unit was seen to be achieving the targets set. In December the target was 80% and the trust achieved 89.4% of patients spending 90% of their time on a stroke unit.

In 2014 the respiratory unit was not carrying out clinical audits as per NICE guidelines for adult asthma, adult bronchiectasis, adult community-acquired pneumonia, emergency use of oxygen, and non-invasive ventilation. Staff were not able to tell us why these audits were not being carried out. The trust confirmed that national audits from the previous year were removed from the list for 2013/14. Other wards were carrying out effective clinical audits.

In 2015 we found that timely admission to the stroke unit remained an issue. Data for admission within the four hour target for the last year indicated that performance varied between 49% and 62.5%; in April 2015 the trust achieved 51.5%. The low level of performance was attributed to capacity issues. The target of 80% of patients spending 90% of stay on a stroke unit was being met and 83% was achieved in April 2015. Patients not admitted to the stroke unit had a daily review by a stroke consultant or registrar, during the week, although this was varied at the weekends.

In 2015 some audits had been undertaken within the respiratory service however this remained an area for improvement due to the minimal number of audits completed and lack of responsive actions implemented to improve patient care when identified. For example the respiratory service had planned to participate in five national audits in 2014/15. However, two of these audits had been abandoned and three were either on-going or still required outcomes as to compliance and areas for

improvement. Two local audits had also been actioned: one of which was on-going and another with the outcome of non-compliant in relation to DNAR decisions being carried forward into the community. This meant that the service could still not demonstrate it was meeting NICE guidelines or had made suitable improvement based on regular audit outcomes. There was an action plan in place to increase the number of audits undertaken to eight in 2016/17.

Staff, equipment and facilities

In 2014 we found that the stroke ward was not meeting national guidance as there were only two consultants in post, as opposed to three. Also, for the cardiac wards, there was a lack of dedicated consultant cover at the weekends. There was an effective staff delegation of duties in place for each shift and wards used a RAG (red, amber, green) rating system for staffing cover emergencies. We found that access to CT scans for stroke patients was very efficient. Staff on the medical wards told us that there was no consistent ownership of the four-hour transfer targets for patients from the emergency department, and that this had an impact on whether patients were appropriately cared for on the correct wards. We were told that one of the factors causing delays in transferring patients to appropriate wards was the cleaning of beds, which should take 30 minutes but frequently took an hour and a half due to the inclusion of an en suite bathroom.

In 2015 consultant staffing on the stroke ward (B11) had been increased to three. Funding had been secured for a third substantive post and recruitment was underway however there is a national shortage of stroke consultants which had resulted in a locum currently filling the third position. Dedicated consultant cover at weekends for cardiology remained an issue. There were four consultant cardiologists in post, (3.6 whole time equivalent), which was insufficient to cover out of hours. These consultants were also still required to participate in the general medical rota; therefore there was not a separate cardiologist on call at weekends and out of hours. There was a full time locum in post to cover between six and eight cardiac clinics a week which had a financial implication for the Trust.

In 2015 there were acute coronary syndrome specialist nurses in the trust however their service had recently reduced from six days to five days. The medical admissions unit (MAU) was opened on the 7th May 2015. Staff were positive and hopeful that this would address patient flow and reduce patient transfers as patients would be admitted to the most appropriate ward in the first instance.

Nutrition and hydration

in 2015 the provision of nutrition and hydration in medicine required improvement. Staff informed us that it was not always possible to assist all patients that required help with eating and drinking in a timely manner. Reasons were not enough staff at times when the ward had a high number of patients that needed help. There were some volunteers on wards however they had to be allocated appropriate patients as some could not assist those patients with a higher degree of swallowing difficulties. One patient informed us that they had been in the toilet when meals were delivered and no meal had been left for them by the domestic staff. The patient received a meal only once they had requested it. This could mean that patients who were less able to communicate may be at risk of missing meals if they were not present at the time of delivery.

In 2015 one patient on B11 was nil by mouth and diabetic. They did have an intravenous drip however the bag had finished, ahead of schedule. It was noted that they had previously received medication and nutrition via a nasogastric (NG) tube. This had been removed on the 13th May, attempted to be repositioned on the 15th and 16th with no success and there had been no further documentation regarding this since. This was brought to the attention of the ward manager, and we were informed that the patient was due for review that day, 18th May, by the team. We could not be assured that any nutrition or medication had been administered for the previous five days and there was a lack of urgency in the response from staff to the concern we raised. We brought this to the attention of the Chief Nurse and saw that these concerns were addressed. We followed this up the following day and found the patient had the nasogastric tube re-sited and was receiving nutrition.

Multidisciplinary working and support

In 2014 we were told by staff that multidisciplinary working on the respiratory unit was not effective. The stroke ward had an effective system for multidisciplinary meetings and shared learning.

In 2015 our findings were that physiotherapy provided a service Monday to Friday and were on call at weekends and out of hours. There were designated physiotherapists and

occupational therapists on each medical ward which provided consistency for patients. Staff handover took place twice a day with an MDT staff whiteboard meeting. New 'discharge tracker' posts had been created with responsibility for identifying and resolving any delays in discharge. Discharge trackers liaised with doctors, pharmacists and nursing staff. This group said the role was welcomed and communication between all parties was good.

In 2015 we observed one patient being assisted by a physiotherapist and staff nurse on ward A8. Following assistance the physiotherapist spent some time chastising the staff nurse in full view of the three patients within that bay. The staff nurse was clearly upset. This behaviour was reported to the senior nurse on duty immediately as unprofessional. On another ward two staff were overhead holding a discussion regarding another patient's condition whilst making the bed of another patient which was inappropriate.

Are medical care services caring?

Requires improvement

In 2014 we found that caring required improvement in the medical directorate as call bells were not always responded to in a timely manner. In 2015 the majority of staff demonstrated a caring attitude when providing care and treatment. However, we saw a number of incidents were appropriate help and support was not provided to patients. These included staff who did not communicate with patients and other staff who did not give patients assistance when they were obviously struggling. Relatives and carers we spoke with told us that they were not always given enough information about the plans for care. Therefore this area was rated as requires improvement as sufficient progress has not been made to ensure that all patients are cared for in a supporting environment.

The Friends and Family Test for the medical wards was positive with all wards reporting greater than 85% of patients recommending the ward and a number of wards scoring consistently at 100%.

Compassion, dignity and empathy

Our findings during the inspection in 2014 were that in the December 2013 NHS Family and Friends Test, ward A10 (gastroenterology) scored a 50 satisfaction rate compared with the trust average of 69. Ward B14 scored 39 and ward A9 scored 65. Both these wards were care of the elderly wards. On one ward, we observed one patient in distress calling out for over four minutes. Staff were within earshot but did not respond quickly to reassure the patient.

In 2014 records showed call bell response times provided to us, we saw that for January 2014, five of the medical wards had significant delays in call bell response times, with all five having over 20% of calls not responded to within five minutes, which was the hospital's expected response time. Some patients we spoke to confirmed that they were kept waiting, especially at peak times in the day, for example during medication rounds.

During our inspection in 2015 we found the majority of staff treated patients with compassion and care. However this was not consistent across all areas. The Friends and Family Test for the medical wards was positive with all wards reporting greater than 85% of patients recommending the ward and a number of wards scoring consistently at 100%. On wards A8 and B11 staff were observe to have minimal interaction with patients. For example, during observation in one four bedded bay, a member of staff came in and cleaned the area but this was done in complete silence, they did not introduce themselves or say hello and had no interaction at all with the patients in that area. There was a green light at the entrance to each room and bay area which was used to indicate when a member of staff was present in the bay or side room. We observed its use in practice but there were at least three occasions when the green presence light was left on when staff had left the room.

In 2015 there was a lack of awareness at times for patients needing additional assistance. In another four bedded bay, cakes and snacks were given out however the cakes were individually wrapped and patients struggled to open the wrappers and no assistance was offered by staff. On two occasions there were patients struggling to eat for over five minutes. One patient was at risk of harm from burning themselves as they were attempting to use their hands and had not received assistance. There were staff in the area but they were involved with other patients and we observed this patient being ignored. In both situations we brought this to the attention of the team and assistance was provided.

Medical care (including older people's care)

In 2015 one relative informed us that their mother had reported to have experienced rough handling from two members of staff during the night at the weekend. The patient had also made a request for a fresh incontinence pad however this was not provided and one member of staff was overheard by the patient to say "forget it", in terms of providing her with the new pad. This relative also informed us that their mother had not been dressed by 2pm on the Saturday before our inspection. Staff had informed them that they didn't have time to wash their mother and that they could not find her clothes, despite them being in the patient's locker. The relative had not brought this to the attention of staff as they had been concerned that their mother may be vulnerable the following evening. We brought this to the attention of the ward manager whilst maintaining the anonymity of the individuals concerned.

Involvement in care and decision making

In 2014 patients we spoke to told us that they were involved in their care planning and were kept informed of what was happening. We saw from patient records that consent forms were signed and in place. We saw that there were effective procedures in place for assessing people's capacity and that patient' representatives were involved in decision making if the patient lacked capacity.

Trust and communication

In 2014 most people told us that there was good communication with the staff and that they were kept informed of progress in treatment plans. However, two relatives said they found it difficult to speak to staff at times as staff members were very busy. Patients were complimentary about staff and appreciated the care and support they received.

In 2015 communication with relatives was varied. Some relatives stated they had been kept informed whilst others said that they had to ask for information before it was forthcoming. Some themes identified by relatives were that there was a lack of information about their relatives' condition, that it was difficult to find out about times of treatments and there were delays in diagnosis. We were told by a member of staff that following a patient fall that resulted in injury, the trust process was that the family would be contacted by the falls nurse lead and informed of the incident. The investigation report into the falls incident would be shared with the family and a meeting arranged to enable the family to ask any questions.

Emotional support

In 2014 the interactions we observed between staff and patients were all positive and supportive and that staff responded to patients' needs, including for emotional support. Patients and visitors told us that staff were caring and kind at all times. Patients on the stroke ward had appropriate access to a clinical psychologist.

Are medical care services responsive?

Good

In 2014 we found that medicine wards required improvement in relation to responsiveness. In 2015 we found the medical assessment unit had improved patient flow and reduced the number of medical outliers in other ward areas. The trust had improved their discharge processes and had recruited in to a 'discharge tracker' role that was facilitating discharge arrangements for inpatients and streamlining the discharge process however there was as yet no data to demonstrate the effectiveness of this system. Most recently available data showed that the medical directorate was meeting its referral to treatment time targets.

In 2014 we found that call bells were not always answered in a timely way. In 2015 we saw that there could still be delays in call bells being answered, in March 2015 over 50 call bells rang for longer than ten minutes out of the 6,800 calls. It is unusual to be able to and good practice that the trust is able to monitor call bell response times.

Meeting people's needs

In 2014 the capacity and demand issues in the emergency department impacted on the functioning of the ESS and ACU, which were used on a frequent basis for caring for the emergency department's patients. Staff told us there were pressures on the flow of patients from the emergency department and that frequently patients were not cared for on the correct wards. We observed on one ward that a call bell was not responded to within 20 minutes. The patient we spoke to later said that they had experienced delays in call bell response times. However trust data shows that on average the call bells across the trust were responded to within five minutes. We found that some of the medical wards had response rates in excess of five minutes.

Medical care (including older people's care)

In 2015 we found that the recently opened MAU had provided stability and process to patient flow. Patients could stay in MAU for up to 48 hours. At the time of our inspection there were 14 patients outlying in other specialty wards whereas prior to the MAU this number was around 60. Whilst the unit was in its infancy it was felt by staff that the benefit of the extended stay on MAU enabled patients to be transferred to the appropriate ward more effectively.

in 2015 there were monthly reports displayed on all wards regarding time taken for call bells to be answered with the target time being five minutes. In all areas visited the wards were achieving this target with results ranging between 1.5 and 2.5 minutes on average. On wards B11 and B6 nurses responded promptly to call bells with staff going to patients and assisting as required. However this was not always consistent in practice. Data from March 2015 showed that there had been over 6,800 call bells rung of which on 53 occasions responses had taken over ten minutes, four of which had been over twenty minutes. On four occasions during our inspection we observed responses to call bells that took in excess of nine minutes. On ward B14 one patient, who was clearly confused, was shouting out to the nurses repeatedly for help and it took six minutes for a member of the medical team to respond.

