

Cambridgeshire & Peterborough

Complex Discharge Demand and Capacity Modelling

March 2019

Summary

The Scope:

- Understand the **capacity and demand gap** for post hospital care provision; and
- Develop **recommendations for addressing** capacity shortages

Summary Conclusions:

- We have adequate capacity at a global level, with the exception of reablement and intermediate care at home, where additional capacity is required.
- The issue is the way in which 'demand' presents itself. This means that we don't have the right capacity in the right place at the right time (**capacity mismatch**). There are a number of reasons for this, including:
 - Flow in and out of services isn't 'average' or 'steady', we discharge in bunches.
 - Geographical variations.
 - Patient choice (e.g. male carers, time of calls)
 - Not all patients are eligible (e.g. ward design, entry criteria, mixed sex wards etc.)
 - Flow out services impacts on blockages in short term provision
- 'Capacity' is hiding 'Process Delays' in some instances

Demand and Capacity Modelling – The Approach

The Approach:

- **Reviewed demand:** 12 months of complex discharge activity from the Patient Tracker Lists (PTL) across Addenbrookes, Hinchingbrooke and Peterborough City Hospital was reviewed. This showed significant demand for post-hospital services across the Cambridgeshire and Peterborough patch, projecting demand at 4.14% increase per year*.
- **Identified post hospital care services with highest demand:** reviewed the coding applied to complex discharges to identify which types of post hospital discharge care have highest demand. Highlighted three key areas*:
 - Reablement
 - Domiciliary Care (including both social care and NHS)
 - Further non-acute NHS Care – including intermediate beds, intermediate care at home, residential and nursing care

These three areas formed the basis of the capacity and demand deep dive.

**See Appendix 1*

Capacity & Demand Modelling – Issues and Assumptions

During the course of the capacity and demand modelling, we identified a number of issues and made the following assumptions:

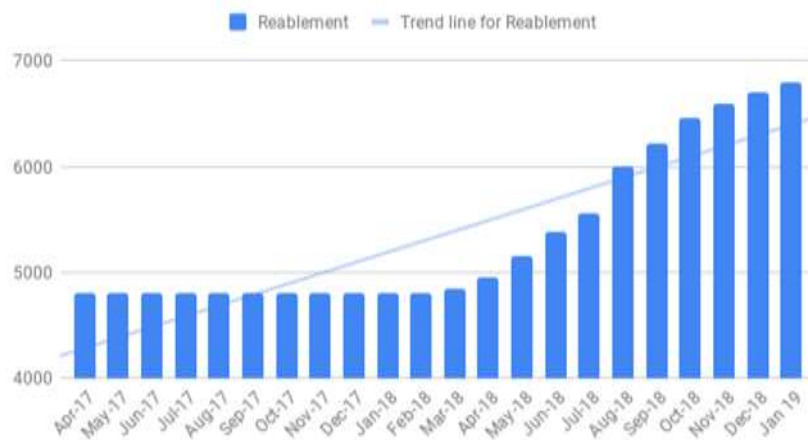
- There was a **large discrepancy between PTL data and actual referrals** into services ('service demand')*, e.g. *reablement figures showed 100% variance between PTL and service demand data.*
- Need to understand the discrepancy between PTL and service demand data, as **the PTL drives daily discharge behaviours** and decisions.
 - Coding incorrectly – e.g. are we hiding 'process delays' as 'capacity delays'
 - Some patient cohorts not being included in PTLs
- We have **used service demand data** wherever possible for the purposes of this analysis.
- **Mean averages were used** for analysis purposes, which doesn't take account of peaks in demand and specific patient cohort differences.

