



# Right Care, Right Time, Right Place Programme

The out-of-hospital opportunity | Annexes to report | 16th November 2018

# Contents

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## **Annexe 1. What a top-performing out-of-hospital system could look like in Calderdale and Greater Huddersfield**

Annexe 2. Plans assessed as part of this report

Annexe 3. Assessment of the impact of existing plans against the total potential

Annexe 4. Qualitative assessment of existing plans against best practice

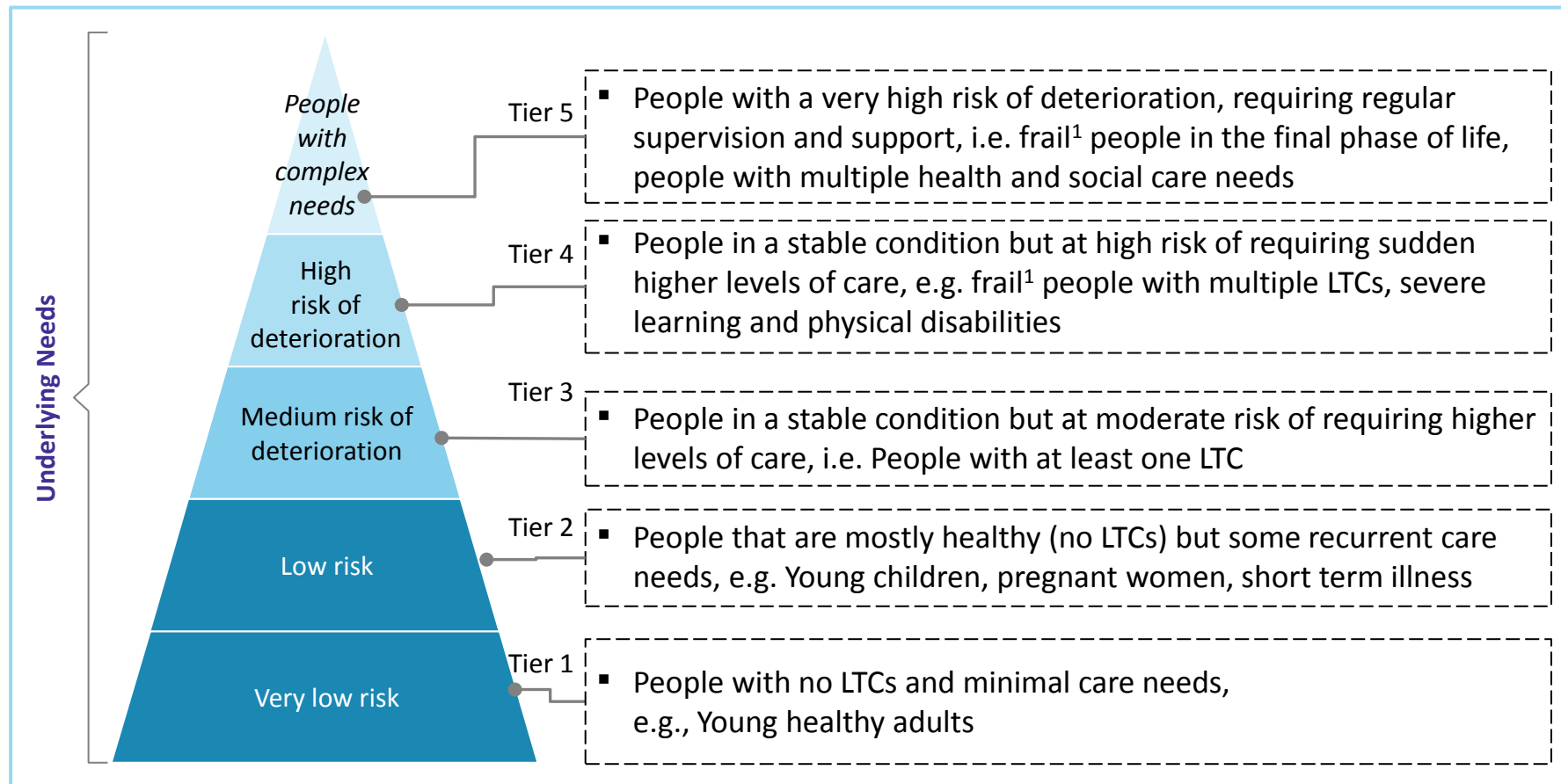
Annexe 5. Capacity required to produce a top-performing out-of-hospital system

Annexe 6. Relationship between the size of proposed localities and services offered

Annexe 7. Implementation plans for the development of an integrated care system

Annexe 8. Case studies of top-performing out-of-hospital systems

# Top systems specifically design care packages around segments of the population with differing needs



<sup>1</sup> LTC (Long term condition) defined as any of: AF, CHD, HF (all causes), Hypertension, PAD (including Stroke, TIA), Asthma, COPD, Cancer, CKD, DM, Pall care, RA, Osteoporosis, Dementia, Depression, Epilepsy, Learning Disabilities, Mental Health; excludes CVD primary prevention

<sup>2</sup> 50% of over 75 assumed to be frail, based on Burden of frailty in the elderly population: perspectives for a public health challenge. Archives of public health. Buckinx et al, 2015.

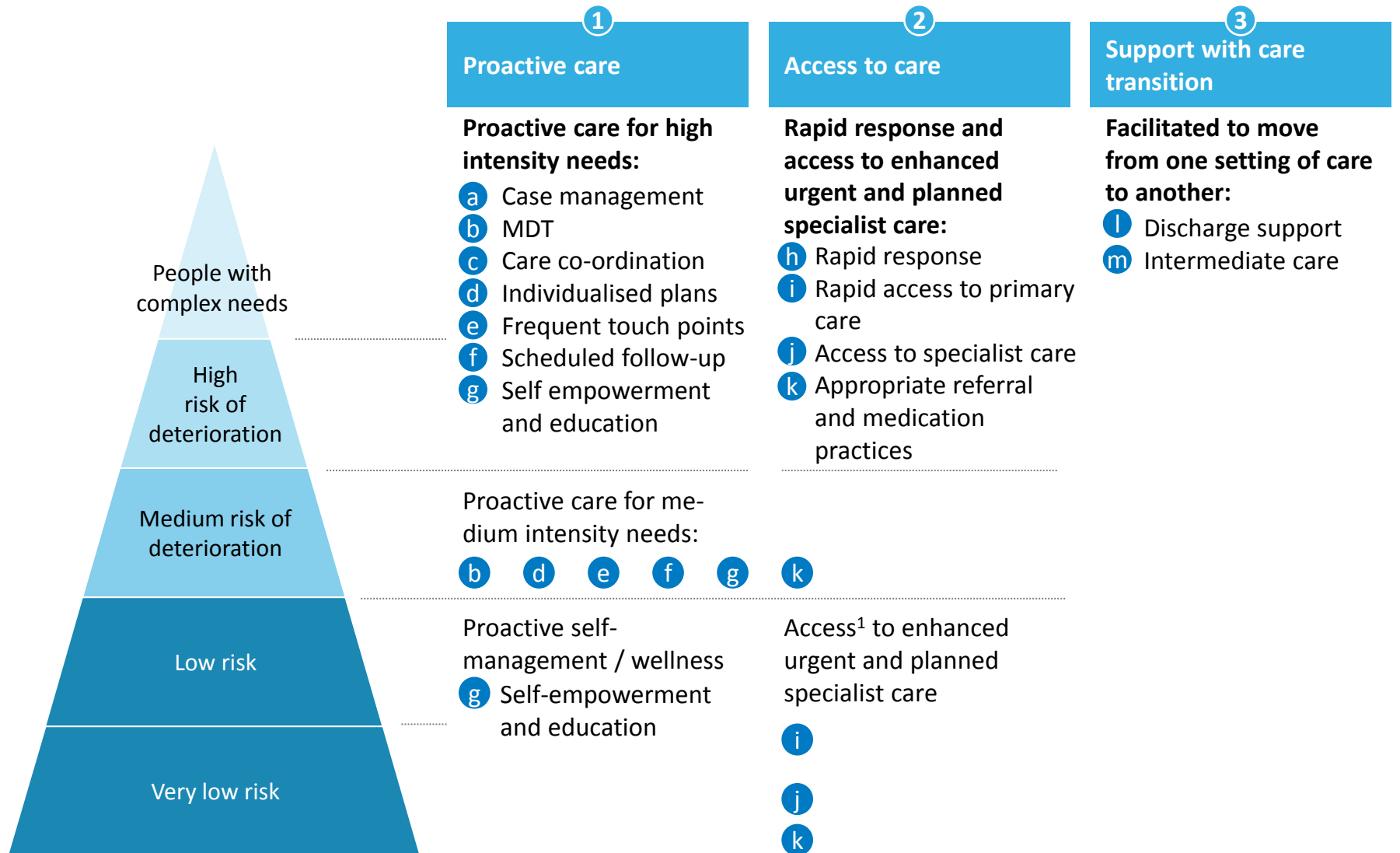
# Top performing integrated systems have the following programmes