Vulnerable patients and capacity

In 2014 the numbers of patients admitted with dementia were increasing and the trust highlighted patients with this condition on their electronic patient system so that all staff were aware that these patients required extra care. Two wards has special areas for patients who had dementia to sit in and this memory area was used to orientate people to their current environment. The hospital had an equalities and diversity lead who advised and supported staff caring for vulnerable patients. On our unannounced visit we saw care provided to one patient who had dementia. The care provided was seen to be sensitive and compassionate.

Access to services

In 2014 due to pressures in the emergency department, and to bed availability, not all patients were transferred to appropriate medical wards within the hospital's timescale of four hours.

In 2015, in the two weeks of the MAU being opened, the Trust had achieved 95% of discharge from the ED within the four hour target which was an improvement from the 84% in January to March 2015 with the majority being transferred to an appropriate medical ward. For April 2015, the hospital was meeting its referral to treatment time targets for inpatient medicines specialties.

Leaving hospital

In 2014 staff told us that effective discharge planning was not always in place and one patient told us that they were ready for discharge on a Friday but, as there was no senior medical cover on Saturday or Sunday, they remained in hospital over the weekend. We were told that 6.76% of bed days were lost due to delayed discharges of care against the hospital target of 5%. This was due to the challenges the hospital faced in discharging patients to a number of different counties and the lack of service provision. We were also told that cardiac rehabilitation in the community was fragmented, impacting on discharge planning.

During our inspection in 2015 the Trust had started a "breaking cycle" initiative that reviewed discharge process, capacity and flow. Outcomes identified that work was required with community partners about the number of interim beds. Internally there were delays with radiology, particularly the review and reporting aspects. Wards were using breaking cycle forms to escalate issues of delayed discharge. Data comparing delayed bed days from March to February 2013/14 and 2014/15 showed an increase in the last twelve months of 35%. Discharge planning did not begin at admission across all areas. We reviewed 21 patient notes and the discharge information and planning section was not completed in 20 of the 21 records reviewed.

In 2015 the role of a discharge tracker had been implemented across the trust from September 2014 and there were now 17 in place across the wards. The aim of this role was to facilitate discharge, reduce delays and reduce administration tasks for nursing staff. The role encompassed problem solving, chasing blood test or investigation results, organising transport, communicating with next of kin and property organisation.

In 2015 there was a "traffic light magnet" system utilised on the white boards to indicate the status of patient tests and procedures which enabled staff to quickly review patient progress. Tasks that required action were marked as red. The added complications from dealing with six local authorities and six different health economies remained. There were 14 different referral forms in use which meant that the discharge trackers would need an in-depth knowledge of Peterborough geography to ensure the

correct authority were contacted dependent on the patient's postcode. This should be improved as from 1st June 2015 it was planned that there would be a single referral for discharge support assessment for the individual on E-track with the predicted date of discharge.Three discharge trackers said they felt there had been improvement and the role was achieving results however no numbers could be provided and it was unclear who was monitoring the effectiveness.

We were informed by a member of staff that the training that had been expected for the discharge tracker role had not yet been delivered. There had only been two induction days which identified the escalation process and individuals involved and a catch-up with discharge tracker leader to enable sharing of experience with other trackers. There had been no training regarding E Track and no ward induction.

In 2015 the delay in provision of medication for discharge (to take out medication) was highlighted on several occasions by staff and patients as an issue. Where possible the request for take home medications was made the day before planned discharge.

Learning from experiences, concerns and complaints

In 2014 and 2015 we saw that complaints and incidents were regularly discussed within team meetings and that individual learning from complaints had taken place. Ward managers monitored complaints and incidents and looked at themes. We saw evidence that actions had been put in place as required to address the areas of concern raised within complaints.

Are medical care services well-led?

Requires improvement

In 2014 we found that the services well led key question required improvement. In 2015 we found that issues that we had raised at our previous inspection had be yet to be embedded throughout the service. We found that the leadership on the wards was inconsistent and ownership of the issues was lacking in some areas. Therefore we have rated this aspect as requires improvement to ensure that patients experience a good service throughout this service. In 2015 we found that there was a clearer strategy within the directorate for managing patient flow and experience. Senior management and trust executives were very visible within the medical wards and there was a clear programme of relocating decision making and re empowering ward leaders. Ward managers were also being encouraged to work clinically to demonstrate local clinical leadership.

Most staff we spoke with were positive about the changes made and felt well supported by senior management and were able to raise their concerns. We were told that the trust was moving to a more open culture. There was a greater focus to identify training needs within the directorate than had been the case in 2014 though appraisal rates in some areas remained low.

Vision, strategy and risks

In 2014 the hospital had piloted an EMU in the autumn of 2013, but we found that this unit had not worked effectively for more than a few days at a time as there was an acute pressure for emergency department beds. The vision for the EMU was to provide effective care for patients to facilitate appropriate medical assessments, but staff told us of their frustration that there was not a coherent plan to ensure that this unit functioned effectively. Staff told us that physician support in the ACU was delayed at times. Staff told us that there appeared to be a lack of long-term planning and that issues were responded to reactively rather than proactively.

In 2015 there had been some improvements made in long term planning with the MAU opening to aid access and flow and a re-evaluation programme entitled 'Breaking the cycle' focussed on managing discharge arrangements. The MAU had only been opened two weeks prior to our inspection and the initial progress required sustaining and embedding. Senior staff on this unit had a number of plans to improve the service this department offered.

Governance arrangements

In both 2014 and 2015 we found that governance arrangements were in place across the medical care service but not all clinical audits as recommend by NICE were being carried out across all wards. Each ward maintained its own system for monitoring incidents and accidents and significant areas of risk were placed on the hospital's risk register. These included five thoracic audits and one on Parkinson's disease.

Risks we observed such as hand hygiene were known to the service prior to our 2014 inspection and continued to

be an issue which needed addressing. Similarly access to appropriate stroke services, response to call bells raimned issues which needed addressing. We found that the respiratory unit were not always undertaking appropriate audits an issue we raised in 2014.

Leadership and culture

In 2014 junior staff told us that there was a lack of effective change management and leadership and that key messages were not effectively cascaded down the organisation. Some staff expressed concern about the pressure to constantly work extra shifts and that this was not always recognised by managers. Two staff told us they had no faith in the hospital's whistleblowing procedures as concerns would not be addressed. We found that there was variable access to clinical supervision for nurses and that not all staff had had an annual appraisal. The departments appraisal rate was the lowest in the trust at 70%. Most staff did not receive regular supervision by their manager but they did say that there was effective informal support provided as required. We saw evidence that staff members' clinical competencies were assessed. We were told that regular team meetings took place on most wards.

In 2015 there was visibility from the senior management team and at executive level with visits to the ward areas. The duty manager undertook a walk around the wards every night. Communication was delivered through several routes such as team brief for lead nurses and senior managers, lunch time sessions for other staff members and information on the communication pages of the intranet. There was also support from the senior staff at ward level with ward managers working alongside staff clinically when required. All staff felt supported and comfortable to raise any concerns with their ward sisters, managers or matrons. Staff were confident that their concerns would be listened to. Staff were aware of the 'safe haven policy' on the intranet which provided guidance on whistleblowing.

In 2015 most staff felt communication was good and reasons were given as to why decisions had been made. Staff felt that there was a positive move from the trust to be more open and core values were beginning to be embedded. Staff appraisal remained poor. Data provided stated that only 57% of staff had an appraisal for the rolling 12 months from 01March 2014 to 31March 2015.

Senior staff in the directorate spoke highly of new directors and felt there had been a positive shift in the culture of the hospital and directorate. There was a greater emphasis on re empowering senior ward staff to make decisions about their own unit. There was a "tapping into your potential' programme which notified staff when training needed to be refreshed. The ward manager's assistant booked the training session well in advance and monitored that training attended. Staff felt that training was good but mentioned the impact on staffing "as always someone going off on training". However, information provided showed additional resource was available to wards to cover staff absence for training.

Patient experiences, staff involvement and engagement

In 2014 some staff said that they did not feel confident in being able to voice concerns. We saw that appropriate systems were in place to record patient experiences and these were shared with staff. Senior staff considered that they were involved in the strategic direction of the hospital but not all junior staff felt that they could contribute meaningfully to this process.

During our inspection in 2015 we were informed that there had been a restructure in the cardiac unit (CCU) which had resulted in one redundancy. It was felt that this had been a difficult period for the trust; staff felt that they had not been listened to which had resulted in a negative effect on staff morale. Staffing was a concern within cardiology, there were three band 6 vacancies and four band 5 vacancies. The band 5 positions had been appointed to from overseas but nurses had not yet taken up position.

Learning, improvement, innovation and sustainability

Management action plans were in place to highlight key areas for monitoring and review, and ward managers were able to inform us of the progress of these plans. However, not all junior staff were fully aware of the function of these plans.

Services for children and young people

Responsive	Good
Overall	Good

Information about the service

Services for children and young people at Peterborough City Hospital consist of one ward that has 28 beds plus two high dependency beds (Amazon), a paediatric assessment unit that has eight beds (Jungle) and a neonatal intensive care unit (NICU) that has two intensive care cots, four high dependency cots and 14 special care cots. There is also a separate children's and young people's outpatient department Rainforest).

During our inspection visit in 2014 we visited all departments within children's and young people's services. We talked with seven relatives, one patient and 26 staff, including nurses, healthcare assistants, consultants, doctors, support staff and senior managers. We observed care and treatment. Before our inspection, we reviewed performance information from, and about, the trust.

At our follow up visit in June 2015 we again visited all departments, spoke with 8 members of staff and reviewed records to ascertain what improvements had been made in the past year.

Summary of findings

In 2014 we found that children's and young people's services were provided in a clean and hygienic environment in line with recognised guidance, which helped protect patients from the risk of infection, including hospital-acquired infections.

Children's care and treatment followed best practice guidance and monthly audits were carried out regarding patient safety, patient experience and the environment. Parents we spoke with told us that they felt that their child received good-quality care and that they were informed about any treatment required.

We found that staff were responsive to people's individual needs; however, staff were unaware of the trusts guidance for staff on the ward areas when they needed to make a decision concerning same-sex accommodation. There was also limited support from the child and adolescent mental health services out of hours.

There was leadership at all levels within children's and young people's services and staff felt well supported well supported by their managers. A clinical governance frame was also in place.

In 2015 we returned to the service to assess whether or not improvements had been made in relation to the responsive domain where in 2014 the service was found to require improvement. This was specifically in relation adolescent service provision and the use of single sex accommodation. It was also identified that improvements were needed in relation to joint working with child and adolescent mental health services (CAMHS). We found that these improvements had been made and that the service had worked extremely hard to develop and progress projects and plans to meet the needs of the children and young people using this service.

Services for children and young people

Are services for children and young people responsive?

Good

In 2015 we returned to this service to assess whether or not improvements had been made in 2014 the service was found to require improvement. This was specifically in relation adolescent service provision and the use of single sex accommodation. It was also identified that improvements were needed in relation to joint working with child and adolescent mental health services (CAMHS). We found that these improvements had been made and that the service had worked extremely hard to develop and progress projects and plans to meet the needs of the children and young people using this service.

Meeting people's needs

The environment of children's and young people's services was visibly clean, bright and child-friendly. We noted that ward areas were designed to respect the patient's privacy and dignity.

During our 2014 inspection, we were informed that there was no specific adolescent ward area. Staff members informed us that patients between the ages of 16 and 18 would be admitted to an adult ward unless there was capacity on Amazon ward. Patients with a long-term medical condition, for example diabetes, would be accommodated on Amazon ward if necessary.

During that inspection we also found that guidance to support staff when they needed to make decisions concerning same-sex accommodation in the children's and young people's services was not accessible or understood by staff. However we were later advised that a policy did exist although staff could not provide this for us during the inspection. Staff we spoke with told us that decisions to move patients in the bays were made on an individual basis as and when required. However we could not be assured that decisions were made using a consistent approach or that the child's or young person's preference was sought in line with national guidance.

During our follow up inspection in May 2015 we found that the service had made significant improvements in relation to the provision of same sex accommodation and services for adolescents. The service had engaged adolescents in service development and improvement. We saw a number of patient feedback stories from adolescents giving their opinions on the service, one of these had even been presented to the trust board. There was a dedicated adolescent "den" in place on the ward which had been improved to contain age appropriate materials such as books, patient information, health promotion advice for teenagers and décor. During our inspection we saw this room being utilised by patients. Contact with youth advisors instead of play assistants was also being offered to adolescents and older children.

