Cambridgeshire & Peterborough

STP Digital Strategy – *working draft*

September 2018

Confidential Draft: work in progress

Fit for the Future
Working together to keep people well

Contents

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Introduction

This working draft represents a first step a developing a digital strategy setting out how we seek to harness the opportunities technology presents to improve how we deliver health and care services across Cambridgeshire and Peterborough. It is, by nature, a working draft and therefore more work is needed to:

- Understand the resources required to deliver, as well as the investments and benefits from delivery.

- Engage with partners in detail to ensure alignment with organisational plans.

- Engage wider stakeholders to understand what we can learn, and what they can offer, as we take the next steps.

- Develop a plan for implementation to build and maintain momentum.

- Challenge ourselves by developing measures of success against which we can be held to account.

- Learn from others, nationally and internally, allowing us to take strides quickly.

- Ensure alignment to the short term (operational performance, financial plan), medium term (Integrated Neighbourhoods, North/South Alliances) and long term (potential Integrated Care System, Devolution) priorities of the STP.

- Ensure there are clear links to the six system digitisation priorities:

    - Deploying EPR solutions at scale across systems.

    - Extending system capacity management.

    - Improving system-wide staff rostering.

    - Extending real-time coded data collection in community and mental health settings.

    - Improving ambulance and first responder access to clinical information and support.

    - Sharing health and social care information to support health and care professionals working in people's homes.

- Engage with Delivery and Enabling Groups (including North/South Alliances) to understand what we can offer and what they need from the digital community.

And finally, and most importantly, we need to ensure that delivery of this strategy will continue to improve the services we offer patients and the wider population focusing on primary, acute, community, mental health and social care services in their broadest forms.

Context

- Within Cambridgeshire and Peterborough; the NHS partners, Primary Care and local government have come together to improve the health and care of our local population (just under a million) and, in time, to return the System back to financial sustainability.

- Cambridgeshire and Peterborough is one of the most, if not the most, challenged local health economies in England, making it essential that we work together to develop robust plans for long-term transformation. We have in place strong, visible, collective leadership and a well-resourced programme of work to address:
    - the health and care needs of our **rapidly growing and increasingly elderly population**;
    - significant **health inequalities**, including the health and wellbeing challenges of diverse ethnic communities;
    - **workforce shortages** including recruitment and retention in general practice;
    - **quality shortcomings** and inconsistent operational performance; and
    - **financial challenges** which exceed those of any other STP area in England on a per capita basis, such that by 2021 we expect our collective NHS deficit, if we do nothing, to exceed £500m

- To enable us to deliver the best possible care, we have agreed a unifying ambition for health and care in Cambridgeshire and Peterborough. This is to develop the beneficial behaviours of an 'Integrated Care System' (ICS) by acting as one System, jointly accountable for improving our population's health and wellbeing, outcomes, and experience, within a defined financial envelope.

- Digital initiatives will require upfront investment, and we've built up a back log of System digitisation efficiencies. There is potential cost savings of efficiency including:
    - Replacing for cheaper systems.
    - Robotics improving automated systems.
    - Improving quality and safety through the use of with improved data e.g. allergies and drug data.
    - Patient management apps linked to EPR for self management and prevention.
    - Commercial links with industry to reduce costs.

- We are currently not in a position to quantify any potential savings from these efficiencies however hope in the longer term (10-20 years) there would be a positive outcome in terms of savings, quality and efficiencies.

STP digital strategy – a one page summary

STP Ambition – Working together to keep people well

At home is best	Safe and effective hospital care, when needed	We're only sustainable together	Supported delivery

Digital Vision – Becoming the most digitally enabled system

Empower patients - using apps, wearables, smart homes so our community is confident in managing their own health and feel independent, in control and connected with their healthcare providers.

Support and empowering staff - Developing our staff digital skills, providing decision support and releasing more time for care for example through the use of virtual assistants and robotics.