	Innovation	Activity
1 Prevention and pro-active care	a Case management	Pro-active case finding, assessment, care planning and care co-ordination for patients with long term conditions, putting them, their families and carers at the centre of decision making
	b Multidisciplinary teams	A regular whiteboard session with a core group of professionals to pro-actively discuss patients or users who are at risk of requiring increased input. Additional professionals may participate ad hoc
	c Care co-ordination	Provides a single point of contact and helps the patient and their supporters to navigate complex services. Often provided by a care navigator, or care co-ordinator, but this can also be the patient
	d Individualised care plan	Develop a patient-centric care plan based on their current and future needs, focusing on what is important to the patient, beyond clinical treatment. It takes a 'whole life' approach
	e Frequent touch points	Pro-active, regular and frequent contact with health professionals for at-risk patients to reduce the risk of crisis events
	f Scheduled service user follow-ups	Use of regular scheduled follow-ups to reduce the requirement for urgent care services
	g Self-empowerment and education	Patient education programs and use of technology to support self-care, with the aim of empowering the patient to become independent and resilient, taking responsibility for their own health
2 Swift and appropriate access to care	h Rapid response	A multidisciplinary team that can be deployed to assess patients and prevents hospital admissions by providing health or social care support for those experiencing an episode of illness or injury
	i Rapid access to primary care	Facilitating access to primary care in the acute setting, after appropriate triage. Also includes improved access from extended opening hours or other channels, eg eConsult
	j Access to specialist care	Access to consultant support and specialist care in the community, including diagnostics
	k Appropriate referral and medication practices	Avoid unnecessary interventions by only referring patients as appropriate
3 Support with care transition	l Discharge support	Community, primary and social care in-reach to support early assessment and discharge of patients from acute care. Dovetails with intermediate care and overseen by a care navigator
	m Intermediate care	Provision of step-up or step-down care in a patient's home or a community hospital inpatient facility to prevent unnecessary admissions to, and to facilitate early discharge from, acute care

1 Also includes prevention even where not explicitly called-out

Source: King's fund, Case management: what it is and how it can be best implemented, 2011; MDT development. Working toward an effective multidisciplinary/multi-agency team. NHSE, 2015; Personalised care and support planning handbook: the journey to person-centred care. NHSE 2016.

# Bundles of these integrated care interventions can then be designed for each population need group



<sup>1</sup> Includes face to face access to physical and mental health services, community and social services, and non-face to face access to all of the above when appropriate



## What the new model of care could look like for a high needs patient

Mrs Patel is an 81 year old who has COPD, not requiring home oxygen, mild CCF and had a stroke 6 years ago with residual weakness affecting her left side. She is able to mobilise around the house, but needs a wheelchair when out of the house. Sometimes she is low in mood. She lives with her 78 year old husband who is increasingly arthritic and mobilises with a stick, but is her main carer. They have a supportive network of family and friends.

- After her last GP appointment Mrs Patel was offered a **care planning appointment**, at which she met with a social care worker and a mental health practitioner. Her wishes with respect to further care and admissions to hospital, together with some help at home were discussed. Overall Mrs Patel would like not to be admitted to hospital if at all possible
- As part of her care plan, **frequent touch points** were agreed, delivered using a remote telemedicine system, and supported by an HCA who would call if the check-in wasn't completed, Mrs Patel was also invited to a **group education session** for COPD sufferers
- A couple of weeks later, Mrs Patel started having a productive cough with green sputum. This was picked-up by her telemedicine system and she was contacted by the COPD nurse practitioner, who proactively called Mrs Patel as part of her **case management** workload. Mrs Patel started experiencing a fever and associated confusion, and the **rapid response team** comprising a COPD nurse specialist and social care worker went to see Mrs Patel in her home. Following full clinical assessment, it was established that Mrs Patel was not at imminent risk of deterioration, and her support network was sufficient to keep her at home, as per her **care plan**. Intravenous antimicrobials were given, blood samples taken, and oximetry performed. Mrs Patel already had course of antimicrobials prescribed in advance at home and she was able to start taking these
- The **case manager** ensured that Mrs Patel was on the next **MDT** discussion and informed intermediate care who were able to step-up support at home to facilitate Mrs Patel's recovery. She was discussed in detail with GP, specialist nurse and social care input at the **MDT** and based on her blood and oximetry results, together with input from her formal care support the decision was made to keep her under surveillance at home. This was facilitated by the **care navigator** who ensured all relevant results and information were present at the **MDT**. The **MDT** recommended that Mrs Patel receive **intermediate care** at home in order to facilitate her recovery;
- As Mrs Patel improved, her intermediate care support was reduced in a controlled fashion and she had a **scheduled follow-up** appointment with the COPD specialist nurse. Unfortunately here performance status had reduced and she was **referred to the respiratory clinic** that takes place in the GP practice once a week, for further consideration of home oxygen. The pharmacist reviewed her medications at this appointment and was able to persuade Mrs Patel the importance of using her spacer
- It was also noted that Mr Patel was increasingly struggling and a care planning meeting was arranged with the whole family and the professionals involved in his care.



# Patients are at the centre of pro-active care for high intensity needs delivered by 7 interventions



## a Case management

Pro-active case finding, assessment, care planning and care co-ordination.

This means *an average of*:

- 12 sessions of 30 minutes per year, equivalent to 6 hours
- Delivered in the home, virtually or the NHS
- Specialist nurse, social care worker (SCW), mental health practitioner (MHP) or AHP input, with facilitation by the care navigator

## b Multidisciplinary teams

A regular whiteboard session with a core group of professionals to pro-actively discuss patients or users who are at risk of requiring increased input.

This means *an average of*:

- 3 discussions per year for 10 minutes, equivalent to 30 mins
- Takes place in person, or virtually
- Core group of GP, nurse, AHP, SCW
- Additional input from consultants, MHPs, specialist nurses and pharmacists
- Co-ordinated by the care navigator

## c Care co-ordination

Provides a single point of contact and helps the patient and their supporters to navigate complex services.

This means *an average of*:

- 2 hours per year, over and above care navigation incorporated in other initiatives
- Delivered in person, or virtually

## d Individualised care plan

Develop a patient-centric care plan based on their current and future needs.

This means *an average of*:

- 2, 1 hour care planning discussions each year in the NHS
- Delivered by the most appropriate members of the wider team, comprising: generalist and specialist nursing and medics, SCW and MHPs
- Facilitated by the care navigator

## e Frequent touch points

Pro-active, regular and frequent contact with health professionals for at-risk patients to reduce the risk of crisis events

This means *an average of*:

- Weekly 5 minute touchpoint
- Delivered remotely or in person
- Care navigator, formal carer or HCA would be usual staff groups

## g Self-empowerment and education

Patient education programs and use of technology to support self-care.