In 2015 staff we spoke with were much clearer on their responsibilities in offering patient choice when it came to same-sex accommodation. Bays were as far as practicable allocated as single sex bays. We heard that patient choice would be respected and that staff would provide explanation where this could not, for example, all single bays were in use or high risk patients needed to be cared for in a specific area meaning it may not be safe to allocate single sex bays. In order to demonstrate that patients had been offered a choice about where they were cared for, this included the choice of being on adult ward where appropriate, stickers had been placed in their care plans.

In addition we found that other work had been on-going with the aim of improving the service to meet children and young people's needs. For example, a new transition project had been agreed and was being supported by a CQUIN target for this year called "Ready Steady Go". This project aimed to build confidence and the understanding of children, younger people and their families' when transitioning into adult services.

All staff spoken with were consistent in their responses to demonstrated that the improvements seen were well embedded and sustainable. The service was supported by an extremely dedicated and passionate leadership team.

Access to services

Children could be referred to Jungle directly by their GP or by A&E. Once admitted to Jungle, the child would be reviewed by a paediatrician or registered children's nurse before being admitted to Amazon ward or being discharged home.

Interpretation services

Staff members in the Rainforest outpatients department explained to us how they accessed and used the

translation service. They told us that this would be initially flagged at the referral stage and a translator would be booked for the appointment; this would be either with an interpreter who attended the appointment or by phone.

Vulnerable patients and capacity

During our inspection in 2014, staff members confirmed that the child and adolescent mental health services (CAMHS) were not available out of hours. This service was provided by the local mental health trust. However, staff at Peterborough City Hospital had access to the crisis team if needed, although we were informed that the crisis team was at times hesitant about seeing a child or adolescent or about making a decision until the patient had been seen by CAMHS. We saw evidence that the CAMHS team supported and trained staff members in the ward areas and noted that a letter had been sent to the ward manager thanking them for a staff member's involvement in a young person's admission.

During our follow up inspection in May 2015 again, we found that the service had introduced a number of initiatives to improve the experience of patients who required CAMHS input. The team had worked hard to improve communication and relationships with the local mental health trust, we heard that whilst out of hours assistance was still not consistent this had improved. For example, we were told by five of the members of staff that we spoke with that the CAMHS team were now making daily contact, including at the weekends, to discuss patients requiring mental health support and to guide nursing staff where appropriate on interventions.

MDT meetings were also regularly taking place with the CAMHS team in attendance and we were told that hospital staff has now been provided with secure information sharing email addresses in order for mental health care plans to be shared for those children and younger people attending the service with known mental health conditions.

Leaving hospital

We were shown information that was provided to parents when their child was discharged from hospital. This included a business card with a direct telephone number for Amazon ward. The clinical director informed us that lengths of stay had been reduced and early discharges improved by implementing consultant cover for each week, with a consultant handover twice a day, seven days a week.

Learning from experiences, concerns and complaints

in 2015 parents we spoke with were aware of the process to raise a concern or make a formal complaint. We saw that information was clearly displayed for people who used the service and who wished to raise a concern or complaint. Staff we spoke with told us that concerns and complaints were discussed at ward or department level and actions were taken as a result of them. We saw evidence of this displayed in the ward areas. Staff members were able to give us examples of learning from feedback from patients and their relatives. One comment had been that there was a lack of age-related toys in the Rainforest outpatients department; the department was working with the play team at the time of our inspection to rectify this.

End of life care

Effective	Good
Overall	Good

Information about the service

Peterborough City Hospital does not have any dedicated wards for end of life care. End of life care is provided across the hospital wards and in the haematology/oncology day wards. The specialist palliative care team (SPCT) is a multi-professional group serving the catchment area of Peterborough, Cambridgeshire, Leicestershire, Lincolnshire, Rutland and Northampton.

The SPCT is a consultant-led multidisciplinary team that consists of two consultants in palliative medicine, and it is shared between Sue Ryder Thorpe Hall Hospice and the trust. Within the hospital are 2.2 whole-time equivalent (WTE) clinical nurse specialists (CNSs) and 0.6 WTE associate CNSs. There are also 0.6 WTE clinical psychologists, funded by the mental health trust. In addition there are chaplains, dieticians, occupational therapists and physiotherapists. The community team includes four CNSs and 1.8 associate CNSs supported by an administrator and managed by a 0.6 WTE CNS. The trust has close links including shared medical appointments with the local hospice.

During our inspection in 2014 we identified 37 patients in receipt of some form of end of life care. Of those patients, 26 were being cared for at the trust and 11 were in receipt of care at home from CNSs. We visited 12 wards where people were receiving end of life care. We spoke to four doctors, eight nurses and support staff. We also spoke with patients and relatives. During the course of the inspection, we discussed end of life care with small groups of staff. In addition, we visited the mortuary and hospital faith centre to talk to the chaplain about the service and the support available for those grieving.

At our follow up visit in June 2015 we visited four wards reviewed the records of six people and spoke with seven members of staff to ascertain what improvements had been made in the past year.

Summary of findings

In 2014 we found that the trust had a strong focus on end of life care. The trust had used CQUINs (Commissioning for Quality and Innovation targets agreed with the local commissioning groups) to develop and improve the service provided to patients at the end of their life.

The trust was clear with regard to the actions required to review and replace the Liverpool Care Pathway. The Amber Care Bundle was being piloted on two wards. The action plan demonstrated that it would then be rolled out across the trust to meet the Department of Health's guideline timeframe of July 2014.

The palliative care team was very committed and provided a service seven days a week. The team was alerted immediately to any admission of a terminally ill patient. There was very good multi-agency working and close working with both the community team and the local hospice.

Staff were clear about 'do not resuscitate' policies and documents viewed were appropriately signed. Equipment was available and clean, appropriate checks had been made and staff understood how to use the equipment.

The care provided to those who had died was excellent and led by a very passionate bereavement centre manager. In addition, the chaplaincy service and the faith centre provided support to both patients, their families and friends and staff of all faiths and cultural backgrounds.

The purpose of our follow up inspection in May 2015 was to check that the Amber Care Bundle had been rolled out throughout the trust, that pain management was being prescribed and administered effectively and communication over the preferred place of death had been improved. We found that a new lead for palliative care had been put in place and that they had supported

End of life care

and empowered the palliative care team to drive forward improvements and positive change. This meant that the effective domain had gone from requiring improvement to being rated as good.

Are end of life care services effective?

Good

We found that end of life services were effective. In 2014 we were concerned that the Amber Care Bundle had not been implemented and that patients did not always receive timely pain relief. In 2015 we found that the Amber Care Bundle had been rolled out to all areas, providing consistent, evidence based care for patients and patients had personalised care plans. Patient care and outcomes were measured by audit and we saw that pain relief for end of life patients was now effectively managed.

Evidence-based guidance

In line with the National End of Life Strategy (2008), the trust had begun to implement the five patient-centred tools to improve quality in end of life care. Following recent guidance from the Department of Health, the trust had stopped using the full Liverpool Care Pathway and had moved to piloting the Amber Care Bundle. When visiting the wards, it was clear that staff were aware of this and knew how to use the Amber Care Bundle even if it was not being used on their ward. The trust had listened to the experience of other trusts and noted that a maximum of two wards should be supported at any one time. Hospitals had failed when they had tried to implement the Amber Care Bundle too quickly. Staff on the two wards using the Amber Care Bundle felt that it was very helpful and understood that it would be rolled out across the trust following the four-month pilot. During our 2014 inspection it was noted that the Amber Care Bundle action plan that the trust had completed had not been implemented across all ward areas.

At our follow up inspection in May 2015 we found that the Amber Care Bundle had been successfully rolled out and implemented across the trust. We visited four wards where patients were receiving palliative or end of life care. We reviewed the records of six people and saw effective and appropriate use of the Amber Care Bundle and Personalised Care Plans (PCPs) in each area that we visited. Staff we spoke with were aware of their responsibilities in relation to supporting patients and their families. Regular input from the palliative care team was evidence in records as was detail about decision making that involved a multidisciplinary medical team and the wishes of patients

and their relatives. We spoke to the relatives of one person receiving palliative care who told us that their relatives care had been "….excellent throughout" and that all "interventions and documentation had been explained fully."

The trust may however find it useful to note that we heard, on two occasions, that due to a reduction in medical cover over the weekend it could be difficult to get decisions about transferring patients on to PCPs. This meant that there was a risk patients may not receive the most appropriate timely interventions and care over the weekend.

Monitoring and improvement of outcomes

Nurses and doctors across the trust praised the SPCT for its commitment and efficiency. There were clear systems in place that supported rapid identification of patients, which enabled the team to act swiftly and effectively. Patients on the wards felt that the staff were very helpful and provided them and their families with support through their end of life care.

However, during our 2014 inspection we found that communication on preferred place of death (PPOD) was poor in the trust and had been made part of the CQUIN for the preferred place of death. At that time we noted that subsequent auditing of the CQUIN had led to a change in the discharge sheet, and this has resulted in improved communication.

In 2015 we reviewed documentation and spoke with staff which confirmed that although improvements had been sustained further work was needed to make sure audit targets were consistently being met. We noted that regular auditing was taking place which looked at ensuring peoples preferred place of death was documented and that this was followed through as appropriate. The results of the most recent PCP audit showed that the 64% of patient's where it is evidenced that discussions re PPOD took place, 88% against a target of 100% were actioned and 71% of patient's against a target of 100% met their recognised PPOD. An action plan was in place to drive and monitor improvement.

In 2014 the trust participated in two National Care of the Dying audits. These were two-yearly audits in which trusts could participate to evaluate how compassionate and appropriate their care was for end of life care. It also provided evidence of high-quality care. The trust scored in line with the national average for those trusts that participated in 2011. In addition, there had been a number of clinical audits carried out by the trust in relation to patients in receipt of end of life care. The trust had action plans in place to address any deficits in care.

At our 2014 inspection one staff member felt that not enough emphasis was placed on pain control for patients receiving end of life care by the medical staff and that they could be quicker in responding to requests for pain control out of hours. The staff member said that the SPCT staff always responded quickly and patients were not left without pain control. A patient who had pain control via 'patches' said that: "I have to ask them to change the patches."

Our follow inspection in May 2015 recognised that significant improvement had been made in relation to pain relief for patients at the end of their life. We saw that the palliative care team had adapted the Abbey Pain Scale Tool and that this had been implemented across the trust. It was used appropriately in records that we reviewed. We spoke with six members of staff who were all familiar with the tool and confirmed that access to anticipatory medications and urgent pain relief was much improved. Two sets of relatives that we spoke with told us that they felt appropriate pain relief was being administered with one relative commenting "When my father became agitated the team ensured he was given a morphine infusion pump."

Sufficient capacity

Staff were supported with sufficient and up-to-date equipment to ensure that terminally ill patients experience good end of life care. The trust recently reviewed all the syringe drivers and purchased more up-to-date ones. A syringe driver is a piece of equipment that delivers medication over a set period of time. It is used in end of life care to continuously administer analgesics (painkillers), anti-emetics (medication to suppress nausea and vomiting) and other drugs where appropriate. This prevents periods during which medication levels in the blood are too high or too low, and avoids the use of multiple tablets (especially in people who have difficulty swallowing).

All staff had access to supervision and support and training was provided to all staff in the SPCT. Psychological and spiritual support were provided by the clinical psychologist and the chaplaincy team.

End of life care

The trust mortuary provided a very good service, not only for people who died in the hospital but also for those who died in the community. The facilities were very spacious and provided excellent areas for relatives. There were three large, well-furnished and decorated, private viewing rooms. Local and regional undertakers used the service and those spoken to during the inspection had a very high regard for the staff and service provided. They said that "it is brilliant here": access was easy, the relatives were more than pleased with the service and patients were treated with dignity and respect after death.

Multidisciplinary working and support

It was clear from speaking to members of the team and other staff that the team was well respected throughout the trust. Patients spoken to during the inspections praised their commitment and support. The clinicians confirmed that the SPCT was a multidisciplinary team that consisted of a consultant two days per week, two and a half CNSs with the support of Marie Curie and a clinical psychologist, and provided a seven-day service. The team was based with the community team on the trust site. The team worked with the transfer of care team to ensure that all patients' needs were facilitated in a timely manner. They also worked very closely with the mortuary and chaplaincy teams.

There were regular reflective sessions for staff that took place in the faith centre. These sessions helped staff review practice and learn from each other's experiences in a safe environment.

The team was supported by the Somerset database, System One for GPs and out-of-hours services, and E track. These three systems held registers and patient details of those people who were in need of end of life care. There were also joint education groups for sharing and learning. Out of hours, the team was supported by a regional on-call consultant for palliative care.