**See Appendix 2*

Key Findings

Reablement

Reablement - Commissioned Hours



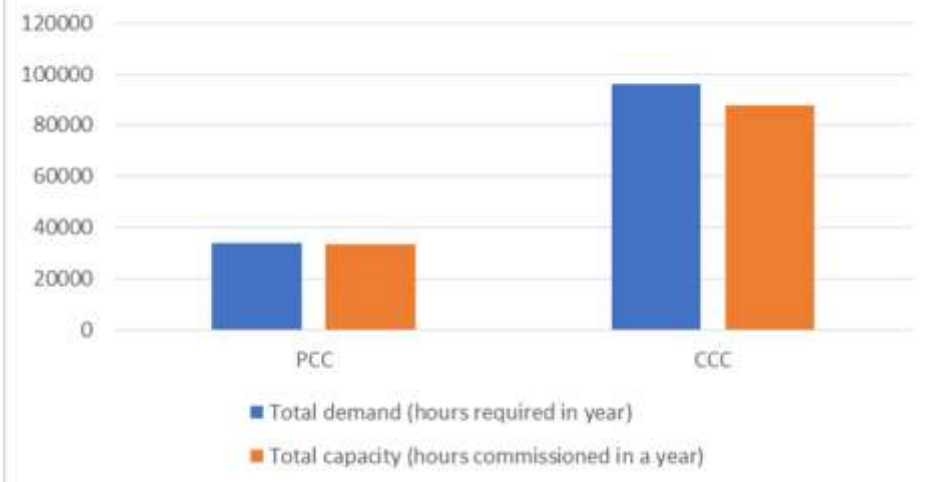
- Since April 2017, the local authority has commissioned a **42% increase in reablement capacity** across **Cambridgeshire***.
- To continue to meet demand, **10% more capacity is needed** in the reablement service.
- Circa. **25% of capacity** is being used to **bridge mainstream domiciliary care** packages. If we reduced bridging, we would increase capacity in the reablement service.

- **In Peterborough, capacity is sufficient** to manage demand.

(n.b. Graphs exclude bridging mainstream domiciliary care hours delivered)

*(*See Appendix 5)*

Demand compared to capacity, reablement

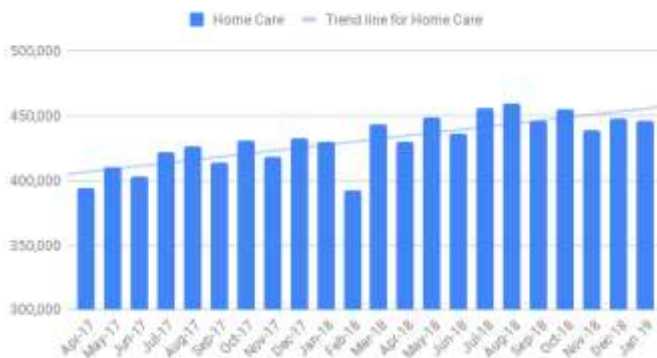


Key Findings

Social Care Domiciliary Care

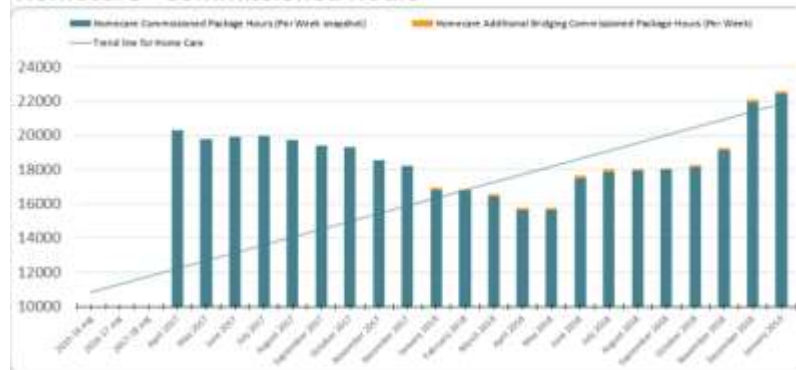
Cambridgeshire:

Home Care - Commissioned Hours



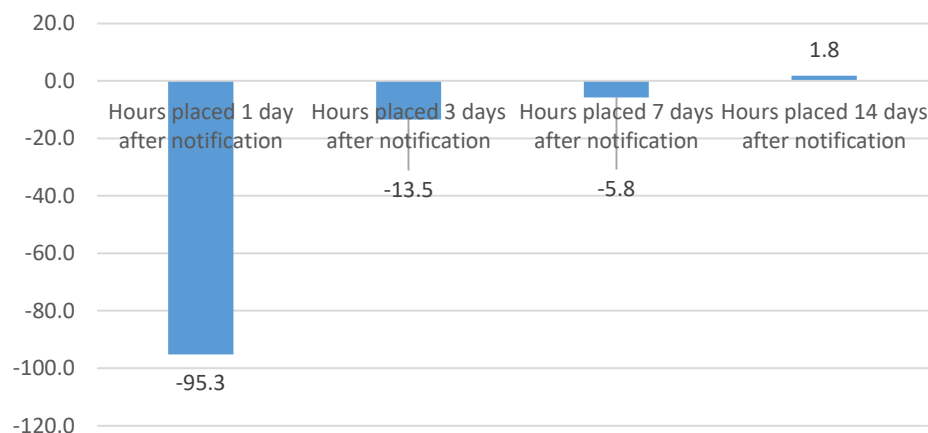
Peterborough:

Homecare - Commissioned Hours



- Since April 2017, the Local Authority has commissioned **13% more capacity** across **Cambridgeshire** and **10% more capacity** across **Peterborough***.
- Demand varies a lot from week to week, but on average there is **sufficient global capacity** to meet demand across the system**.
- The issue is a **capacity mismatch issue** – i.e. the right capacity in the right place at the right time (e.g. breakfast/lunch time calls or geographical location).
 - On average, **all demanded hours have been placed within 14 days** of notification.
 - If we wanted to place all demanded hours within 1 day following notification, we would need up to as much as four times more capacity to match demand with capacity.

Average difference between hours placed and hours demanded (weekly hours)

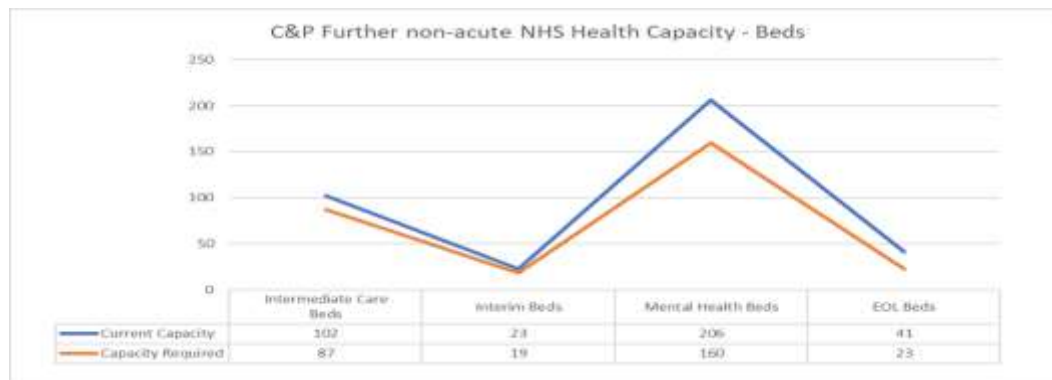


(*See Appendix 5)

(** See Appendix 3)