This means *an average of*:

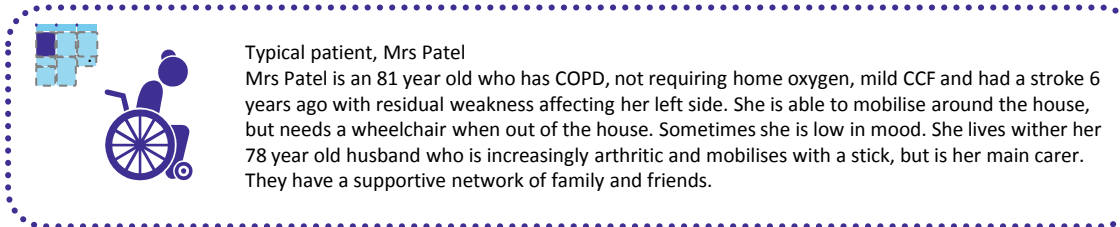
- 30 minutes delivered over the year, over and above other contacts
- The majority delivered virtually
- Delivered by a core practitioner with behaviour changing skillset, or by a formal carer with the same skills

## f Scheduled service user follow-ups

Use of regular scheduled follow-ups to reduce the requirement for urgent care services.

This means *an average of*:

- 9, 10 minute appointments each year
- May take place in the patient's usual residence, the NHS or virtually/remotely
- Delivered by the most appropriate members of the wider team, comprising: generalist and specialist nursing and medics, AHPs, MHPs and pharmacists
- Facilitated by the care navigator

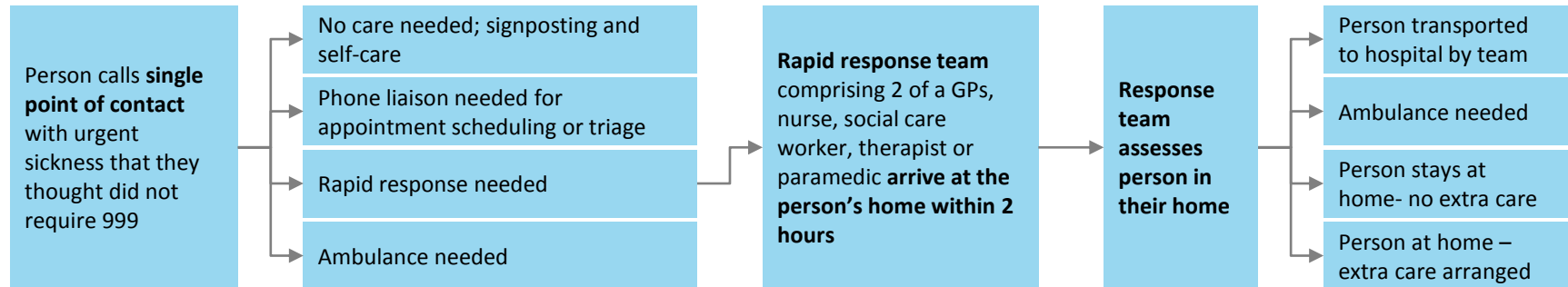




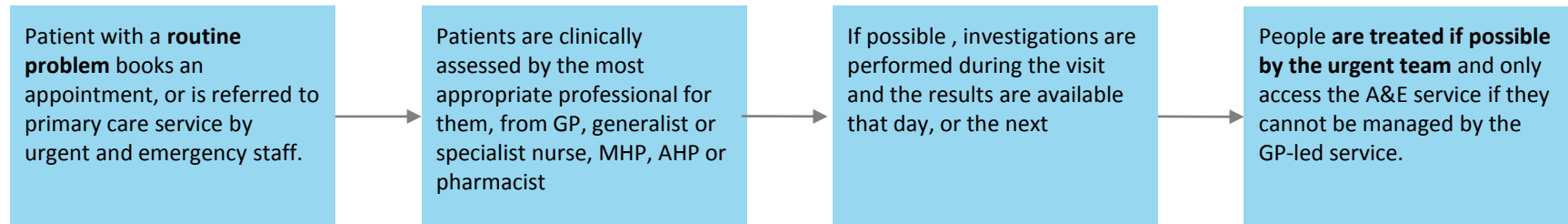
# 3 different journeys reflect rapid response and access to care from the high needs patient's perspective



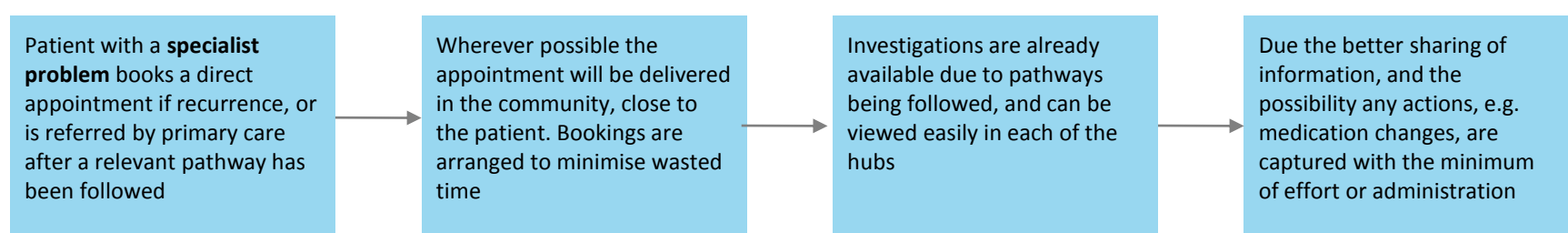
## h Rapid response: An average of 2 hours per year, per patient



## i Rapid access to primary care: an average of 6, 20 minute appointments per year



## j Access to specialist care: an average of 2, 15 minute appointments per year







## 2 interventions facilitate the transfer of care for high needs patients



### 1 Discharge support ('Discharge to assess')

Community, primary and social care in-reach to support early assessment and discharge of patients from acute care. Dovetails with intermediate care and overseen by a care navigator

Patients receive 20 minute per day assessment and input for an average of 7 days, to facilitate their transfer of care

The team is led by allied health professionals, formal carers, and social care. There is also input from social care workers, nurses and pharmacists to support the process and overseen by the care navigator

In total, this would be for approximately **8%** of the high needs population, representing approximately **2,600** patients

### m Intermediate care

Patients who are struggling at their usual residence, are recognised by the frequent touch points and could be discussed at the MDT, with or without a rapid response

Step-up intermediate care to try and prevent an acute hospital admission. This could take place either in the patient's usual residence or in a community hospital

Patients who are ready to be discharged from hospital, but need support, and a greater level of intervention than discharge support on its own

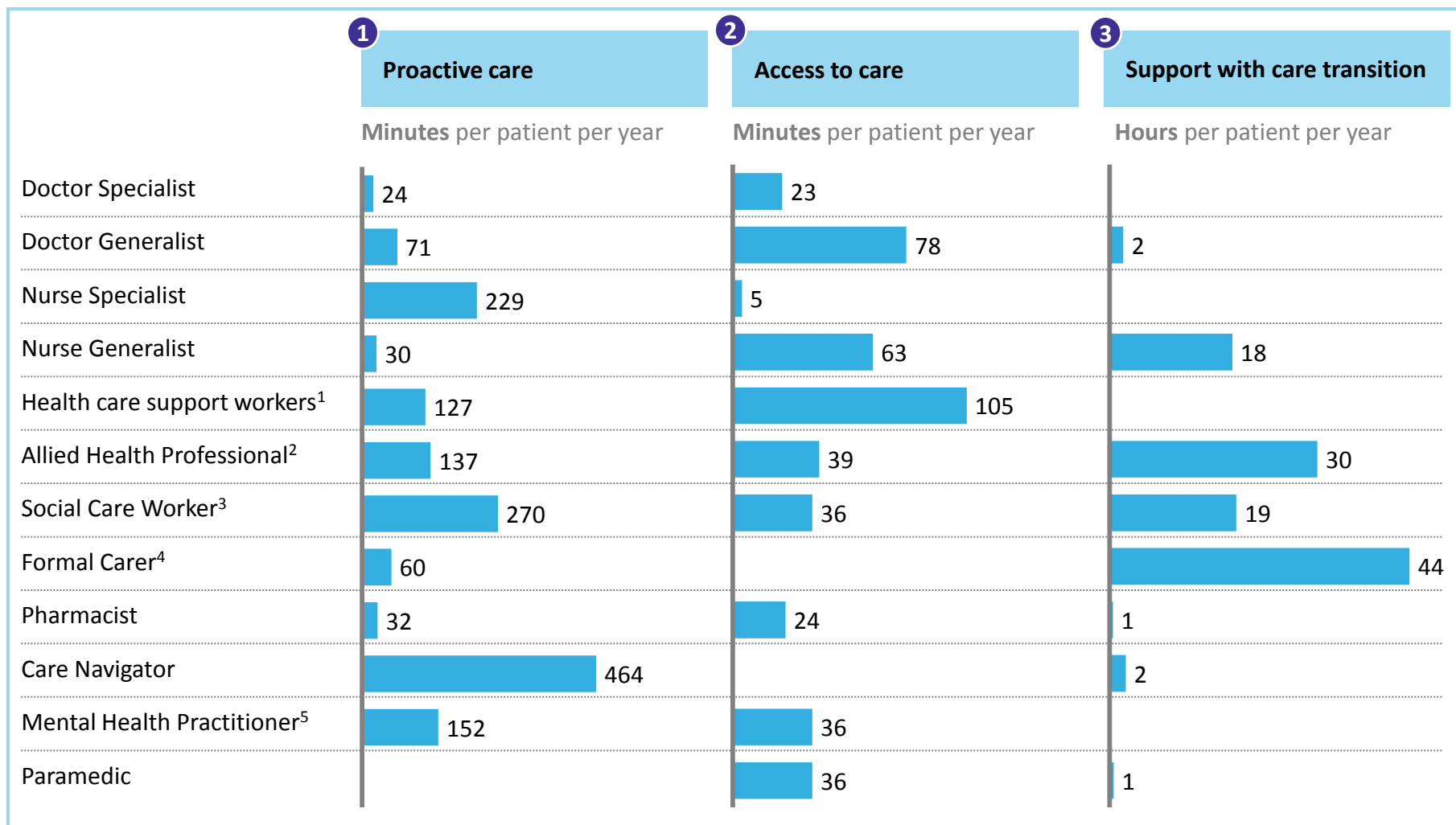
Step-down intermediate care to minimise the duration of an acute hospital admission. This could take place either in the patient's usual residence or in a community hospital