Outstanding practice and areas for improvement

Outstanding practice

- The trust had thoughtfully engaged with children and young people in the service development and improvement of children's services.
- A new transition project had been agreed and was being supported by a CQUIN target for this year called "Ready Steady Go". This project aimed to build confidence and the understanding of children, younger people and their families' when transitioning into adult services.
- The trust was now meeting face to face increasing numbers of patients to discuss concerns or complaints.
- The Quality Assurance Committee was open to some external stakeholders including Healthwatch.

Areas for improvement

Action the hospital MUST take to improve

- Ensure records are accurate and updated to reflect the needs of patients and that care is given in line with records.

Action the hospital SHOULD take to improve

- Ensure that patients are adequately supported with nutritional needs.
- Ensure that medicines are stored correctly in all areas.
- Ensure that learning from incidents is disseminated consistently across different directorates and clinical areas.

This section is primarily information for the provider

Requirement notices

Action we have told the provider to take

The table below shows the legal requirements that were not being met. The provider must send CQC a report that says what action they are going to take to meet these requirements.

Regulated activity	Regulation
Diagnostic and screening procedures Treatment of disease, disorder or injury	Regulation 17 HSCA (RA) Regulations 2014 Good governance The provider should ensure that all patient records are accurate and up to date.

This section is primarily information for the provider

Enforcement actions

Action we have told the provider to take

The table below shows the legal requirements that were not being met. The provider must send CQC a report that says what action they are going to take to meet these requirements.

Peterborough and Stamford Hospitals NHS Foundation Trust

Stamford and Rutland Hospital

Quality Report

Ryhall Road
Stamford
Lincolnshire
PE9 1UA
Tel: 01733 678000
Website: www.peterboroughandstamford.nhs.uk

Date of inspection visit: 5 March 2014
Date of publication: 16/05/2014

This report describes our judgement of the quality of care at this hospital. It is based on a combination of what we found when we inspected, information from our 'Intelligent Monitoring' system, and information given to us from patients, the public and other organisations.

Ratings

Overall rating for this hospital	Good
Accident and emergency	Good
Medical care	Good
Surgery	Good
Outpatients	Good

Summary of findings

Contents

Summary of findings

Overall summary

Stamford and Rutland Hospital was opened in 1828 as the result of a bequest by local surgeon and benefactor Henry Fryer and has a long history of providing healthcare for the town. Today it forms part of the Peterborough and Stamford Hospitals NHS Foundation Trust and provides inpatient services for up to 22 patients, outpatient services, day surgery services and a minor injuries unit.

The hospital clearly has its own identity within the trust and staff and patients enjoy working there and using the services it provides. Feedback from patients shows that they appreciate having a small and dedicated hospital that serves the local communities. The minor injuries unit sees approximately 30 to 40 patients a day and is a dedicated nurse-led unit. At our inspection on 5 March 2014, we found that the hospital was meeting expected standards of care.

The hospital does not provide main accident and emergency (A&E) services; however, the minor injuries unit is reported under this section as staff rotate between the two areas.

Stamford Hospital was last inspected in July 2013, when it was found to be non-compliant in respect of 'Outcome 4: Care and welfare of people who use services', 'Outcome 13: Staffing' and 'Outcome 16: Assessing and monitoring the quality of service provision'. These regulations relate to the assessment of patients' needs, completion of care records and adequate staffing being available to provide care. At this inspection, we found that all actions taken to address these breaches in regulation had been taken and that both hospitals were compliant.

Staffing

The staffing levels maintained at the hospital were appropriate to meet the needs of patients using the service. Emergency nurse practitioners in the minor injuries unit rotated through the trust's main hospital A&E department, which allowed them to maintain their skill base. The ward manager in the John Van Geest unit had used her staffing budget in innovative ways to ensure that the needs of patients were met by sufficient numbers of staff on duty. The outpatients department had the appropriate number of staff on duty and they were familiar with the procedures and specialties that held clinics at the hospital.

Cleanliness and infection control.

The hospital was clean and tidy throughout. The John Van Geest unit had its own housekeeper who ensured that the ward was kept clean and free of clutter. Staff in the minor injuries unit reported that cleaning staff were quick to respond to ad hoc cleaning requests and this ensured that the department was able to function effectively. Cleaning schedules were in line with national guidance and there have been no reported methicillin-resistant Staphylococcus aureus (MRSA) bacteraemia or Clostridium difficile (C. difficile) infections since May 2013. The average cleaning score on the John Van Geest unit was 99.4%.

Summary of findings

The five questions we ask about hospitals and what we found

We always ask the following five questions of services.

Are services safe?

Good

Services at Stamford and Rutland Hospital are safe because the departments ensure that they maintain services that fit the criteria for their area. The emergency nurse practitioners ensure that they work to the protocols for their area and that patients who do not fit their criteria are stabilised and sent to the main A&E department.

The hospital has a low rate of accidents and incidents and staff know how to report these when necessary. Action is taken to address issues and lessons are learned. There are good systems in place to maintain the hospital equipment and facilities, which result in a safer working environment.

Are services effective?

Good

Where practicable, national guidance is in place and staff work to these guidelines. Patient outcomes are good with quality monitoring systems that reflect good practice.

All teams work well with local stakeholders to ensure that patients receive appropriate and timely care. Staff are supported through appraisals, supervision sessions and training to provide good care to patients.

Are services caring?

Good

Staff were seen to be caring, maintaining privacy and dignity and carrying out care with compassion. Patients felt involved in decisions about their care and treatments were explained to them in detail. On the John Van Geest ward, staff had time to talk to patients while carrying out care and to ascertain how they felt about the care they received.

Are services responsive to people's needs?

Good

Patients liked using the services at the hospital. They felt that it was a personalised service through which they received excellent care. Staff were aware of the issues facing people who were vulnerable and adapted care to meet their needs.

Waiting times were minimal and within the targets set. Where there were breaches, all staff could explain the reason for these. The care provided was close to home for many patients, which they appreciated. However, they were aware that the main hospital site was approximately 20 minutes away.

Summary of findings

Are services well-led?

Good

The local management teams ensured that staff felt supported through supervision and appraisal. The staff reported that a good system was in place to disseminate information from the trust and they understood what was happening at the main site.

Leaders at the site had good systems in place to review the quality of care provided and had innovative ways of sharing information with the staff on site.

Summary of findings

What we found about each of the main services in the hospital

Accident and emergency

Good

The minor injuries unit provides safe services to the people of Stamford and the surrounding villages. This is because the staff are familiar with the services the unit provides and act swiftly to refer patients to the main A&E unit if required after a period of stabilisation. Nursing staff are well qualified to undertake the roles in the department and benefit from clinical supervision to ensure that their practice is in line with the trust's protocols.

The department's re-attendance rate is low as treatment is often provided on first attendance. However, a number of patients return to have their dressings checked or changed. Local trust protocols are in place and reflect national guidance on the treatment of injuries.

Staff were seen to be caring and responsive to the needs of individual patients. Due to the small size of the team there is good cohesion and team working between the staff on duty and those within the rest of the hospital. We saw good examples of multidisciplinary working.

Medical care (including older people's care)

Good

The John Van Geest unit provided safe care for patients. Their individual needs were highlighted on care plans and on IT systems to ensure that everyone was aware of these. There were systems in place to learn from incidents and accidents and to ensure that action was taken to improve services.

Local audits showed that the unit provided effective care and did so safely. Results from infection prevention and control audits were excellent, with no MRSA or C. difficile infections in the past nine months. Staff on the unit were caring and respectful of patients' privacy and dignity. Staff knocked on patient room doors and called when entering to ensure that they did not surprise sometimes very elderly patients.

The ward manager had been in post for approximately 18 months and had set up good systems to ensure that staff were kept informed and felt involved in the management of the ward. She had introduced a process called 'flooding the ward' which occurred every morning and ensured that all staff were up to date with the issues for that morning.

Summary of findings

Surgery

Good

We saw caring staff and the patients we spoke with told us that staff were kind and gentle. One told us: “I’ve been here lots of times for various things. It’s not only excellent, it’s an ideal place for Stamford.”

All patients were invited to a pre-assessment clinic prior to their surgery. This was to ensure that they were suitable for attending a small unit for their day surgery or procedure.

Surgical services were provided in a clean and hygienic environment in line with recognised guidance. This helped protect patients from the risk of infection, including hospital-acquired infections.

We saw that appropriate equipment checks and maintenance were carried out.

Staff were well trained, confirmed that they felt well supported, and had received an appraisal within the last 12 months.

Patients we spoke with, some of whom had visited the department on several previous occasions, were complimentary about their care and the staff’s attitude.

Outpatients

Good

Outpatient services were safe, caring and met the needs of patients. There were no major safety concerns within the department. Staff knew how to report concerns and felt that action would be taken if they did so.

Patients liked coming to the department as they were seen on time and received the same treatment that they would have received at the main hospital site. Monitoring systems were in place and reviewed in order to improve the quality of the service.

The department was responsive to the needs of patients using it. Complaint numbers were low and accolades increasing. This meant that patients were satisfied with the care provided in the department.

The department was well led and staff and the manager felt supported. The only concern was that the department staff felt that they were not seen as equals by staff at the main Peterborough City Hospital site.

Summary of findings

What people who use the hospital say

The NHS Friends and Family Test relates only to the John van Geest ward at this hospital, and shows that most patients are 'likely' or 'extremely likely' to recommend the ward to their family and friends.

We received 18 comment cards on the day of our inspection and all contained very positive comments about the hospital and the services it supplies. Patients spoken to during the visit were very complimentary about staff and the service they received.

Good practice

Our inspection team highlighted the following areas of good practice:

Ward "flooding"
The ward manager on the John van Geest ward had introduced a system whereby once the team had ensured that patients had had breakfast and handover had been taken from the night staff, the whole team sat down at the ward table for 10 minutes to discuss the activities of the day and to receive feedback about the management of the ward or trust. This ensured that staff were informed of issues within the ward and trust and that everyone knew what was happening with all patients.

Stamford and Rutland Hospital

Detailed Findings

Services we looked at:
Accident and emergency;Surgery, Medical care (including older people's care); Outpatients

Our inspection team

Our inspection team was led by:

Mark Pugh, Chief Executive, Isle of wight NHS Trust and Fiona Allinson, Head of Hospital Inspection, CQC

Background to Stamford and Rutland Hospital

Stamford Hospital was opened in 1828 as the result of a bequest by local surgeon and benefactor Henry Fryer and has a long history of providing healthcare for the town. Today it forms part of the Peterborough and Stamford Hospitals NHS Foundation Trust and provides inpatient services for up to 22 patients, day surgery, outpatient services and a minor injuries unit.

Stamford Hospital was last inspected in July 2013, when it was found to be non-compliant in respect of 'Outcome 4: Care and welfare of people who use services', 'Outcome 13: Staffing' and 'Outcome 16: Assessing and monitoring the quality of service provision'. These regulations relate to the assessment of patients' needs, completion of care records and adequate staffing being available to provide care. At this inspection, we found that all actions taken to address these breaches in regulation had been taken and that both hospitals were compliant.

Why we carried out this inspection

We inspected this hospital as part of our in-depth hospital inspection programme. We chose this hospital because they represented the variation in hospital care according to our new intelligent monitoring model. This looks at a wide range of data, including patient and staff surveys, hospital performance information and the views of the public and local partner organisations. Using this model, Peterborough and Stamford Hospitals NHS Foundation Trust was considered to be a low risk service.

How we carried out this inspection

To get to the heart of patients' experiences of care, we always ask the following five questions of every service and provider:

- Is it safe?
- Is it effective?

Detailed Findings

- Is it caring?
- Is it responsive to people's needs?
- Is it well-led?

The inspection team always inspects the following core services at each inspection:

- Accident and emergency
- Medical care (including older people's care)
- Surgery
- Outpatients

Before visiting, we reviewed a range of information we hold about the hospital and asked other organisations to share what they knew about it. We carried out an announced visit on 5 March 2014. During our visit at the main trust site we held focus groups with a range of staff in the hospital, including nurses, doctors, physiotherapists, occupational therapists, porters, domestic staff and pharmacists. We talked with patients and staff from all areas of both hospitals, including the wards, the outpatient departments and the A&E departments. We observed how people were being cared for and talked with carers and/or family members and reviewed patients' personal care or treatment records. We held a listening event at which patients and members of the public shared their views and experiences of the location.