Key Findings

Further non-acute NHS Care – Interim Beds & Intermediate Care at Home

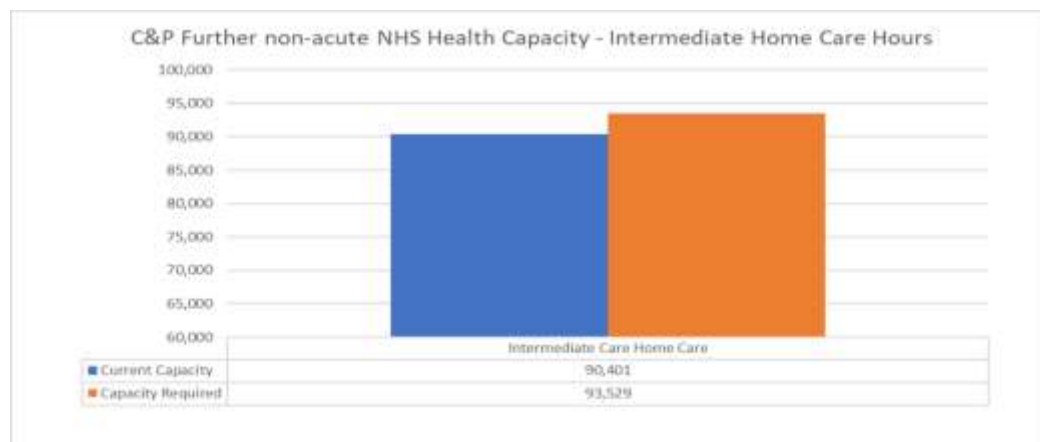


Interim Beds:

- Based on 90% occupancy rates and average length of stay, there is **sufficient bed capacity to meet demand***.

Intermediate Care at Home:

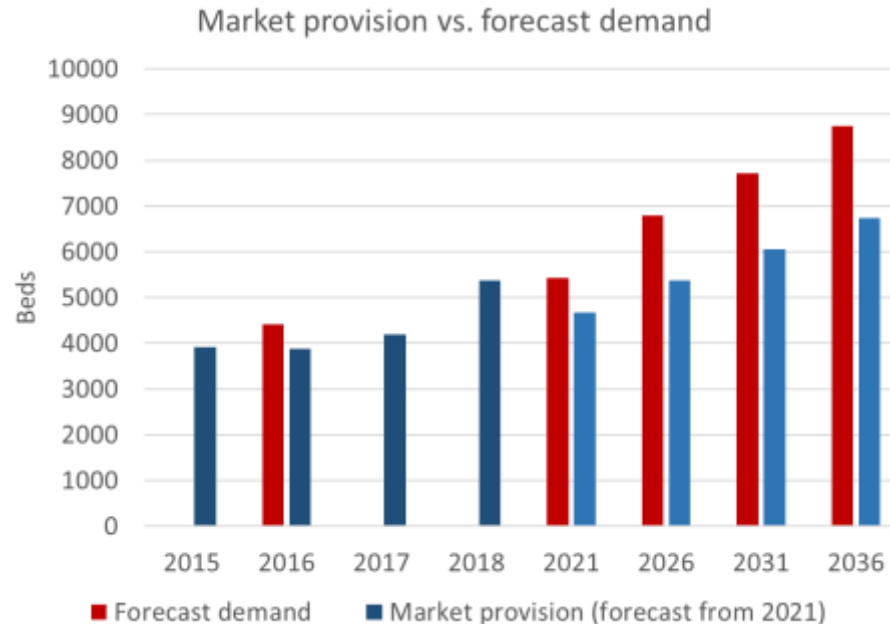
- We need **6% more capacity for intermediate care at home**. The chart shows that the current level of commissioned NHS and private provider homecare hours are just short of the level required to meet demand*.



(* See Appendix 4)