Patients each receive an average of 28 days intervention, of 2 hours per day. The intervention is led by the formal caring team and AHPs. There is also significant nursing input, with additional support from pharmacists. Doctors will review the patients, particularly in the first 2 weeks, and would see the patients for around 2 hours overall

In total, this will be for approximately **5%** of the high needs population. This represents approximately **1,600** patients per year



# What this means for high needs patients



1 Includes HCA, Paramedic technician

2 Includes physiotherapists, dietitians, osteopaths etc.

3 Includes a range of roles from specialised case management to dispensing advice on how to access social care

4 Volunteer/private/NHS funded carer, includes domiciliary and reablement carer

5 Most appropriate mental health skillset including mental health nurse, psychologists and counsellors

Source: Workshop 16/08/2017



## What the new model of care could look like for medium needs patients

Mr Jones is 62, has diet controlled type 2 diabetes, struggles to keep his HbA<sub>1</sub>C less than 8.5 and is significantly overweight. He continues to smoke 20 cigarettes per day and drinks around 30 units of alcohol per week, He lives alone and has no close friends or relatives

- Mr Jones was invited to his **annual diabetic review** where a **care-planning discussion** was held. This was a conversation with Mr Jones, his GP and the practice diabetic nurse specialist about how he could best manage his condition
- Mr Jones was invited to attend a **group education session** to learn more about his diabetes and how it could be managed, and also invited to submit his weight to the surgery electronically **once per month**
- Mr Jones' bloods had indicated that his HbA<sub>1</sub>C had increased significantly, and he was therefore commenced on oral anti-hyper glycaemic agents. He had a review **scheduled** with the **pharmacist at his GP** in a month's time to assess his concordance with the medications, and also to discuss any side effects
- Some months spending an evening fishing Mr Jones noticed that his feet, and particularly his toes, were extremely cool and painful. He took some simple analgesia, however the next day he sought **rapid access** to his GP. Upon review it was clear he had developed ischaemia of several toes of his right foot, and his GP was able to access a **rapid opinion** from the surgical registrar on the local surgical assessment unit (SAU). Mr Jones was advised to take analgesia, and present the following morning, having not eaten, to the SAU. A slot was available in theatre if required. The surgical review revealed dry gangrene, and he was admitted for amputation of the affected digits
- During his admission the **vascular specialist nurse** added him to the MDT for discussion where his practice nurse was informed of his medication changes and **follow-up** plan
- During his admission Mr Jones received **smoking cessation advice** from the 'Stop Smoking' team
- Once he had recovered from his operation, Mr Jones was discharged. As he had no social support networks, **discharge support** was arranged. Mr Jones required this for 48 hours following discharge
- Mr Jones was seen by his GP the following week as a **scheduled follow-up appointment** to discuss both secondary prevention and his admission to hospital. Together they decided that Mr Jones would attend Weight Watchers and try and put himself first, as well as monitoring his HbA<sub>1</sub>C
- Unfortunately Mr Jones' bloods sugar level was persistently high, and in view of his now complex diabetes with an element of vasculopathy, he was **referred** to the diabetes outpatient service. By sharing clinical records between clinicians. Mr Jones was able to be seen the following week, near to his place of work



# Patients are at the centre of pro-active care for medium intensity needs, delivered by 5 interventions



## b Multidisciplinary teams

A regular whiteboard session with a core group of professionals to pro-actively discuss patients or users who are at risk of requiring increased input.

This means *an average of*:

- 1 discussion per year for 10 minutes
- Takes place in person, or virtually
- Core group of GP, nurse, AHP, SCW
- Additional input from consultants, MHPs, specialist nurses and pharmacists
- Co-ordinated by the care navigator
- For 5% of the medium risk population

## d Individualised care plan

Develop a patient-centric care plan based on their current and future needs.

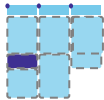
This means *an average of*:

- 1, 10 minute care planning discussion
- 80% delivered in NHS estate, and 20% in the patient's home
- Delivered by the most appropriate members of the wider team, comprising: generalist and specialist nursing and medics, SCW and MHPs
- Facilitated by the care navigator
- For 100% of the medium risk population

## e Frequent touch points

Pro-active, regular and frequent contact with health professionals for at-risk patients to. reduce the risk of crisis events

- This means an average of:
- Monthly 5 minute touchpoint
- Delivered 100% remotely Care navigator, formal carer or HCA would be usual staff groups
- For 5% of the medium risk population



Typical patient, Mr Jones

Mr Jones is 62, has diet controlled type 2 diabetes, struggles to keep his HbA<sub>1c</sub> less than 8.5 and is significantly overweight. He continues to smoke 20 cigarettes per day and drinks around 30 units of alcohol per week, He lives alone and has no close friends or relatives



## g Self-empowerment and education

Patient education programs and use of technology to support self-care.

This means *an average of*:

- 1 discussion per year for 10 minutes
- Takes place in person, or virtually
- Core group of GP, nurse, AHP, SCW
- Additional input from consultants, MHPs, specialist nurses and pharmacists
- Co-ordinated by the care navigator
- For 5% of the medium risk population

## f Scheduled service user follow-ups

Use of regular scheduled follow-ups to reduce the requirement for urgent care services.