Integrate services - Create systematic, seamless and high quality care using standardised records, ready access to necessary information, and close to real time flows of information across clinical pathways.

Manage the system effectively - Aligned digital strategy to create system convergence and interoperability, create a common approach to information governance, data definitions and standards and procurement.

Create the future - In collaboration with patients and industry, support innovation, research and service development by creating rich, integrated information resources and analytics, by using machine learning and AI and by continually looking ahead to see what emerging technologies can be used in healthcare.

Which we will achieve, by putting in place….

- New governance and processes
- New behaviours and mindsets
- New skills and training programmes
- New roles
- New resources and tools

Skilled capacity to support implementation at pace:
- Project management
- Subject matter experts (e.g., from industry , NHSD)
- IT & Informatics
- Clinicians
- Front line staff
- Patients

A series of product offerings on behalf of the system
e.g., integrated care record, interoperability & integration opportunities, apps & patient support tools

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The local case for change and national FYFV priorities

Only by working as a system, by adopting the behaviors of an integrated care system, can we address our biggest system problems. We are individually unviable, as we:

- have substantial health inequalities (most unequal combined authority in the country),
- are out of financial balance (c£500m as a system by 2021),
- have an increasingly ageing population with complex health needs and co-morbidities (>65's will grow 35% by 2031)
- are planning for significant population growth (2.5% per annum)
- experience major workforce challenges in recruitment & retention (local medical vacancies 9.8% vs national 7.5%)
- are concerned about the clinical sustainability of one of our three A&Es,
- are not universally well advanced in models of integrated working especially around proactive management of long-term conditions & frailty at a neighbourhood level,
- are struggling with day to day clinical workload, across all our providers, and
- face growing demand for adult social care and high levels of children with very complex needs, which cannot be met sustainably without more radical transformation.

The five year forward view identified the need to simplify patient access to care, in the most appropriate location, while supporting people in managing their own health. It identified key solutions needed over the next two years to support these aims:

- Make it easier for patients to access urgent care on line.
- Enable 111 to resolve more problems for patients without telling them to go to A&E or their GP.
- Simplify and improve the online appointment booking process for hospitals.
- Make patients' medical information available to the right clinicians wherever they are.
- Increase the use of apps, both developed nationally and local expertise, to help people manage their own health.

The local landscape - complex and not integrated

H	GP	C	M
3 Main Acute Providers: CUH NWAngliaFT RPHFT	101 GP practices Around 600 GPs	2 Community Providers: CPFT CCS	1 Mental Health provider CPFT

- The STP shares a boundary with the CCG so covers a population of 960,000.

- Cambridgeshire County Council and Peterborough City Council cover a population of 847,000.

- 265,000 patients go through our A&E departments and 87,000 go through our minor injury units each year.

- There are an estimated 3,000,000 GP visits by our patients (3.18 visits per registered population) each year.

- Our community providers carry out around 1,000,000 contacts each year.

- Our Mental Health provider carries out 177,000 contacts each year.

- But limited integration across providers using multiple EPR systems of varying functionality, interoperability and scope and no agreed data definitions and standards.

- Two of our acute hospitals, Peterborough & Stamford Hospitals and NHS Foundation Trust and Hinchingbrooke Healthcare NHS Trust merged in April 2017 to form North West Anglia NHS Foundation Trust (NWAngliaFT).

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Building on what we have already achieved

- CUH is a **Global Digital Exemplar** and Royal Papworth are a **Lorenzo Digital Exemplar**.

- There are approximately 830,000 **Summary Care Records** available to view with consent across all health settings for Cambridgeshire and Peterborough patients.

- We currently have 8 EMIS practices and 61 SystmOne practices signed up to use the **End of Life Care dashboard**.

- Frailty patients that have an Summary Care Record with Additional Information 779 (for the period to end of March 2018) (case management data- live for 6 months Frail and Elderly patients**)

- There is ability for **CPFT staff to view EPIC record viewer** when appropriate and with consent.