Key Findings

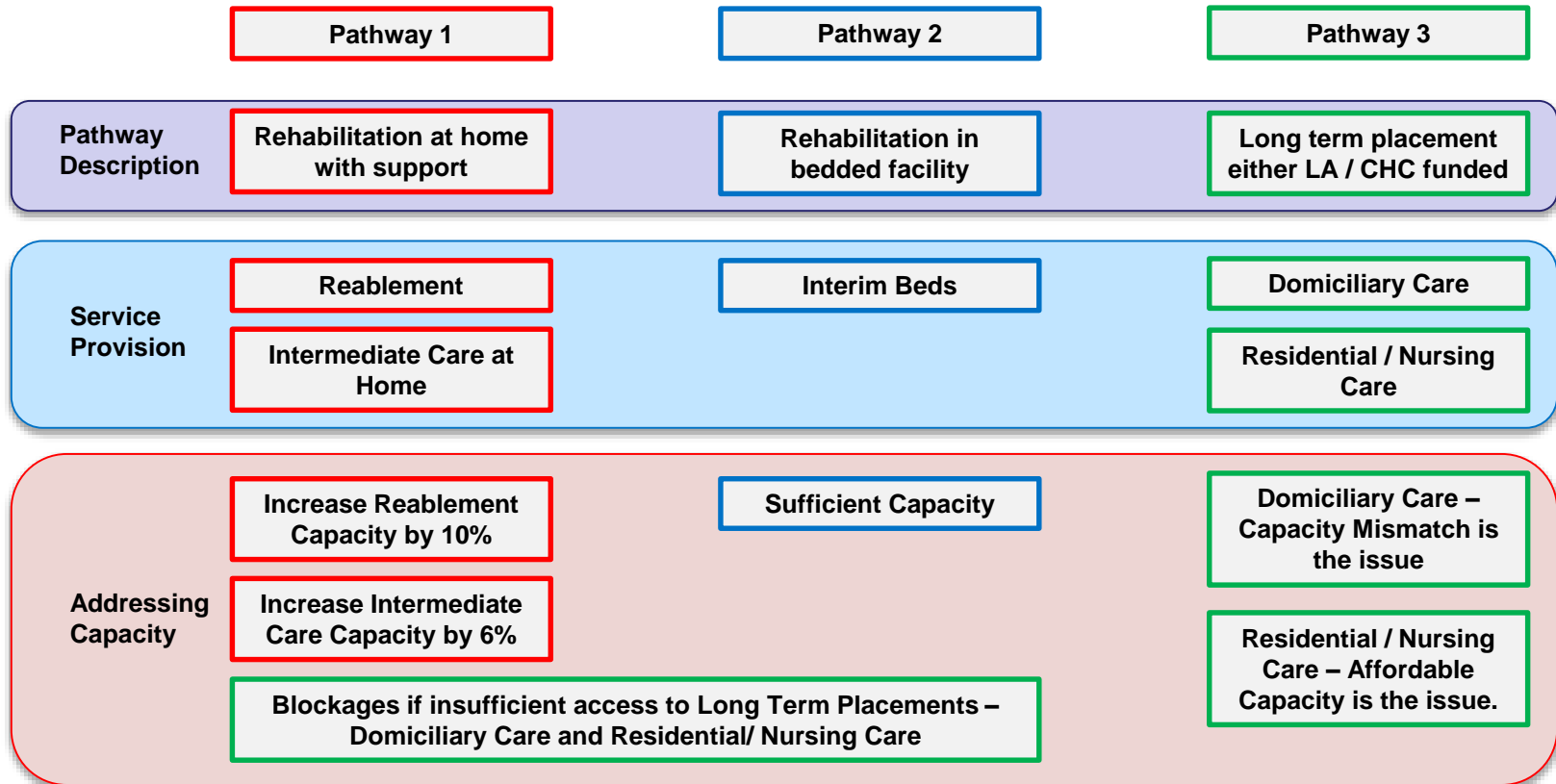
Further non-acute NHS Care - Nursing and Residential



- Cambridgeshire's residential care home bed capacity grew by 5.6% between April 2015 and April 2018. Peterborough's capacity grew by 11.2%*.
- Cambridgeshire's nursing bed capacity reduced by 5.2% between April 2015 and April 2018. Peterborough's nursing bed capacity remained static*.
- Currently, there is **adequate capacity**, but there is mixed impact (e.g. 40% of the Cambridgeshire market is purchased by self funders*)
- **Affordable capacity is the problem.** Costs have been inflating due to self-funders, national living wage costs and exchange rates etc. We need to commission together to manage the market costs more effectively.

(* See Appendix 5)