This means *an average of*:

- 1, 15 minute appointment each year
- May take place in the patient's usual residence, the NHS or virtually/remotely
- Delivered by the most appropriate members of the wider team, comprising: generalist and specialist nursing and medics, AHPs, MHPs and pharmacists

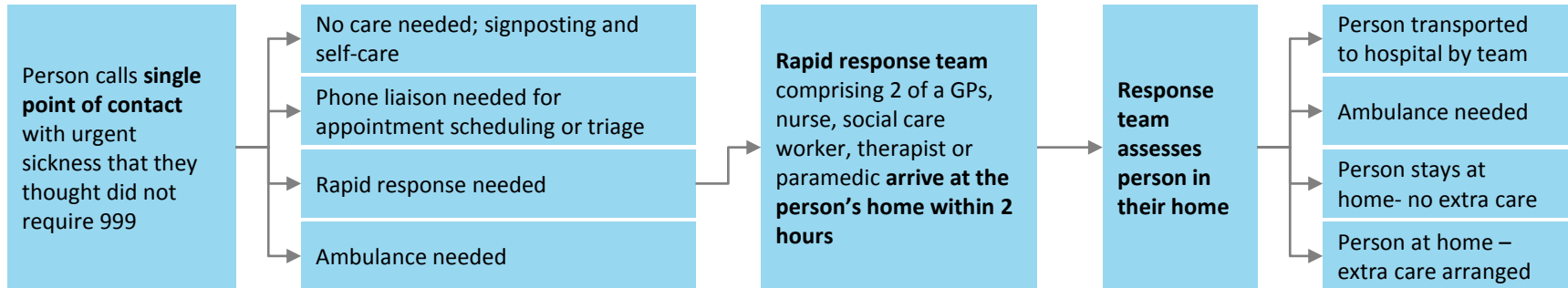




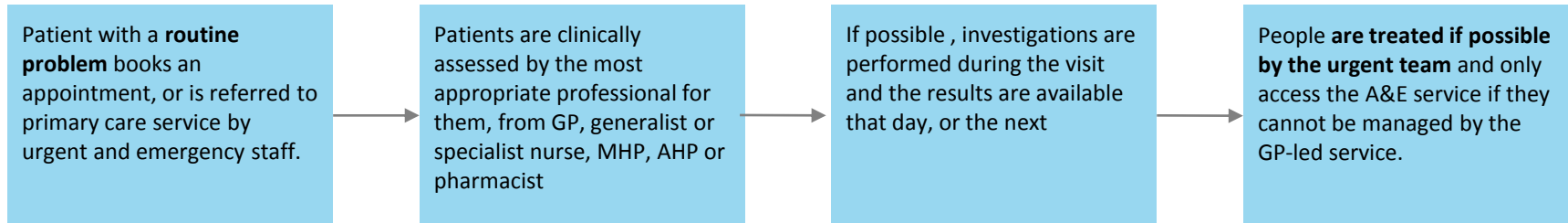
# 3 different journeys reflect rapid response and access to care from the medium needs patient's perspective



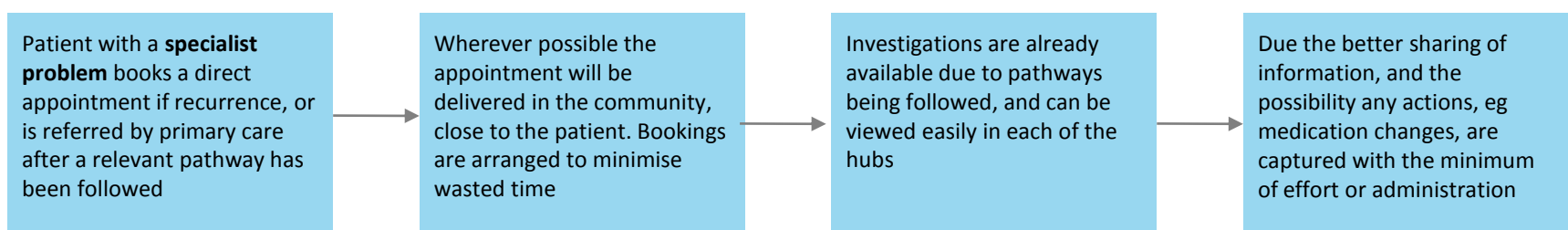
## h Rapid response: An average of 1 hour per year, per patient



## i Rapid access to primary care: an average of 4, 20 minute appointments per year



## j Access to specialist care: an average of 2, 15 minute appointments per year





## 2 interventions facilitate the transfer of care for medium needs patients



### 1 Discharge support ('Discharge to assess')

Community, primary and social care in-reach to support early assessment and discharge of patients from acute care. Dovetails with intermediate care and overseen by a care navigator

Patients receive 20 minute per day assessment and input for an average of 7 days, to facilitate their transfer of care

The team is led by allied health professionals, formal carers, and social care. There is also input from social care workers, nurses and pharmacists to support the process and overseen by the care navigator

In total, this would be for approximately **7%** of the medium needs population, representing approximately **10,000** patients

### m Intermediate care

Patients who are struggling at their usual residence, are recognised by the frequent touch points and could be discussed at the MDT, with or without a rapid response

Step-up intermediate care to try and prevent an acute hospital admission. This could take place either in the patient's usual residence or in a community hospital

Patients who are ready to be discharged from hospital, but need support, and a greater level of intervention than discharge support on its own

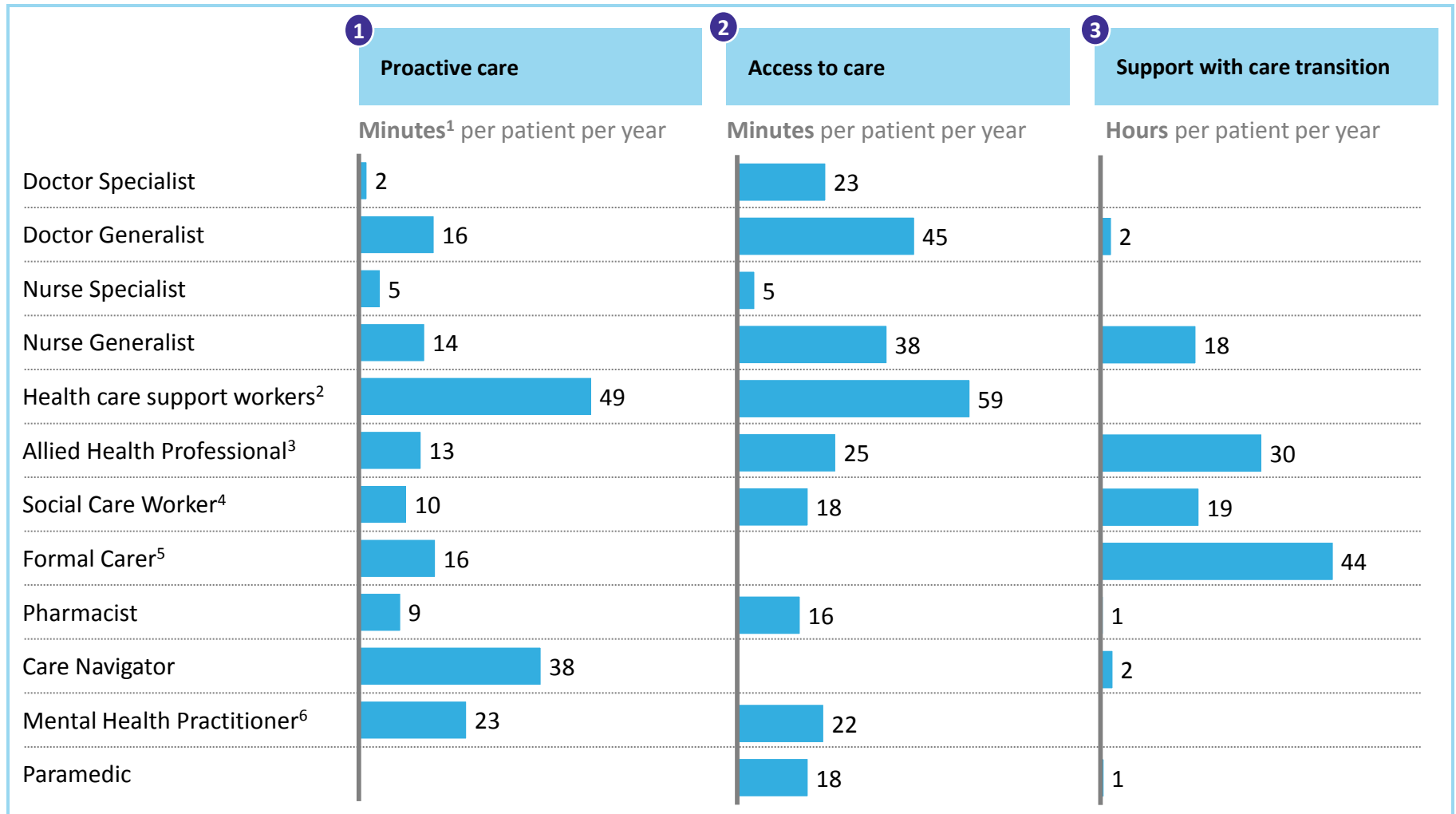
Step-down intermediate care to minimise the duration of an acute hospital admission. This could take place either in the patient's usual residence or in a community hospital

Patients each receive an average of 28 days intervention, of 2 hours per day. The intervention is led by the formal caring team and AHPs. There is also significant nursing input, with additional support from pharmacists. Doctors will review the patients, particularly in the first 2 weeks, and would see the patients for around 2 hours overall

In total, this will be for approximately **1%** of the medium needs population. This represents approximately **1,400** patients per year



## What this means for medium needs patients



1 Represents the time for accessing each intervention. Not all patients will access all interventions

2 Includes HCA, Paramedic technician

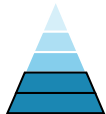
3 Includes physiotherapists, dietitians, osteopaths etc.