Good

Accident and emergency

Safe	Good
Effective	Not sufficient evidence to rate
Caring	Good
Responsive	Good
Well-led	Good

Information about the service

Stamford Hospital provides a minor injuries unit (MIU) that is open from 9am to 5pm, Monday to Friday. The opening hours are displayed on the trust's website and well known locally. The service is led by emergency nurse practitioners (ENPs) who rotate to the unit from their home base in the A&E department in Peterborough. The ENPs spend one week at a time in Stamford. The same nurses attend the unit on a regular basis. Two ENPs and one staff nurse are on duty at all times. The unit does not assess or treat minor illnesses such as abdominal pain, skin diseases or childhood illnesses. It only provides services for minor injuries such as broken bones and sprains and wound care.

The MIU sees around 30 to 40 patients a day; however, on the first day of our visit, it saw 50 patients during the day. This was exceptional. The unit sees adults and children and refers on to the main A&E department if required.

Summary of findings

The MIU provides safe services to the people of Stamford and the surrounding villages. This is because the staff are familiar with the services the unit provides and act swiftly to refer patients to the main A&E unit if required after a period of stabilisation. Nursing staff are well qualified to undertake the roles in the department and benefit from clinical supervision to ensure that their practice is in line with the trust's protocols.

The department's re-attendance rate is low as treatment is often provided on first attendance. However, a number of patients return to have their dressings checked or changed. Local trust protocols are in place and reflect national guidance on the treatment of injuries.

Staff were seen to be caring and responsive to the needs of individual patients. Due to the small size of the team there is good cohesion and team working between the staff on duty and those within the rest of the hospital. We saw good examples of multidisciplinary working.

Good

Accident and emergency

Are accident and emergency services safe?

Good

Services are safe at Stamford Minor Injuries unit.

Safety in the past

The unit had not reported any serious incidents in the previous year. The staff were aware of how to report incidents and did so when necessary. The trust uses an IT system called Datix to capture incident reporting. Staff could show the inspection team incidents that had been reported by staff working at the unit. The numbers of these were very low. Staff are aware of how to report safeguarding issues to the relevant authorities but this rarely happens at the unit.

Learning and improvement

Due to the scarcity of incidents within the department, staff were unable to identify where practice had changed as a result of an incident in this department. As they were part of the larger A&E team, the ENPs were able to discuss how incidents were investigated and lessons learned at the main unit. It was rare for these to have an impact on the MIU.

Systems, processes and practices

The department was very compact but remained clutter-free. The unit comprised three 'spaces' (curtained areas for treatment) and two treatment rooms. One of these was designated as the resuscitation room. This room contained the resuscitation trolley, which was checked daily by the staff.

The unit was damp dusted each morning by the staff as part of their infection prevention and control procedures. Sharps bins were placed discreetly outside curtains and elevated to ensure that children did not mistake them for Lego boxes. Equipment, both large and small, was stored appropriately and the environment was clean and tidy and with enough space for treatment to be provided.

The department had access to sufficient equipment for its needs. All areas had the basic patient monitoring equipment with those areas that specialised having the relevant equipment, for example the resuscitation trolley or a slit lamp (for eye assessments). Medicines were stored appropriately and in line with national guidance. A pharmacist visits once a week to ensure that stock is up to date and good storage maintained.

Monitoring safety and responding to risk

The unit always has two ENPs and one staff nurse on duty. This staffing level is maintained from the main A&E department. While the ENPs rotate between the two sites, the constant employee is the staff nurse, who always works at Stamford Hospital. Handover between staff is good as there is a small, distinct team of individuals working within the unit. When changes are suggested a team meeting convenes to discuss the practicalities of the proposed change and support is given. This ensures a timely reshaping of the service and consistency of approach.

Anticipation and planning

Until January 2013, the MIU had a medical presence at the unit. However, when this ceased the unit became nurse led. Despite advertising this within the hospital and on the trust's website, occasionally inappropriate patients attend the unit. When this occurs, the ENPs refer the patient back to their own GP or to the main A&E unit in Peterborough.

Are accident and emergency services effective?

(for example, treatment is effective)

Not sufficient evidence to rate

The minor injuries unit was inspected but not rated in this area.

Evidence-based guidance

The ENPs work to protocols set by the trust in line with national guidance. This includes guidance from the College of Emergency Medicine. They are the main part of the resuscitation team at the hospital and as such are trained in advanced life support. The Resuscitation Council guidance was seen on the wall in the resuscitation room and the resuscitation trolley complied with this guidance. Infection control standards were high and these were audited in line with the code of practice for health and adult social care on the prevention and control of infections and related guidance.

Good

Accident and emergency

Monitoring and improvement of outcomes

This unit does not actively participate in any national clinical audits at present. Local audits are undertaken to ensure that the department is functioning in line with trust policy. Infection control audits, hand washing audits and medication audits are undertaken on a regular basis within the department. Staff were able to describe both the findings of these audits and actions taken as a result.

Sufficient capacity

The staff on duty in the unit were appropriately trained and experienced to ensure an effective service. ENPs had had the required extended training in order to be able to diagnose and treat minor injuries. The ENPs were also able to prescribe medication from the trust's list of medications. This meant that patients were seen by appropriately trained staff.

Supervision and appraisal of these staff were undertaken through the senior staff at Peterborough A&E department. Clinical supervision was undertaken at the main site and consisted of a review of practice to ensure that the ENPs were working to the guidelines.

Stamford Hospital had its own facilities arrangements and staff reported that faulty equipment or repairs to the building were undertaken very quickly because the staff were on site. We did not see any equipment needing repair during our visit.

Multidisciplinary working and support

We saw good examples of multidisciplinary working both internally and externally by staff working in the department. Staff and the receptionists on the front desk worked closely to ensure that patients were safe. While reception staff did not formally triage patients, they would flag to the nursing staff when a patient appeared to be very unwell. The staff at the MIU had excellent working relationships with the local GP receptionists. Should a patient be sent to the unit who required medical input, the staff from the MIU would contact the GP receptionist to book an appointment for the patient. Most receptionists knew the staff from the MIU and assisted them in securing a GP appointment for the patient.

Are accident and emergency services caring?

Good

Staff in the minor injuries unit provide a caring service.

Compassion, dignity and empathy

Patients were treated compassionately and sensitively within this department. Patients waiting in the waiting area were called through to treatment areas where curtains were in use to protect patients' privacy. The treatment rooms were private and staff knocked prior to entry into the treatment area. Patients were rarely in the department for more than a few hours so there was no system of intentional rounding in place. This is a system where there is a planned care round attending to patients basic needs at a frequency stated by the hospital.

Involvement in care

Patients we spoke to felt that they were involved in their care and decision making. Staff explained what was going to happen to people and ensured that they understood their treatment options. We saw a number of information leaflets available for patients to take home with them. These were generally in English and staff told us that they did not have a problem with communicating with their patients. However, they were aware of how to obtain a translator should one be required.

Trust and respect

Staff spent time talking to patients to develop a rapport with them. Some patients returned to the department on a number of days to have their wounds re-dressed. Staff were open and honest about the treatments and supported patients with treatments that impacted on their daily life.

Emotional support

Staff in the MIU rarely saw anyone who required emotional support, as all major trauma went to the main A&E site in Peterborough. However, some staff were able to describe when a patient had entered the unit with chest problems and required stabilisation prior to transfer to the main site. Staff stated that they took care of the patient's relatives during this time.

Are accident and emergency services responsive to people's needs?

Good

Accident and emergency

(for example, to feedback?)

Good

Services were responsive to the needs of patients.

Meeting people's needs

The MIU works well with the local GP surgeries. If a patient presents with a minor illness, the nursing staff will ring and book a GP appointment for the patient. Many of the GP receptionists are familiar with the staff at the MIU and quick to facilitate such requests. Similarly, if a patient requires A&E services, the nursing staff will ensure an effective handover between departments.

Access to services

Staff working on the MIU were able to describe the processes for ensuring the safety of patients with reduced capacity, with a learning disability or with a physical disability. The service was accessible to people with a physical disability. The unit rarely saw aggressive patients but staff were confident that support would be provided to them in a timely manner by the security staff.

Vulnerable patients and capacity

The receptionist takes the patient's details when they walk into the hospital and enters them on the computer system. The patient is then directed down the corridor to the MIU. A small waiting room is provided for patients. The unit achieves the four-hour wait target almost all the time. Having reviewed data for the previous two months, we saw that a breach had occurred only once during this period. Such a breach was so infrequent that nursing staff could inform the inspection team of what was wrong with the patient and why they were delayed without looking up the notes on the system. Delays in treatment are usually due to waiting for a bed in the main hospital. However, this does not happen often. Patient arrival times are RAG rated (rated red, amber or green) according to the length of time in the department so that nursing staff can see how long a patient has been waiting. Despite us talking to one member of staff, patients were being seen within 15 minutes on the day of the inspection.

Leaving hospital

Staff ensured that people left the department with the correct discharge information and any instructions that they required for care at home. This information was available in written format in English only.

Learning from experiences, concerns and complaints

The department had had no incidents, complaints or concerns over the past 12 months. However, staff were able to identify issues that had resulted in changes to practice at the main A&E site.

Are accident and emergency services well-led?

Good

The service was well led

Vision, strategy and risks

The department had a risk register that fed into the main A&E risk register; however, this is a low-risk department. Staff were very familiar with the scope of practice and what injuries they were able to treat. Staff were clear about the role and future plans for the department. They had been working at the hospital for some time so were also aware of the history of the unit, having gone from being a medically led service to a nursing-led service. Staff were able to talk about and demonstrate the values of the trust in that they were caring, creative and worked well with local stakeholders.

Quality, performance and problems

There was a clear structure for reporting at an operational level to the senior team at the main unit at Peterborough City Hospital. The unit staff were conscious of their targets for quality and took pride in the fact that they usually achieved the targets set. When a breach in the four-hour wait target had occurred, staff could explain why this had happened: for example, the previous week one patient waited more than four hours due to transport issues.

The MIU undertook regular auditing of the services the department offered. Staff from the main Peterborough City Hospital visited the unit to audit areas such as pharmacy and cleanliness.

Good

Accident and emergency

Leadership and culture

There were five ENPs who rotated between the main A&E unit and the MIU at Stamford. No one ENP was in charge of the service. The group worked well and issues were resolved within this group and with the staff nurse who was a permanent member of the staff at Stamford and Rutland Hospital. There was a good team spirit within the department and staff worked well together. There was pride in the way in which the department worked and the service that they provided.

Patient experiences and staff involvement and engagement

Patients spoken to at the unit felt that the care was good and that the staff involved them in discussions about the care provided. Patients used the unit rather than travel to the main Peterborough site as they felt that the service at this unit was more personalised and that they received treatment in a more timely manner. The trust had a policy called 'Raising concerns in a safe environment'; the staff we spoke with told us they were aware of the policy and felt confident in reporting concerns if they needed to.

The major change to the unit in January 2013 was the move to being a nurse-led service. This proposal had been consulted on with the local population and the nursing team. ENPs felt supported in maintaining this service.

Learning, improvement, innovation and sustainability

Staff reported good access to training to support their roles within the unit. They felt empowered to make changes within the unit to improve services for patients. If an ENP had a suggestion, this was discussed within the group, approval sought if necessary from the management team, and then implemented. This meant that changes could be made in a timely manner.

The ENPs had supervision from their line managers at the Peterborough City Hospital site. The regular staff nurse working at Stamford received supervision from the ENPs and from her line manager.

Good

Medical care (including older people's care)

Safe	Good
Effective	Good
Caring	Good
Responsive	Good
Well-led	Good

Information about the service

The John Van Geest ward accepts patients from the main Peterborough City Hospital in order to provide rehabilitative services to ensure that patients return to as able a life as they can achieve following illness or injury. The unit has 22 beds for patients referred to it.

Summary of findings

The John Van Geest unit provided safe care for patients. Their individual needs were highlighted on care plans and on IT systems to ensure that everyone was aware of these. There were systems in place to learn from incidents and accidents and to ensure that action was taken to improve services.

Local audits showed that the unit provided effective care and did so safely. Results from infection prevention and control audits were excellent, with no MRSA bacteraemia or C. difficile infections in the past nine months. Staff on the unit were caring and respectful of patients' privacy and dignity. Staff knocked on patient room doors and called when entering to ensure that they did not surprise sometimes very elderly patients.

The ward manager had been in post for approximately 18 months and had set up good systems to ensure that staff were kept informed and felt involved in the management of the ward. She had introduced a process called 'flooding the ward' which occurred every morning and ensured that all staff were up to date with the issues for that morning.

Good

Medical care (including older people's care)

Are medical care services safe?

Good

Services on the ward ensure the safety of patients.