- Link between the **EPIC systems used by CUH and Western Sussex Hospitals NHS Foundation Trust** to allow staff to view **EPIC/CERNER records** when appropriate and with consent.

- Link between the **EPIC systems used by CUHFT and Granta group practices** to allow staff to view EPIC records when appropriate and with consent.

- The CUH patient portal **MyChart** was deployed in 2016, with 660+ users; further rollout is planned this year to thousands of patients with chronic diseases

- 148,000 appointments booked via a **GP Online booking service** between April 2017 and February 2018.

- NWAngliaFT established **electronic patient records for the maternity department**.

- **MyCOPD app launched** to support patients suffering with COPD.

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What do our staff say our system needs

Local front line staff, informatics, clinicians, patients and tech colleagues imagined a world where everything was as they would like digitally. Below are some of the key elements discussed:

"A mechanism for data to be available in real time across the system - a platform such as Google"

"Quick, simple and portable data storage (iPad / Tablet)"

"Having the right info at the right level – no point having lots of info if the context is not useful. Maybe have the data and individual access basis that is relevant to a profession"

"Patient held data"

"Intelligent Software – linking databases and/or systems automatically"

"Full data Sharing – the patients believe this is happening so why isn't it"

"Standardised terminology"

"One system that links all the different systems across the footprint"

"A system similar to 'PUSH GP'"

"Shared EPR across STP area"

"Promotion of self care using technology – smart phone apps etc."

"One login, card based, fingerprint or facial recognition"

"Don't reinvent the wheel, learn from others who are further ahead."

"Knowing who is involved in the care of an individual and how to contact them"

"Education on digital solutions – training and/or support both for colleagues in the system and the service users"

"A solution that evolves"

"A 'Summary' look at a patients care that is relevant to the professional looking at the record"

"Instant messaging capability for all"

"Access to all EPR systems, incl. specialist services such as maternity, pathology, radiology etc."

"Can the System to 'share' the risk around Information Governance – Private companies can do this – what makes the NHS different?"

"Consent/IG is the patient/service user responsibility and the granularity of the data available to professionals should be driven by the patient "

"A 'Red Book' (used in maternity) for all patients/service users in the system"

"What is the data being used for – if relevant have available"

"System boundaries being removed"

"Support from the third sector for care without barriers"

The enablers to turn our identified needs into our digital vision

In order to achieve our vision, we need to develop the following products….

New governance and processes

- An established system digital leadership including CIO and CCIO and underpinning governance structure i.e. Digital Enabling Group.
- Centralised/standardised information governance processes and data sharing agreements
- Review baseline status of organisations looking at technology currently available to them, their plans for any future developments and assess interoperability and integration opportunities between partners.
- Integrated analytical function between partners supporting investment decisions and population health management.
- Using social media to advise patients of the digital opportunities that are out there already.

New behaviours and mindsets

- Shared decision making with patients through technology e.g. patient portal.
- Thinking as a system rather than an individual organisation.

New skills and training programmes

- New system wide training programmes for existing staff.
- Recruiting new staff with a recognition of the need for digital skills.

New roles

- System wide CIO.
- System wide IG lead.
- CCIO, clinical, Aligned Health Professionals input both from different healthcare sectors and professional groupings.

New resources and tools

- Shared view of the patient record (this may eventually be an integrated care record) and agreed minimum clinical data set.
- Use apps and other patient support tools to increase self –management for patients, decision support, robotics and AI.
- Directory of digital resources for staff.

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Our digital vision – 5 priorities

Our digital vision is aligned to the five priority areas as described in the Five Year Forward View. In the following slides we align our enablers to delivering against the following five areas:

Empower patients

Support and empowering staff

Integrate services

Manage the system effectively

Create the future

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Empower patients

Outcomes

Population happy and confident to share decision making with health professionals through innovative connected services.