4 Includes a range of roles from specialised case management to dispensing advice on how to access social care

5 Volunteer/private/NHS funded carer, includes domiciliary and reablement carer

6 Most appropriate mental health skillset including mental health nurse, psychologists and counsellors

Source: Workshop 16/08/2017

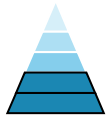


## What the new model of care could look like for low needs patients

Freddy is a 14 years old and fit and well. He enjoys playing football and sport in general. He has no medical conditions

- As part of his schooling he is taught about healthy eating as part of the **wellness agenda**
  - He is taught to cook, and the importance of having a balanced diet and portion control
- One Saturday he is playing football with his team and he receives a dodgy tackle. As a result Fred falls to the ground and immediately has pain in his arm, which is noticeably deformed
- He is taken to the local minor injuries unit at the **primary care hub** by one of the coaches, and his mum meets him there
- X-rays are taken that confirm a displaced both-bone forearm fracture, and he is placed in a plaster by one of the specialist nurses and a plaster technician
- Further X-rays are taken, and reviewed remotely by the trauma **specialist** on-call at the local hospital, and the position is adequate. There are no signs or symptoms of neurovascular compromise
- Freddy is given a fracture clinic appointment for the following day, and advised where to access analgesia
- Given the nature of his injury, it is highly likely that surgical intervention will be required, and therefore a day surgery slot is booked for him the afternoon of his fracture clinic appointment. Freddy and his mum are advised of the likely course of action, and an information sheet regarding the procedure is given
- He is advised to arrive at the hospital started for his appointment
- As expected, surgery is required and his forearm is manipulated and fixed, and he is discharged the same evening with advice regarding elevation and symptoms of compartment syndrome
- Within 6 weeks Freddy is playing football again

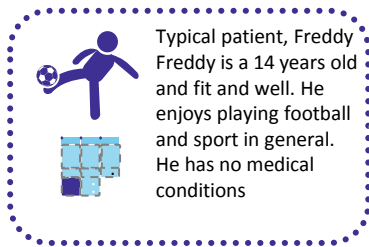




# Timely access to appropriate care when needed, and pro-active self-management describe the interventions for low and very low-risk patients



## Self-empowerment and education: 10 minutes per year



Typical patient, Freddy  
Freddy is a 14 years old  
and fit and well. He  
enjoys playing football  
and sport in general.  
He has no medical  
conditions

The concept of '**making every contact count**' means that wellness advice can be delivered in any appropriate setting

Additionally **10 minutes per year** should be delivered explicitly, over and above routine advice as part of school, college, sports activities or medical settings

This can take place at home, virtually or in NHS settings, **wherever most appropriate** and applies to the whole population

## i Rapid access to primary care: an average of 1 urgent, 10 minute appointment and 4 routine 10 minute appointments per year

Patient with a **routine problem** books an appointment, or is referred to primary care service by urgent and emergency staff.

Patients are clinically assessed by the **most appropriate professional** for them, from GP, generalist or specialist nurse, MHP, AHP or pharmacist

If possible, investigations are **performed during the visit** and the results are available that day, or the next. Routine appointments predominantly delivered by non-doctor roles, virtually

People are **treated if possible by the urgent team** and only access the A&E service if they cannot be managed by the GP-led service.

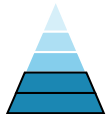
## j Access to specialist care: an average of 1, 20 minute appointments per year for 70% of the population

Patient with a **specialist problem** books a direct appointment if recurrence, or is referred by primary care after a relevant pathway has been followed

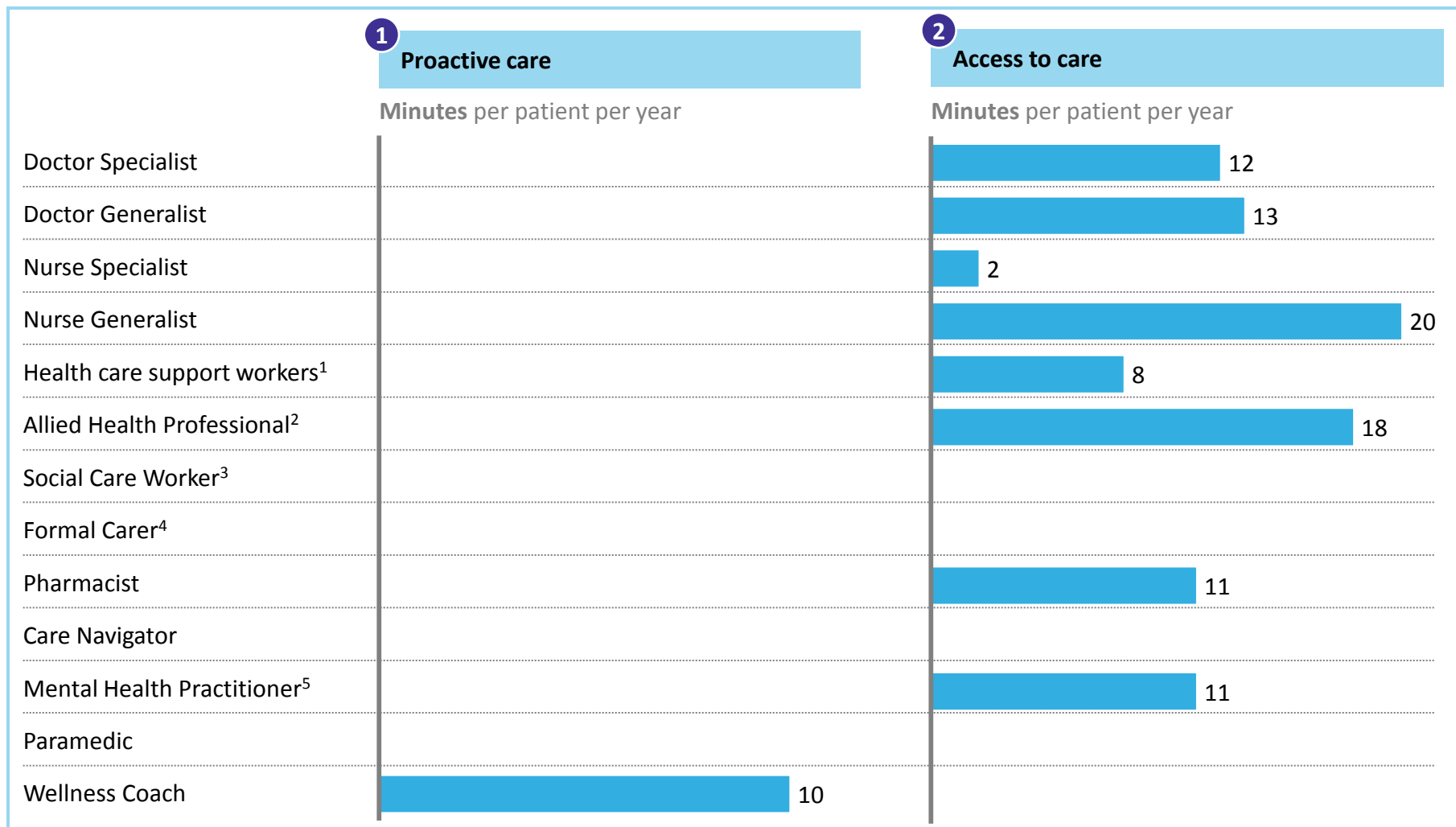
Wherever possible the appointment will be **delivered in the community**, close to the patient. Bookings are arranged to minimise wasted time