Safety in the past

The ward had reported two falls during which the patient had sustained serious harm in 2012. This included a patient who dislocated their shoulder. The ward accepts very immobile patients and encourages them to become as independent as possible. With patients' high levels of acuity, there is a high risk of falls on the ward. However, the ward manager has instigated a number of systems to ensure that patients who do fall are highlighted. There have been five falls during 2013; the most recent one was in January 2014. None of these were classed as falls with serious harm.

Learning and improvement

The ward manager and her staff were able to describe the practices in place to prevent people falling and to lessen the risk of serious injury when patients fall. These systems included flagging a potential to fall on the corporate IT system, placing a large 'F' marker on the patient's door to highlight the fall risk to staff and others, and encouraging identification of patients at risk at verbal handovers. Physical equipment such as cot sides, crash mats and low-level beds were also being used to address this issue.

Systems, processes and practices

Environment and equipment

The ward is a relatively modern building and is split into three main corridor areas. Staff work in pairs to ensure that they can meet the needs of patients. There was sufficient equipment available to provide appropriate care for patients. However, storage areas were at a premium and some equipment was inappropriately stored in bathroom areas.

Infection control

The ward had its own housekeepers who ensured that the ward area was clean and tidy. The ward areas were cleaned in line with both the schedule identified by the trust and current guidance. Care staff and others had access to personal protective equipment such as aprons and gloves and we saw that these were used and changed between patients. Audits displayed on the ward showed that there had been no cases of patients with MRSA bacteraemia or C. difficile since May 2013.

Medicines Management

The ward had a walk-in drug cupboard that was locked securely at the time of the inspection. A pharmacist undertook drug reconciliation and drug reordering. The pharmacist also worked with the doctor to review prescribing patterns. Drug audits were undertaken and actions seen to be taken as a result.

Monitoring safety and responding to risk

There were sufficient staff on duty to meet the needs of the patients currently on the ward. Staffing levels had been reviewed in the past 18 months and numbers had been reorganised to meet the needs of the patients. At the time of the inspection, the ward had six staff on duty during the day (two working in each area) and three on duty at night. However, a healthcare assistant now works a twilight shift of 6.30 pm to 10.30 pm as it was identified that patient falls and confusion occur during this time.

Staff understood and could demonstrate compliance with the Mental Capacity Act 2005. Therefore, patients who may lack capacity to make decisions about their care were protected through these processes. Those who were vulnerable were supported in their decision making. The ward had many vulnerable patients at any one time so staff had built up the knowledge and experience of supporting patients at all levels. Staff were aware of the local safeguarding procedures and were able to discuss the signs of potential abuse with inspectors

Anticipation and planning

There were no planned changes to the service that would have an impact on patient care apart from the ward manager leaving.

Are medical care services effective?
(for example, treatment is effective)

Good

Patients could be assured of effective services at the John van Geest unit.

Good

Medical care (including older people's care)

Evidence-based guidance

The ward manager reviewed all falls that occurred on the unit and ensured that all precautions that could be taken were in place. The ward used signs on patient room doors to highlight to all staff that the patient was at risk of falling. A variety of equipment was in place to reduce the risk of falls, such as cot sides and crash mats, and staff ensured that the area around the patient was free of clutter. The ward manager had redistributed her staffing allocation to ensure that an extra healthcare assistant was on duty between 6.30pm and 10.30pm as this had been identified as a time when people fell.

Monitoring and improvement of outcomes

Staff were appropriately trained to provide the care and support that patients required. Daily supervision of staff was undertaken at all levels due to the way in which the ward was managed. Staff nurses worked with healthcare assistants and junior staff stated that they felt well supported. The ward manager had implemented a process called 'flooding the ward'. This meant that the nurses on duty received handover from the night staff and then assisted the healthcare assistants to wake patients up and sit them up for their breakfast. Following breakfast, when care staff supported people to eat, the whole care team met around the ward dining table for 10 minutes to discuss what was happening with patients that day and to hear any changes or new initiatives from the trust or hospital. This ensured that all staff were kept informed of future plans and of the patients' activities for that day. Staff felt that this was a good use of time and that they were informed not only of ward but of trust issues.

The care team received regular supervision and one-to-one sessions with the ward manager. The ward manager had started a file for each member of staff in which they could record their training. The trust's training database was not current as staff found it cumbersome to use and relied on their own signing-in sheets to demonstrate what training they had received. A mandatory training day had recently been held that covered a number of issues on the mandatory training list. However, in order to input this into the hospital database, each element would have to be recorded separately.

Sufficient capacity

The ward received a large number of referrals for care. However, with only 22 beds it often had a list of patients waiting for admission.

Multidisciplinary working and support

We saw good examples of multidisciplinary working on the ward. There were designated physiotherapists and occupational therapists for the ward who met with the nursing care team to discuss patients. Records showed multidisciplinary entries from all groups of staff caring for patients. While on site, we saw that patients had the opportunity to get involved in a game hosted by the Age UK team, which also ran a day service within the hospital. One patient was very keen to ensure that she was in the day room in time for this activity as she clearly enjoyed it.

Are medical care services caring?

Good

Staff were caring on the John van Geest unit.

Compassion, dignity and empathy

The average length of stay on the John Van Geest ward was 16 days. This meant that patients on the ward were well known by the staff caring for them. Staff displayed compassion and empathy with patients. We overheard several respectful and encouraging conversations while visiting the ward. One patient said that staff were "lovely, so kind and caring despite pushing me to try to do more for myself".

Involvement in care

Patients and families felt involved in the decision-making and care process. We heard of a family who had requested that their relative remain in hospital to attend an outpatient appointment as it was due shortly after the planned discharge. The ward had been able to facilitate this request. The ward takes patients who require complex discharge arrangements and links with the family and a number of other agencies in order to facilitate these.

The ward manager has significant experience of managing difficult conversations with patients and their relatives. While the ward acceptance checklist has a requirement that, if necessary, a 'do not attempt cardiac pulmonary resuscitation' order is in place prior to the patient arriving on the ward, should a need for this be identified it was managed well on the ward. The ward manager and doctor involved the patient and family in these discussions and this was clearly documented in the patient's care record.

Good

Medical care (including older people's care)

Trust and respect
The ward team was sensitive to the needs of patients. Staff were encouraging but supportive to patients when they were trying to ensure that they achieved as much independence as they could. Staff were able to have meaningful conversations with patients; although the ward was busy, they made time to do this either while giving care or in the quieter moments of the working day.

Emotional support
Patients were mainly elderly and in need of significant support while on the ward. The care team provided this through positive interactions with patients and their families and through open and honest discussions. Staff were able to give examples of when they had had difficult discussions with patients, including with patients who were unable to cope at home and had to be admitted to a care home.

Are medical care services responsive to people's needs?
(for example, to feedback?)

Good

Services were responsive to the needs of patients.

Meeting people's needs
Most patients were referred to the ward from Peterborough City Hospital. A referral form was completed and screened at ward level. This ensured that appropriate patients were admitted to the ward and that they benefited from this type of treatment and support. However, not all patients could be admitted due to the capacity of the ward area. Patients were usually elderly, had high dependancy and either required complex discharge arrangements or were in need of rehabilitation prior to discharge. The ward provided support and promoted independence for the patients using the service to return them to a life as near normal as they had previously enjoyed.

Access to services
The ward worked well with other stakeholders. There were good links with the local community and with the social work department. The care team had good networks to ensure that patients had the items of equipment and support they needed on discharge. The integration of the local Age UK day service within the ward meant that patients were already aware of this service and had had the opportunity to use it prior to discharge. This meant that patients had access to a service that stimulated them not only socially but physically.

Vulnerable patients and capacity
Due to the purpose of the ward there were many vulnerable patients on the ward. The staff were experienced in supporting these patients. We saw that one member of staff reassuring a patient a number of times as they expressed their fears. This was done in a patient and calm manner and using words that the person could understand. Time was spent ensuring that this person was encouraged to undertake the task in hand.

Leaving hospital
As discussed above, the ward had good networks with local health and social care providers to facilitate complex discharges. Patients and families were involved in making decisions about post-hospital discharge arrangements and given the emotional and physical support to ensure that this was a positive experience.

Learning from experiences, concerns and complaints
The ward manager kept a file of complaints, of which there were few. There had been no complaints in the previous year. Compliments cards and thank you cards were displayed on the noticeboard and there were many of these. The ward manager had implemented a number of systems and processes based on her previous experience in the 18 months she had been in post. Ward staff reflected that these had been generally positive. Staff were unable to identify an area of practice that had changed as a result of an incidents; however, as there had been no serious incidents in the previous year, the inspection team was not unduly concerned.

Are medical care services well-led?

Good

The staff are well led by an experienced manager.

Vision, strategy and risks
Staff were able to describe the way forward for the unit. They could articulate current plans and changes to

services. They also were aware of the trust's values and demonstrated these through their working practices. There was a good sense of team spirit on the ward at the time of our inspection.

Quality, performance and problems

Quality monitoring audits were in place and showed very positive results for the ward area. The average cleaning score for the ward in audits was 99.4% and numbers of falls and infections were low. The Friends and Family test showed that most patients were likely or highly likely to recommend the ward to their family and friends. However, staff were keen to increase the participation of patients in this area and were encouraging patients to complete the forms.

Leadership and culture

There was strong leadership from the ward manager who had clearly put in place systems and processes to address previous issues highlighted on the ward. All the staff we spoke with described an open and honest culture within the service. We were told that the staff team worked well together and appropriate support was received from senior managers.

Patient experiences and staff involvement and engagement

Patients we spoke to reported that they felt involved in the care. One patient said they (the staff) push you to do things but you know it's for your own good. The staff all felt part of the ward team, as did the housekeeper we spoke to. The practice of ward 'flooding' had been well received by ward staff as it engaged them in a variety of aspects of daily care and also informed them of issues going on at the trust. The monthly newsletter was also well received. However, the ward manager told us that attendance at the team meetings was low. This was due to the fact that the staff felt 'up to date' with what was going on and did not see the meeting as a priority.

Learning, improvement, innovation and sustainability

Staff had access to training and opportunities for self-development. Members of the ward team took on additional responsibility in designated areas to enhance their own learning and to provide feedback to the team. The ward team embraced external stakeholders and worked well with them to facilitate a good discharge for patients.

Good

Surgery

Safe	Good
Effective	Good
Caring	Good
Responsive	Good
Well-led	Good

Information about the service

The Greenwood day unit is contained within Stamford Hospital, a few miles from the main hospital in Peterborough. It comprises one operating theatre, a procedure room, a first stage recovery area with three bays and a second stage recovery with eight bays. The hospital provides a range of surgery including orthopaedic, ophthalmic, urology and general surgery. There is a procedure room where endoscopies and procedures to relieve chronic pain are carried out. All the pain medicine for Peterborough and Stamford Hospitals NHS Foundation Trust are carried out here. The department is managed from the main operating department at Peterborough. However, there is a senior member of staff on duty every day who oversees the day-to-day running of the unit.

The Greenwood day unit has a pre-admission clinic where patients can be seen and assessed prior to surgery. We talked with five patients and five members of staff, including nurses, operating department assistants, healthcare assistants and support workers. We observed care and treatment and looked at three care records. We received comments from people at our listening events, and from people who contacted us to tell us about their experiences. Before our inspection, we reviewed performance information from, and about, the trust.

Summary of findings

We saw caring staff and the patients we spoke with told us that staff were kind and gentle. One told us: “I’ve been here lots of times for various things. It’s not only excellent, it’s an ideal place for Stamford.”

All patients were invited to a pre-assessment clinic prior to their surgery. This was to ensure that they were suitable for attending a small unit for their day surgery or procedure.

Surgical services were provided in a clean and hygienic environment in line with recognised guidance. This helped protect patients from the risk of infection, including hospital-acquired infections.

We saw that appropriate equipment checks and maintenance were carried out.

Staff were well trained, confirmed that they felt well supported, and had received an appraisal within the last 12 months.

Patients we spoke with, some of whom had visited the department on several previous occasions, were complimentary about their care and the staff’s attitude.

Good

Surgery

Are surgery services safe?

Good

Safety in the past

There was little data on the safety of the surgical unit at Stamford and Rutland Hospital as this unit was managed by the main Peterborough City Hospital surgery directorate. We spoke to staff and ascertained that there had been no serious incidents at the unit in the previous year (2013). Staff were able to discuss any incidents reported on the trusts monitoring tool Datix. Due to the low risk nature of the surgery undertaken here there were few reports of incidents at this site.