Products

- Using apps, wearables, smart homes so our community is confident in managing their own health and feel independent, in control and connected with their healthcare providers.
- Using social media to advise patients of the digital opportunities that are out there already.

Implementation

- Use patients forums and links with Healthwatch to ensure patients are represented at Digital Enabling Group. Ensuring their views drive forward the use of technology, review products already available and have a role in prevention/health promotion.
- Work with Neighbourhoods (especially Northstowe) and others with new housing development.

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Support and empowering staff

Outcomes
Staff have ready access to intuitive and easy to use technology and the training to get the most out of it. This will make their working lives more efficient and free up time for patient care.

Products
- **Developing our staff digital skills through system wide training programmes.**
- **Provide decision support tools.**
- **Virtual assistants and robotics to release more time for care.**
- **Staff to regularly discuss and exchange digital best practice.**

Implementation
- **Dedicated training resource to develop and deliver the programme, linked to the Workforce Enabling Group for staff planning and skills.**
- **Project team to source, procure and implement decision support tools, virtual assistants and robotics.**
- **Create forum for staff and super users to discuss digital best practice.**

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Integrate services

Outcomes
Systematic, seamless and high quality care using standardised records, ready access to necessary information, and close to real time flows of information across clinical pathways.

Products
- **Clinically consistent pathways across all providers to improve outcomes and efficiency, with fewer, more specialist centers across our hospitals.**
- **Risk Stratification and predictive analytic tools based on Secondary, Primary, Community, Mental Health and Social Care activity.**
- **System Wide Decision Support tools available across all care settings.**
- **Shared view of the patient record (this may eventually be an integrated care record) and agreed minimum clinical data set**

Implementation
- **Digital links to North and South Alliance Delivery Groups, to support neighbourhood and GP federations development.**
- **Links to national work around new care models and how they are supported by digital infrastructure e.g. National Population Health Management forum.**

Manage the system effectively

Outcomes
Aligned digital strategy to create system convergence and interoperability, create a common approach to information governance, data definitions and standards and procurement.

Products
- **An established system digital leadership including CIO and CCIO and underpinning governance structure**
- **System wide agreement around purchasing of new technologies, leverage our purchasing power.**

Implementation
- **Digital enabling group as a forum to discuss organisational priorities and how they fit into the system.**
  - **Task & Finish groups to support each element of the Digital Vision.**

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Create the future

Outcomes
In collaboration with patients and industry, support innovation, research and service development by creating rich, integrated information resources and analytics, by using machine learning and AI and by continually looking ahead to see what emerging technologies can be used in healthcare.

Products
- **Centralised/standardised information governance processes.**
- **Integrated analytical function between partners supporting population health management.**

Implementation
- **Review baseline status of organisations looking at technology currently available to them, their plans for any future developments and assess interoperability and integration opportunities between partners**

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A phased approach to delivery