Investigations are already available due to **pathways being followed**, and can be viewed easily in each of the hubs

Due the **better sharing of information**, and the possibility any actions, e.g. medication changes, are captured with the **minimum of effort** or administration



## And what this means for low needs patients



1 Includes HCA, Paramedic technician

2 Includes physiotherapists, dietitians, osteopaths etc.

3 Includes a range of roles from specialised case management to dispensing advice on how to access social care

4 Volunteer/private/NHS funded carer, includes domiciliary and reablement carer

5 Most appropriate mental health skillset including mental health nurse, psychologists and counsellors

Source: Workshop 16/08/2017

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Annexe 8. Case studies of top-performing out-of-hospital systems

# CCGs' plans for further reducing NEL bed days over the next 5 years have been grouped against the framework for complete integrated care systems

	Innovation	Activity
1 Prevention and pro-active care	a Case management	Pro-active case finding, assessment, care planning and care co-ordination for patients with long term conditions, putting them, their families and carers at the centre of decision making
	b Multidisciplinary teams	A regular whiteboard session with a core group of professionals to pro-actively discuss patients or users who are at risk of requiring increased input. Additional professionals may participate ad hoc
	c Care co-ordination	Provides a single point of contact and helps the patient and their supporters to navigate complex services. Often provided by a care navigator, or care co-ordinator, but this can also be the patient
	d Individualised care plan	Develop a patient-centric care plan based on their current and future needs, focusing on what is important to the patient, beyond clinical treatment. It takes a 'whole life' approach
	e Frequent touch points	Pro-active, regular and frequent contact with health professionals for at-risk patients to reduce the risk of crisis events
	f Scheduled service user follow-ups	Use of regular scheduled follow-ups to reduce the requirement for urgent care services
	g Self-empowerment and education	Patient education programs and use of technology to support self-care, with the aim of empowering the patient to become independent and resilient, taking responsibility for their own health
2 Swift and appropriate access to care	h Rapid response	A multidisciplinary team that can be deployed to assess patients and prevents hospital admissions by providing health or social care support for those experiencing an episode of illness or injury
	i Rapid access to primary care	Facilitating access to primary care in the acute setting, after appropriate triage. Also includes improved access from extended opening hours or other channels, eg eConsult
	j Access to specialist care	Access to consultant support and specialist care in the community, including diagnostics
	k Appropriate referral and medication practices	Avoid unnecessary interventions by only referring patients as appropriate
3 Support with care transition	l Discharge support	Community, primary and social care in-reach to support early assessment and discharge of patients from acute care. Dovetails with intermediate care and overseen by a care navigator
	m Intermediate care	Provision of step-up or step-down care in a patient's home or a community hospital inpatient facility to prevent unnecessary admissions to, and to facilitate early discharge from, acute care

## Prevention and pro-active care:

### 1 a case management

#### Atrial fibrillation stroke prevention (mature in 2020/21)

**Greater Huddersfield** are proposing to pilot of a programme to reduce the incidence of stroke by (i) better detection of atrial fibrillation (AF) patients using mobile ECG devices and targeted diagnostic support to GP practices, and (ii) improved anticoagulation of AF patients. In collaboration with the Yorkshire and Humber Academic Health Science Network (AHSN). The programme will also be adopted in neighbouring Kirklees CCG.

The AHSN's model applied to GH CCG suggests that full implementation of the programme could prevent 65 strokes per year, although it could also result in 9 additional major bleeds. The programme takes 1 year to fully implement, with full effects felt after 1-2 years.

#### Locala Local Incentive Schemes (mature in 2018/19/20)

Locala, the community care provider in **Greater Huddersfield**, is contracted to reduce avoidable admissions in five categories: falls, UTIs, COPD, those in sheltered housing and from high intensity users. Locala's contract includes tiered payment for performance in reducing annual admissions up to a reduction by 15%, against the 2017/18 baseline. Their focus is particularly on 0-1 day admissions and day cases. In order to hit these targets, Locala deploy focussed case management and care co-ordination teams specifically for these risk groups.

Locala's initiatives include full assessment for UTI and fall risk for every regular attender. Assessments focus on what can be done to improve patients' care packages, and how major risks can be avoided – for example, by removing catheters as early as possible. Sheltered housing teams work directly with risky patients to put preventative measures in place, and to use telemonitoring where appropriate. Similarly, COPD patients receive comprehensive case management and review, as well as remote monitoring of SpO<sub>2</sub>.

The impact of Locala's programmes will overlap with wider system initiatives, including the frailty and falls programme and respiratory focusses.

## Prevention and pro-active care:

### 1 b multi-disciplinary teams

#### Remote monitoring of LTC patients at home (mature in 2017/18 with limited expansion opportunities)

**Calderdale** developed a programme for remote monitoring of patients with LTCs in their homes. This used a remote monitoring and telemedicine solution similar to that used in care homes under the QUEST programme. Further expansion of the programme is currently under review, as not all stakeholders think that the current solution is workable and time-effective.

#### Care home support and interim service (mature in 2019/20/21)

**Greater Huddersfield** are re-procuring their care home support services for 2019/20. Partnering with GP federations, hospices and Locala, they intend to ensure every care home as the appropriate level of care. This will expand the existing support and education programmes to care homes to include:

- GP practices specifically dedicated to care home residents;
- MDT holistic assessments of patients, including medication reviews and condition management;
- Education provided to care homes on long term conditions, admission avoidance, end of life care and relevant local pathways;
- Use of 24/7 telemedicine to provide rapid access to expert clinical assessment; and
- End of life care that is integrated with other providers in the system.

Locala do already have some MDT support in place, including pharmacists and geriatricians, in addition to nurse visitors to care homes.

## Prevention and pro-active care:

### 1 c care co-ordination (1/2)

#### End of life care model reconfiguration (mature in 2019/20)

CHFT and Kirkwood Hospice are leading an integrated remodelling of end of life care in Calderdale and Greater Huddersfield. Its focus is on care co-ordination, as well as out of hours care, ensuring that patients have care plans in place and are appropriately cared for in their preferred settings. There are two major components to these plans.

CHFT's End of Life Care Strategy, designed in 2016/17, is setting out to achieve over 12-24 months:

- Hospital staff trained and enabled to identify people in the last 12 months of life, using prognostic indicators and highlighting of end of life patients within team huddles
- High quality communication with patients, their carers and their families, by ensuring staff take appropriate actions and direct people to appropriate care
- Use of Electronic Palliative Care Co-ordination (EPACC) systems to ensure both primary and secondary care are aware and updated of end of life patients' preferences and needs. Completed EPACCs are recommended nationally as an effective method of ensuring that patients' wishes about where they end their life are respected, and that all relevant care can be effectively co-ordinated at short notice.
- Palliative care handover processes on discharge to enable supported transitions into care, with access to necessary equipment such as syringe drivers even in the home
- The best possible care in the last days and hours of life, by training all care staff about the best care and communication practices.

In addition, Kirkwood Hospice is leading an end of life provider alliance to support the delivery of integrated community end of life services in Kirklees. This will:

- Aim to improve the existing pathways to reduce duplication and increase quality of care for patients and their families, as well as helping more patients to die in their preferred place of death; and
- Focus on designing services around the localities that have formed primary care networks.

#### Expansion of the EPACC programme (mature in 2020/21)

**Greater Huddersfield CCG** are explicitly promoting the use of EPACCs within their region. They intend to both increase the proportion of patients who have a completed EPACC at the end of life, and to reduce the proportion of people who die in hospital with a completed EPAC and no medical need (although they have now reached the national average of 8%).

## Prevention and pro-active care:

### 1 c care co-ordination (2/2)

#### Single points of access (implemented in 2019/20, mature in 2020/21)

At least eight “single points of access” exist across **both CCGs** at the moment: for adult mental health provided by SWYPFT, the acute frailty services run by CHFT, Locala services, the Gateway to Care for intermediate and adult social care in Calderdale, the respiratory services in Calderdale, the MSK clinics (separately) in both CCGs, and for adult social care in Greater Huddersfield. Both CCGs have some plans to simplify this situation.