Learning and improvement

Staff we spoke with confirmed that they had access to the trust's electronic incident reporting system (Datix) and understood their responsibilities to report incidents. Senior staff were clear about any actions taken and learning outcomes reached as a result of incidents. However, this learning was not always robustly cascaded to the more junior members of staff. Staff we spoke with were unsure about how any learning had arisen from incidents. We saw a log of incidents from the Datix incident reporting system that showed that actions had been taken.

The Greenwood day unit used the early warning system (EWS). EWS is a method of identifying patients whose condition may be deteriorating. If a patient deteriorated, there was a procedure in place whereby an ambulance would be called to transfer the patient to Peterborough Hospital.

We observed good use of the paper-based system of surgical safety checklists in place in the operating theatre. This included the use of the World Health Organization (WHO) surgical safety checklist, which is designed to prevent avoidable errors. We reviewed three patient records specifically to review the completeness of the WHO checklist and noted that in all of the records the checklist was present in the files. This showed that adequate checks were undertaken to ensure that patients were safe within the operating department.

The pre-admission service was nurse led and involved a full history being taken as well as any pre-operative tests, for example an electrocardiograph (ECG) and blood tests. The nurses could refer to an anaesthetist, who was on site daily, if there were any concerns about a patient's health needs. If there were any concerns with regards to a patient's suitability for surgery in a small satellite unit, for example if they had ongoing or unstable long-term conditions, the patient was referred back to the main hospital for surgery there. This meant that patients' general condition and fitness were assessed so that the risk to them was minimised.

Surgery was undertaken between 8 am and 5.30 pm, Monday to Friday only. The anaesthetist did not leave the building until the last patient was fit to leave the first stage recovery area. This meant that surgery was undertaken when there was suitable staff in the building.

Systems, processes and practices

Equipment

We checked a sample range of equipment in the day unit. All the equipment we saw had been checked and was signed as being safe to use. For example, we saw portable appliance test (PAT) stickers, which were in date.

Monitoring safety and responding to risk

Environment

The Greenwood day unit was not purpose-built and comprised one theatre and a recovery area. There was a steep downwards slope into the operating theatre from the main corridor. In a separate area, a short walk up the main corridor, which also sloped, was the day unit, procedure room and pre-admission clinic. The nurse in charge told us that a risk assessment had been completed that encompassed the risk of pushing trolleys and wheelchairs up and down the slopes. It was deemed a moving and handling risk. Therefore, the trust had purchased motorised trolleys, to mitigate the risk to staff.

Equipment was stored safely and the department looked uncluttered.

The changing facilities were single sex in the day unit. There were two waiting areas in the day unit, one for women and the other for men. One room was larger than the other, so they were interchanged depending on how many patients of each sex were booked on the operating lists. This meant that when patients were waiting to

undergo their procedure and in their dressing gowns, their dignity was maintained. The recovery areas were mixed, but the staff told us that curtains were used to promote privacy; we saw that this was the case.

Infection prevention and control

The building that the Greenwood day unit was situated in was old and not purpose-built. However, we noticed that it was very clean. We saw a member of the housekeeping staff thoroughly cleaning the day unit. Hand hygiene gel was available at the entrance and within both the day unit and the operating theatre. Staff were observed using these. None of the gel dispensers we tested were empty. We noted that all the clinical staff we saw were adhering to the trust's 'bare below the elbow' policy and were wearing minimal jewellery. Staff we spoke with were able to describe to us the 'five moments of hand hygiene'.

All elective patients who attended the pre-operative assessment area before their operation, other than those undergoing an ophthalmic procedure or endoscopy, were screened for MRSA. This meant that a patient could be given appropriate treatment if their MRSA screening was found to be positive and prior to any treatment going ahead.

Sterile instruments were obtained from Peterborough Hospital, where they were decontaminated and sterilised. No decontamination took place at Stamford. There was a twice daily delivery service between the two sites. The instruments and instrument trays belonging to Stamford were marked in a way that identified them. A member of staff told us that generally there were enough instruments, although occasionally there was a problem with getting instruments turned around quickly. The instruments were stored in tins, which minimised the risk of unusable instruments due to torn exterior paper wrapping. There were very few sets that needed to be rejected, for example if they were wet.

Patient records

We reviewed three patient records and noted that appropriate assessments had been completed accurately, such as venous thromboembolism (VTE) risk assessments. Records of the operation or procedure were recorded, including post-operative instructions from the surgeon. Despite some people staying for a short time only, we saw that care had been documented and evaluated.

Staffing

The day unit appeared well staffed and the pace calm and unhurried. We observed patients' needs being anticipated and met quickly. Although we did not observe an operating list taking place, the nurse in charge told us that the operating theatre had enough staff to run a list and recover patients safely. The nurse in charge told us that very occasionally, if a list overran, staff would stay late to ensure that the patient was not discharged before they were ready. The department operated a 'time owing' policy. This meant that if staff did stay late, they took time back in order not to work long hours. We spoke with three staff about this and they all liked to work in this way. One told us: "It's give and take really. I really like it as I get some flexibility." All the staff we spoke with told us that they thought there were enough staff. One said: "Some days it's a bit frantic, but we all pull together. Other days it's really calm. I always feel I have enough time to look after the patients how I like to." A patient told us: "I've been here lots of times for various things. It's not only excellent, it's an ideal place for Stamford." The nurse in charge told us that patients' operations were never cancelled due to lack of capacity. Procedures were cancelled or postponed only if the patient was unwell. On the day of our inspection, a list had been cancelled as the surgeon was unwell. The nurse in charge told us this was a rarity.

Peterborough and Stamford Hospitals NHS Foundation Trust scored average in the national staff satisfaction survey for key finding one (% feeling satisfied with the quality of work and patient care they are able to deliver). The staff we spoke with at Stamford all told us they enjoyed their work. One told us: "I look forward to coming to work." However, all staff were concerned about plans for the unit. It was due to have an upgrade and staff were unsure whether the unit would close while the work was going on or remain open. One told us: "We're all a bit unsure what is going to happen to our jobs, which is unsettling."

Safeguarding

Staff we spoke with were able to demonstrate a good understanding and awareness of the trust's safeguarding systems and processes, and how they would report any concerns. The staff reported that they admitted very few patients who had a difficulty with communication. However, they were aware of the Mental Capacity Act 2005 and its application with regards to caring for those who lacked capacity.

Good

Surgery

The unit did not undertake procedures for patients under the age of 16 years. Clinical staff we spoke with told us they had been trained in the Mental Capacity Act and were able to give a detailed account of the consenting process and the people who were involved in it. This included doing a further check before an operation that valid consent had been obtained. This was finally checked on the WHO checklist prior to surgery commencing.

We saw information leaflets to assist patients so that they could be as knowledgeable as possible about the risks and benefits of their procedure. During our review of three records, we noted that consent forms had been completed appropriately.

Are surgery services effective?
(for example, treatment is effective)

Good

Evidence-based guidance
Audits were undertaken as part of the trust's auditing programme, for example of the efficacy of EWS. Audits were also undertaken of transfers into the trust following surgery for patients who had experienced complications or required an unexpected overnight stay. This would identify whether late operating was being undertaken or if unsuitable patients were being operated on. We saw from data provided to us by the trust that there had been no reported incidents of transfers into the trust since before July 2013 (which was when the data we saw commenced). The nurse in charge told us that they could not remember the last time a patient had been transferred.

Monitoring and improvement of outcomes

Pain management
Patient records showed that a patient's perception of pain was evaluated and pain relief provided appropriately to patients.

The day unit undertook all the pain management procedures for the trust.

Staff, equipment and facilities
Ward sisters we spoke with explained to us that mandatory training was provided and that this information was recorded centrally and kept in the main operating department at Peterborough Hospital. Staff confirmed this. The senior staff described their recent attendance at training run by the trust for band 6 and 7 staff; they said this had been beneficial.

All the staff we spoke with confirmed their attendance at mandatory training and explained that if they did not attend their manager was contacted. This ensured that all staff attended essential training. Furthermore, all staff confirmed that they had received an appraisal within the last year, which gave them the opportunity to discuss their work performance and career aspirations with their manager.

A new member of staff described their induction, which was undertaken both hospital-wide and locally in their department. They told us that the trust induction covered topics including health and safety and fire awareness. They went on to tell us that their local departmental induction had been very beneficial and also provided information about what the expectations were within their role. They described the good relationship they had with their mentor, who they said had been helpful and supportive. They went on to say: "I feel like I've been here for years. Everyone has been a mentor to me. They're all brilliant."

Sufficent Capacity
The nurse in charge told us that they did not have the capacity issues that were more common in the main hospital in Peterborough. They told us that they were very full some days, but could not remember cancelling a procedure due to lack of capacity.

Multidisciplinary working and support
The nurse in charge of the unit told us that communicating essential information was fairly straightforward within the unit as it was so small. The theatre manager from Peterborough City Hospital, who had operational responsibility for the unit, visited weekly. Monthly operational meetings were held in Peterborough City Hospital, to which the senior staff were invited. There was a communication folder in the day unit where essential written information was stored, so that all the staff were kept up to date with what was going on. The nurse in charge showed us a 'Friday update' email that they sent to all the staff in the unit and that contained local and trust-wide information. One member of staff showed us information available on the trust's intranet, including 'Ask Peter', the forum where staff could email questions to the

chief executive. One member of staff told us: "I think we are communicated with really well. There's loads of information and it's up to us to find out and not be passive."

The staff worked well with the doctors and anaesthetists, seeking advice about particular patients if, for example, the patient had an existing condition or required pre-operative tests.

Are surgery services caring?

Good

Compassion, dignity and empathy

Patient experience and feedback

We spoke with two patients who had undergone previous procedures at the Greenwood day unit. They told us how they liked the more intimate atmosphere and that the staff remembered them. Patients told us that they felt involved in decision making for their treatment. One patient told us that they had been in and out of the unit regularly over the years, often having similar procedures. They told us: "They go through everything, even though I've had it done before. It's very reassuring."

Patient centred care

During our time spent in the Greenwood day unit, we observed positive interactions between staff members and patients and caring behaviours. Patients were complimentary about the level of care they had received, both at the pre-admission stage and when they had arrived for their procedure.

Involvement in care

During our observations in the Greenwood day unit, we saw that there was an effective system in place to discuss a patient's care and treatment, both at the pre-admission stage and pre-operatively, and that this included consultants, theatre and nursing staff. The anaesthetists provided advice to the pre-admission clinic on ordering further investigations, ECG interpretation or whether a patient was suitable for surgery in a 'satellite' unit.

We saw that patients were given full instructions prior to them being discharged back to their home. There were systems in place to ensure that patients received further care if required, for example liaison with GPs or district nurses for removal of sutures.

Trust and respect

Privacy and dignity

Patients were admitted and discharged in a private room, prior to changing and going into the general male or female waiting area. This meant that private discussions about patients' symptoms and their personal information could be discussed confidentially. During our inspection visit, we observed care that was delivered with dignity and respect. The nurses and carers spoke quietly and calmly to the patients. We noticed that curtains were used in the recovery areas and there were separate waiting areas for men and women. One patient we spoke with told us that they had been treated with dignity and respect by the nursing staff.

Emotional support

Pre-operative assessments included capacity assessment and took into account patients' and relatives' views. Where mental capacity was a risk, pre-assessment information included the contact details for the multidisciplinary team.

Patients we spoke with said that their procedure had been explained to them and the staff within the unit were kind and considerate towards their needs. One told us: "My wife is very anxious and last time I was here, the nurse called her when I had my procedure to put her mind at rest. It helped me too as I wasn't worried about her worrying about me."

Trust and communication

All the staff we spoke with were fully aware of gaining feedback from patients. Patients we spoke with knew how to make a complaint and had been given information in pre-admission documentation. One told us: "If I wasn't happy, I would ask to speak to whoever in in charge."

Good

Surgery

Are surgery services responsive to people's needs?
(for example, to feedback?)

Good

Meeting people's needs
All patients who were to undergo planned surgery were seen by the nurse at a pre-operative assessment clinic. The pre-assessment was held in private to allow for questions to be asked. Post-operative information was given at the pre-assessment stage, so that patients had the opportunity to consider the information. We spoke with four new patients who all said they appreciated the opportunity to ask questions and have their fears allayed.

Any patients who were deemed unsuitable for day care in a small unit, for example if their co-existing conditions increased the risk of complications, were referred back to Peterborough. This meant that patients who could have been at risk had their procedure in a hospital that would meet their more complex needs.

The nurse in charge told us that occasionally patients were booked late, and then any pre-operative tests needed to be expedited. However, this was a rarity. No emergency or urgent procedures were undertaken in the day unit: every procedure was pre-planned.