Within 6 months…

- Systemwide Information Governance agreement in place complying with the GDPR allowing for the a health information exchange platform to be built/created
- Appoint system wide CCIO and CIO
- Appoint systemwide IG Lead
- Establish Digital Enabling Group and supporting workstreams
- Recruit / source capacity for scouting and implementation
- Develop a work programme to ensure compliance with national digital strategy
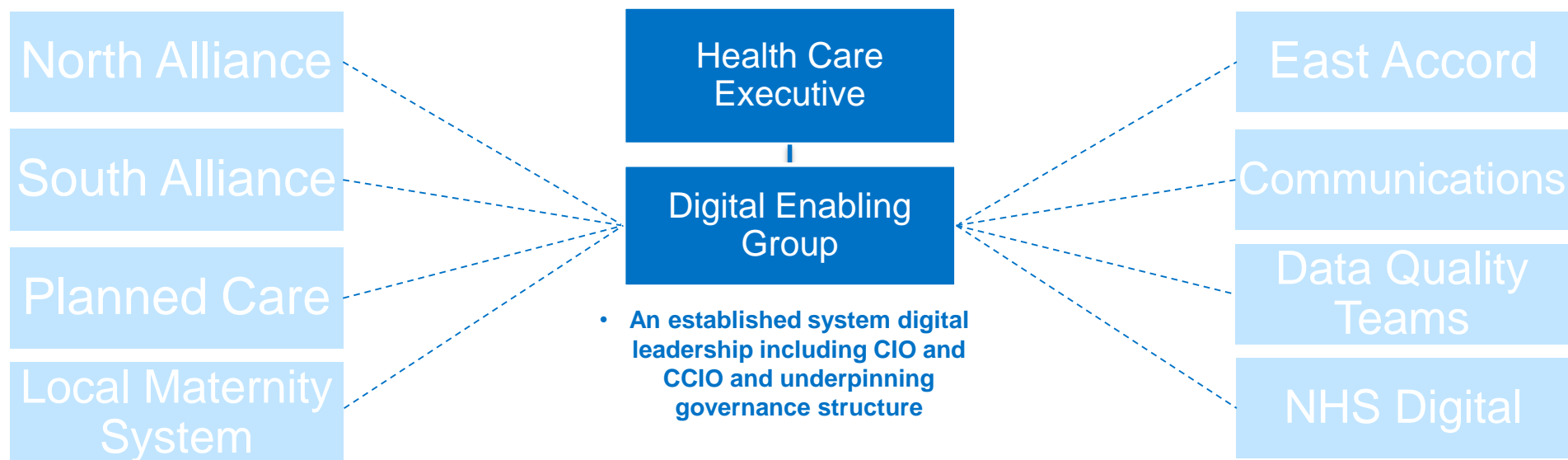- Dataset agreed for health information exchange

Within 1 year…

- Implementation of a health information exchange platform allowing relevant clinical data to be available at the point of care
- Plan for adoption / offering 'self help' apps
- Commission data for information exchange platform
- Alignment of stakeholder digital strategies, and the LDR, to assist with the interoperability of the future and promote joint working
- Health information exchange allowing access to pseudonymised data for research purposes

Within 2 years…

- Introduction of updated technology to all staff within the system to ensure staff have access to records across the STP footprint
- Online booking of appointments simplified and available across the system
- Paper free at point of care for all services allowing for access to records across the STP footprint
- Full systemwide interoperability
- Online access to own records for patients
- Taking stock of NWAngliaFT and RPHFT PAS implementations.

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Proposed task & finish groups

North Alliance

South Alliance

Planned Care

Local Maternity System

Health Care Executive

Digital Enabling Group

- **An established system digital leadership including CIO and CCIO and underpinning governance structure**

East Accord

Communications

Data Quality Teams

NHS Digital

Empower patients	Support and empowering staff	Integrate Services	Manage the system effectively	Create the Future
Review opportunities to use apps and other patient support tools to increase self –management for patients	**Integrated analytical function between partners supporting population health management**	**Shared view of the patient record (this may eventually be an integrated care record) and agreed minimum clinical data set**	**Centralised/standardised information governance processes**	**Review baseline status of organisations looking at technology currently available to them, their plans for any future developments and assess interoperability and integration opportunities between partners**

• Harnessing the power of technology: apps, wearables and smart homes.
• Link with Smart Cambridge programme.
	• Led by STP / CCG / PHI
	• Direct support to North and South Alliance delivery groups
	• Two way flow of information, answer questions as well as identifying developing issues.
		• Led by CUHFT, NWAFT, CPFT, RPHFT and Primary Care
		• Find interoperability & integration opportunities e.g. build on CCG work around SCR.
			• Led by System IG lead (resource required)
			• Common Consent Model
			• Local issue resolution for:
			  • Direct care
			  • Secondary Uses
			• Links to NHS Digital for longer term changes
				• Identifying new technologies and ways of working:
				  • Automation or substitution of human tasks with AI
				• Significant change that is coming from regulators.