Capacity Impact on Discharge Pathways

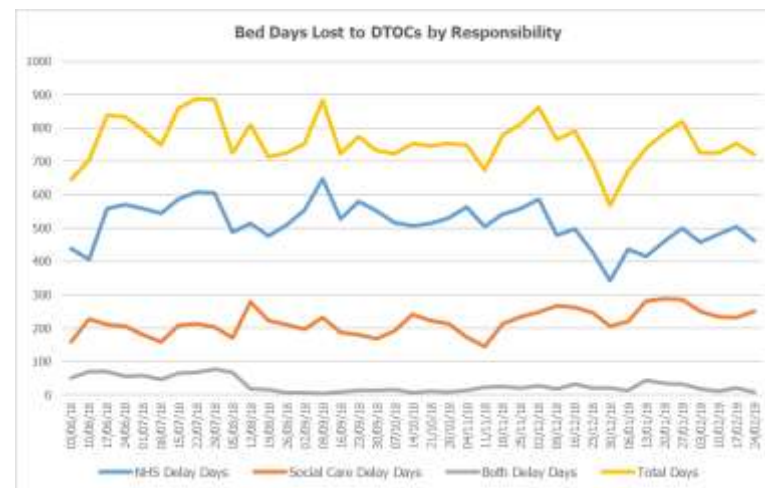


Recommendations & Next Steps

- There are three potential options to address capacity mismatch:
 - **Option 1:** Fund extra capacity and therefore the extra inefficiencies that come with this.
 - **Option 2:** Do nothing and accept the current level of DTOC performance.
 - **Option 3:** Think differently about how we match capacity to demand

Recommendations & Next Steps – Options 1 and 2

- As a system, we are **already doing elements of option 1 and 2**, including:
 - Local authority has actively commissioned additional reablement (42% increase since April 2017) and domiciliary care capacity (13% increase since April 2017)*
 - Residential care home capacity has increased by 5.6% in Cambridgeshire and 11.2% in Peterborough between April 2015 and April 2018*.
 - Additional investment in DTOCs through Improved Better Care Fund, Hancock Monies, STP etc.
 - Continue to work with the market to increase and maximise capacity (e.g. Joint Market Position Statement, Provider forums, closer working across brokerage to maximise capacity)
 - Increased focus on prevention and early intervention, to reduce the demand on domiciliary care, e.g. increasing use of technology enabled care, reducing double up packages.
 - CCG commissioned additional intermediate care worker capacity.
- There is also limited additional capacity in the system to purchase.



DTOC performance shows we continue to struggle as a system to deliver against the 3.5% target.

Cambridge and Peterborough System - Delayed Transfers of Care

	CUH			HH			PCH			CPFT - Community		
	Delay Patients (snapshot)	Total Delay Days Lost	% Performance	Delay Patients (snapshot)	Total Delay Days Lost	% Performance	Delay Patients (snapshot)	Total Delay Days Lost	% Performance	Delay Patients (snapshot)	Total Delay Days Lost	% Performance
27/01/2019	69	466	7.4%	21	183	11.1%	55	205	5.2%	15	93	14.0%
03/02/2019	53	430	6.5%	11	118	7.3%	43	201	5.1%	14	114	17.1%
10/02/2019	53	417	6.5%	17	124	6.7%	54	221	5.6%	6	74	11.1%
17/02/2019	45	364	5.7%	25	190	11.1%	42	239	6.0%	9	53	8.0%
24/02/2019	51	395	6.2%	20	190	11.3%	42	185	4.8%	8	59	8.9%

Recommendations & Next Steps – Option 3

- In order to develop approaches to **Option 3**, we need to **think differently about how we match capacity to demand**:
 - **Process and Flow**: make best use of available resources to maximise the capacity that is available to us.
 - Joint brokerage – to maximise market capacity.
 - Improving patient following assessment – e.g. trusted assessor model
 - Advanced notice for discharge
 - **Changing the conversation** with patients: patient choice, having difficult conversations earlier.
 - **Commissioning differently**, examples include:
 - Personal budgets / health budgets
 - Better use of the voluntary sector resources
 - Use of banding within commissioning contracts and assessment practice – e.g. ‘time bandings’ and moving away from traditional ‘breakfast, lunch and dinner calls’
 - Commissioning criteria for services, e.g. eligibility
 - Mixed sex wards
 - Place based commissioning, rather than service based commissioning
 - Focusing on the front end, to **reduce flow into hospitals**, through greater investment in **early intervention and prevention** approaches in the community, e.g.:
 - Adults Positive Challenge Programme
 - Integrated Neighbourhoods
 - GP engagement earlier on in patients journey
- The role of the Discharge Programme Board:
 - The capacity issue is different to what we anticipated. How do we focus efforts in the right areas to address capacity mismatch?