Access to services

Patient support
Nursing staff were able to show us information about advocacy services that were available to patients, and they explained that they would also direct patients and relatives to the Patient Advice and Liaison Services (PALS) if they needed any further information.

Vulnerable patients and capacity
During our inspection, we observed the care of a patient who had a visual impairment. We saw that the staff explained everything carefully and ensured that their drink and call bell were within easy reach. We saw staff checking the patient regularly to ensure that they were comfortable and could reach everything they needed.

Leaving hospital
The nurse in charge explained to us how discharge planning began at the pre-admission clinic. Any potential problems were identified, for example if someone lived alone. The staff ensured that patients had someone to take them home after their procedure and that their home circumstances were suitable, for example that there was an adult who could care for them when they returned home. They gave advice about post-operative care and aftercare, for example when people could return to work or drive.

Learning from experiences, concerns and complaints
Staff we spoke with explained that patient and relative feedback, particularly around complaints and concerns, was readily encouraged. We saw that feedback was actively encouraged from information that was given to patients. The staff told us that there were very few complaints; the few that there were mostly surrounded concern about the long walk from the hospital entrance to the unit, particularly for those who had mobility problems.

The staff described that any complaints were dealt with locally if possible. Staff were able to direct patients to a more senior member of staff or the PALS.

Are surgery services well-led?

Good

Vision, strategy and risks

Leadership and vision
The leadership in the unit was generally viewed as positive and effective by the staff we spoke with. All staff we spoke with on the unit were very positive about the teams they worked in and how well they were led. We saw examples of leadership with experienced staff being responsible for supporting and leading staff who had recently been appointed.

Quality, performance and problems

Management of risk
The trust had a system in place to identify and escalate identified risks to the appropriate risk register. We saw a copy of the most recent risk register and there were no risks recorded that related directly to Greenwood day unit.

Good

Surgery

Staff told us that generally there was an adequate supply of equipment for the correct treatment and care of patients. We saw equipment that was stored safely. In the operating department, the storage areas had recently been reduced to enable some building work to take place.

Leadership and culture

Some nursing staff told us that they were confident about raising concerns with their direct line manager or with a medical staff member if it concerned a patient. Generally, staff told us that they felt supported by their senior staff. One told us: "As it's such a small team here, we all just muck in and do everything."

Patient experiences and staff involvement and engagement

Nursing staff told us that the nurse in charge and the consultants were very approachable and supportive. They said that they were all open to suggestions for improvements and that there was an open culture to change across the service. They told us that they did not see very often the manager who had overall responsibility for the department, who was based at the main hospital in Peterborough. However, they emphasised that this was not a problem for them.

During our inspection, we saw that staff on the units readily approached the nurse in charge for advice and information to ensure that patient treatment and care were maintained and effective at all times.

We saw that changes required to trust-wide practice were communicated by email and placed in the communication folder. However, staff informed us that explanation around change and how to implement change properly was not always given. There was particular concern raised by all staff regarding the imminent changes to the unit, which they said had not been communicated effectively.

Learning, improvement, innovation and sustainability

Most staff members we spoke with told us that, as the day unit was so small, they did receive an overview and often detailed feedback from complaints or incidents. However, this was at a local level only. One member of staff told us that generally feedback from incidents, once they had been entered on the hospital-wide Datix system, was inconsistent. This meant that learning from complaints and incidents was not always effectively communicated by the management teams at ward level and above.

Good

Outpatients

Safe	Good
Effective	Not sufficient evidence to rate
Caring	Good
Responsive	Good
Well-led	Good

Information about the service

Stamford and Rutland Hospital provides a small but extensive outpatients department (OPD). It is staffed independently from Peterborough City Hospital although line management is provided by the City Hospital. The site has been there for many years and redevelopment is planned for 2014–16. On the day of the inspection, 14 different specialties were seen in the OPD.

Summary of findings

OPD services were safe, caring and met the needs of patients. There were no major safety concerns within the department. Staff knew how to report concerns and felt that action would be taken if they did so.

Patients liked coming to the department as they were seen on time and received the same treatment that they would have received at the main hospital site. Monitoring systems were in place and reviewed in order to improve the quality of the service.

The department was responsive to the needs of patients using it. Complaint numbers were low and accolades increasing. This meant that patients were satisfied with the care provided in the department.

The department was well led and staff and the manager felt supported. The only concern was that the department staff felt that they were not seen as equals by staff at the main Peterborough City Hospital site.

Good

Outpatients

Are outpatients services safe?

Good

Outpatient services were safe.

Safety in the past

There have been no serious incidents reported in the last six months. The main issue reported was the lack of a translator to attend the OPD with patients.

Learning and improvement

The matron showed us her balanced scorecard that she used to set the agenda for her team meetings. A copy of the meeting agenda and notes taken were seen and confirmed this and that actions were taken to learn from incidents. It should be noted that, although the matron includes all the hospital managers in these meetings, she does not line manage the sister or the OPD team. There were no major concerns for the OPD.

Systems, processes and practices

Staff were very aware of safeguarding and knew how to refer concerns. The environment was very clean and hand gel was available at appropriate points to aid infection control.

E track is used throughout the hospital and is linked to the main trust system. There were good systems in place that ensured that patients attended clinics, with reminders for attendance being left on answerphones and sent via text messages. Patients book in at the main reception before going through to the OPD. Medical secretaries said that they have no problems accessing the medical records from the main hospital site and that they are managing to get letters out quickly and keep within the five days they have before the medical records have to be returned.

Monitoring safety and responding to risk

Datix was used by staff to record incidents and actions taken to resolve issues. There is no trust-wide individual risk register for this OPD. Staff felt that they knew how to report risks and that, when risks have been reported in the past, actions have been taken.

Medical records are securely stored while on the hospital site and returned to the main hospital site within five days. Staff clearly understood the need for patient confidentiality and how records should be kept.

Staff had received training on the Mental Capacity Act 2005 and knew how to make potential safeguarding referrals. Datix records showed that, if concerns in regard to a safeguarding nature were seen in clinics, they were referred to the appropriate authorities.

Anticipation and planning

The trust clearly understood the issues that a very old hospital site caused for both patients and staff. There were no concerns about the old building and it was safe and maintained; however, plans were now in place to redevelop the site and improve facilities for all in 2014–16. All staff welcomed this, but especially the pain clinic team that was housed temporarily in the very old hospital buildings.

Are outpatients services effective?
(for example, treatment is effective)

Not sufficient evidence to rate

Evidence-based guidance

The consultants and doctors using the department were from the main Peterborough City Hospital site where they were actively engaged in research and in implementing national guidance in treatments. This experience was carried into the OPD on this site. Overall, it was difficult to assess how effective the department was.

Monitoring and improvement of outcomes

The Matron uses a trust-wide balanced score card modified to be specific to the OPD'. The matron does not manage the OPD; it is managed via the management team at the main hospital. Most of the trust performance measures are not clearly split out for Stamford and Rutland. The overall trust-wide performance for the OPD is measured by the number of breaches of the 13-week target waiting time. The trustwide performance is 12 breaches in the year to date (103,152 new attendances in the year to date). There were three breaches in quarter 1, one in quarter 2, none in quarter 3, and eight so far in quarter 4.

Sufficient capacity

The OPD manager said that she had no problems with staffing and that, if needed, staff come from the main hospital site. Equipment was available, clean and in good working order. There were systems to ensure that all equipment was serviced and PAT tested. The friends of the hospital were very generous and had provided most of the

equipment for the eye clinic. The facilities were very clean and airy with sufficient space for people to be seated. The facilities for the pain clinic were not purpose-built and were very old. This sometimes did not aid privacy and dignity, as patients' conversations could be heard from time to time. This issue will be addressed when the hospital site is redeveloped.

Multidisciplinary working and support

Staff from different professions were seen to be working very well together. Student nurses felt that it was a good place to come for a placement as there was such variety in a small area and they got to see and help care for people with a range of conditions. The plaster technician had been in the hospital for only a few weeks and said how she enjoyed working there as people from all professions helped one another. One patient commented that the communication with their GP following their outpatients appointment was very good.

Are outpatients services caring?

Good

We received 18 comment cards from Stamford and Rutland Hospital. All 18 were very positive. A patient who attended outpatients department said that "the care I received in the eye clinic was superb. I was extremely well cared for by both the nurses and consultants who really looked after my well-being. It is a wonderful hospital where staff really care." Another patient said: "A very good service and I did not have to wait long and a very good service from nurses."

A student nurse had been shown how to apply a plaster cast to her arm. This was left on during the day so that the student nurse could experience the issues patients have while wearing a plaster cast.

Involvement in care

The patients we spoke to felt that they had been included in the decision making and had felt very well supported. Staff were very clear about the Mental Capacity Act 2005 and how that impacted on patients' consent and decision making.

Trust and respect

Patients felt that they were well communicated with in the hospital. One patient who had attended physiotherapy said that "the staff were very kind and helpful. They listened to what I was saying and had the time to listen too." Another patient said: "Everyone just makes you feel welcome, and the jitters just disappear. I have had blood tests and outpatient appointments and have been dealt with professionally. These are people who care." Patients also felt that staff remembered them and knew their names and their condition, which reassured them.

Emotional support

Patients attending the pain clinic were provided with psychological support from a clinical psychologist. If needed, the chaplaincy from the main hospital site will visit, but this does not happen often in the OPD.

Are outpatients services responsive to people's needs?

(for example, to feedback?)

Good

Services are responsive to the needs of people attending.

Meeting people's needs

Patients felt that their needs were being more than met and that this was because of the friendliness of the staff, the way in which the hospital was run, and the fact that Stamford was a very close-knit community: "We all know each other." Another patient said: "All staff are very interested and observant. I would always come to visit Stamford Hospital when possible ... it is my preference."

Access to services

Patients interviewed felt that they could access the service very well and only occasionally did they have to wait. They found the whole process, from appointment booking to attendance, easy and very simple to follow. The pain clinic was located at Stamford and was a nationally registered specialist service.

Vulnerable patients and capacity

Staff had received training on the care required by vulnerable patients. During our visit we saw that staff were kind and caring to all patients in the department.

Learning from experiences, concerns and complaints

The hospital had received very few complaints over the last three quarters. The matron tracked these on her balanced scorecard. In comparison, the number of accolades on the

scorecard had increased from a steady 22 up to 63 in December. The public and patients have very strong views about the hospital; in the main, these are very positive. The hospital also has a noticeboard in one of the corridors with Post-its on which people can make comments about anything to do with the hospital. The matron reviews the comments and then posts a response and, if needed, an update. Four of the responses had been updated several times.

Are outpatients services well-led?

Good

The outpatients team were well led by the local management.

Vision, strategy and risks

The vision for OPD is linked to the plans to redevelop the site in 2014–16. There are no other specific strategies for the OPD. However, staff were able to discuss the strategy and could articulate the trust's values.

Quality, performance and problems

The hospital's main governance arrangements are overarching and part of the quality governance framework that comprises a quality assurance committee; this includes non-executive directors, executive directors, GPs, Healthwatch and governors. This committee reviews the balanced scorecard for the trust as whole, among other trust matters. Consultants and staff felt that there were good governance systems in place even though they were some distance from the main hospital.

Leadership and culture

The OPD sister is line managed by a manager from the main hospital. The sister felt that this was a very supportive and a very good working relationship. Consultants felt that the OPD was very well led locally and they enjoyed the working experience provided by the hospital that was "very different to Peterborough". However, the staff we spoke to did feel that being such a distance from the main hospital presented some barriers and they felt disrespected by some staff at Peterborough City Hospital. Staff said that they are made to feel that they are second class and that rude comments are made, especially when they join a training session at the main hospital.

Patient experiences and staff involvement and engagement

Completed comment cards (18) recorded numerous very positive patient experiences and patient engagement. However, staff did not feel fully engaged with the main hospital and said that no board meetings were ever held at Stamford and Rutland Hospital. However the trust provided evidence that board meeting had taken place in Stamford in 2012 and 2013 and a council of governors meeting had taken place on the Stamford site in 2014

Learning, improvement, innovation and sustainability

Systems were in place for addressing and learning from complaints; these systems were mainly trust-wide. However, the matron's balanced scorecard documented that there were only one or two complaints for the hospital per month. It was not clear which departments these complaints came from. The hospital has a very open and trusting culture; all staff know each other, as do many of the patients. Staff and patients were not afraid to speak up about their concerns. It was not clear if the turnaround rate for complaints in the OPD was meeting the 30-day target, as data was for the whole trust and not just this hospital.