**Calderdale** plans to create an integrated single point of contact for health and social care, by drawing current services into one single place. The existing Gateway to Care service covers the majority of intermediate and adult social care in the CCGs. The “Gateway Plus” system would expand the operating hours to a seven day service, and broaden its scope to include the full range of community health services (for example district and community nursing, palliative care and the falls and frailty teams) as well as public health services (such as weight loss and smoking cessation).

**Greater Huddersfield CCG**, as part of their redesign of intermediate and rehabilitation services with the Kirklees local authority, will set up one single point of access into these care systems. The phone line will be used by clinicians and patients, and will be handled by a multidisciplinary Independent Living Team.

#### Red bag scheme (implemented in 2018/19)

**Both CCGs** are rolling out the Red Bag Scheme in nursing homes across the patch, with support from CHFT. The scheme supports patients who visit hospital to feel comfortable, co-ordinates their care and assists in discharge. Red bags contain a change of clothes, standardised paperwork and medication, as well as personal items. Sutton CCG found care homes with red bags spent four fewer days in hospital than those without.

#### End of life training for care homes (implemented in 2018/19)

**Both CCGs** are being supported by Kirkwood Hospice and the **Kirklees and Calderdale End of Life Training and Education Group** to use End of Life Workbooks as part of a focussed training offering to care home staff about end of life care. Additionally, **Calderdale** are relaunching in 2018/19 National Gold Standards Framework training provision in their care homes. **Locala** already provide care home training packages, as part of their care home support. The ambition of these schemes is that end of life care will be more appropriate, and better co-ordinated between services.



# 1 g Prevention and pro-active care: self-empowerment and education

## Active Calderdale (mature by 2024)

**Calderdale** has been selected as one of 12 national Local Delivery Pilots to create a significant increase in physical activity levels in the population, particularly among people from lower socio-economic groups. Calderdale aims to be the most active Borough in the North of England by 2024.

With support from Sport England and the Design Council, Calderdale will train and develop 50 local people to become Design Thinkers. These community members will work in small teams on an intensive programme to tackle the priority themes of the project covering geographical areas, forms of care provision, and specific populations such as South Asian Women or addicted substance users.

Overall, the programme will take a whole-systems approach (from individuals' attitudes through to the physical environment and local policy) to this design project. However, one key proposal in the model is the development of neighbourhood activity hubs, that will be the centres of outreach and physical activity work within local areas.

## Kirklees Wellness Model and Community Plus (mature by 2021/22)

The **Kirklees local authority** are developing a new approach to pro-active population health and wellness promotion in Kirklees: the Kirklees Wellness Model. The objectives of the new Wellness Model include the provision of advice, guidance and support to the population to improve nutrition, increase physical activity, reduce levels of obesity, excess alcohol consumption and smoking prevalence, and elevate broader health and wellbeing in the area. Broad integration with existing services is expected from this model. Users of the service will range in the support they need, from those simply accessing support and advice, to specific 1:1 tailored support packages. Individuals who meet inclusion criteria will be offered initial support assessments with general wellness workers, and NHS Health Checks where appropriate.

The Kirklees Wellness Model will be part of the existing Community Plus programme, which co-ordinates support from the authority, private and third sector for residents to help them lead a better and healthier life. Other important, but already mature, aspects of Community Plus include the social prescribing initiative, and Local Area Co-ordination, which explicitly co-ordinates health and wellbeing programmes in the community. The Kirklees Wellness Model will be provided by a partnership model, as part of this wider Community Plus programme.

## National Diabetes Prevention Programme relaunch (mature in 2019/20)

**Calderdale** is re-launching the National Diabetes Prevention Programme. This will identify patients and offer them tailored help to reduce risk of contracting diabetes, including education, help with weight loss, exercise programmes. Patients are offered 13 education and exercise programmes of 1-2 hours over 9 months, and at least 16 hours of face-to-face time. The initial mailing to patients within the CCG is taking place in Autumn 2018.

## 2 h Swift and appropriate access to care: Rapid response

### Development of the Hear and Treat 999 patient pathway (mature in 2019/20)

The **Yorkshire Ambulance Service (YAS)** are developing a team of clinicians as part of the operations centre. This team will expand their ability to manage calls over the phone, without sending a responder team. Their aim is to make the national best-in-class target of 10% of calls handled through this pathway over the next 2 years, from 8% at present. Impact on NEL admissions is likely to be low, given the severity of patient illness treatable on this pathway.

### Paramedic care response (mature in 2019/20)

**YAS** are recruiting (in November 2018) a team of specialist paramedics who will be able to respond to calls by car, with no intent to convey the patient. This new pathway is enabled by the increase in patient triage time given by the roll-out of the national Ambulance Response Programme in 2018. Impact on NEL admissions is likely to be low, given the severity of patient illness treatable by this route.

### 111 Online (mature in 2018/19)

**YAS** are one of the leading areas nationwide for development of **111 online**, with the first pilot 1 year ago. This is a 111 service provided through internet browsers, offering patients similar triage and signposting services to the 111 phonenumber. Given its maturity in the area, there is likely little additional impact in 2018/19 onwards.

## 2 i Swift and appropriate access to care: Rapid access to primary care (1/2)

### Access Incentive Schemes (mature in 2018/19)

In line with national guidelines, **both CCGs** are creating more capacity in primary care. **Calderdale** will provide an additional 45 minutes per 1000 patients per week of GP contact time, up from the 30 minutes already procured; **Greater Huddersfield** will also provide an additional 30 minutes. **Calderdale** also provides additional Winter Resilience capacity.

### Extended and Improved Access Schemes (mature in 2018/19)

**Both CCGs** now run out of hours GP services in evenings and weekends. Much of **Calderdale's** increased capacity from the Access Incentive Schemes will be given to this out of hours service.

### Additional High Impact Changes from the GP Forward View (mature by 2019/20)

Both CCGs are implementing additional actions set out in the GP Forward View, with the aim of releasing time from GPs. These include:

- **Correspondence or document management training** to support more efficient working
- **Active signposting**: frontline staff (care navigators) training on care navigation and signposting, based on the West Wakefield model.
- **Staff development programmes**, Covering GP leadership, practice management, and nurse prescribing, among other areas.
- **Greater Huddersfield** are looking to restart the Productive Practice programme, providing targeted training and support to specific practices (the programme has been very effective elsewhere: in Bury, it released 2 hours per day of GP time<sup>1</sup>).

### Expanded primary care workforce (mature by 2019/20)

**Greater Huddersfield CCG** is aiming to increase the range of workforce roles based at GP practices. Significant progress has already been made: all practices have access to clinical pharmacists, who principally support repeat prescribing. The CCG is considering expanding their role, once the service is well established, to include polypharmacy reviews of high-needs patients.

Greater Huddersfield intends to build on this scheme by providing physicians' associates and extended nursing roles in practices. Additionally, proposals are in place to fund nurse placements and nurse associate roles in GP practices, as a way of increasing the number of training opportunities within the area.

## 2 i Swift and appropriate access to care: Rapid access to primary care (2/3)

### Digital Primary Care Development (maturing until 2023)

- **Direct booking:** 111 and out of hours providers can directly book GP appointments for patients using new digital systems. This is slow to develop in **Calderdale** as the IT cannot currently support the change. **Greater Huddersfield** has the system running in some areas, but full roll-out is not expected until 2019/20.
- **eConsult** to improve website signposting, and to provide online consultations via email, skype and video. These services will be rolled out in 2018/19 in **Calderdale**. eConsultation is out for procurement for 2019/20 in **Huddersfield**.
- **GP online services:** online booking and repeat prescription requests are already available in most practices, but the programme is expanding to cover all during 2018/19/20.
- **Huddersfield** have a **local digital roadmap** for primary care. This sets out the direction over 5 years for mobile working, care home digitisation, GP wifi, and electronic advice systems.

## 2 j Swift and appropriate access to care: Access to specialist care (1/2)

### OPAT (mature for Calderdale in 2019/20)

Outpatient antimicrobial therapy (OPAT) provides intravenous antibiotics in a community setting, primarily for conditions such as cellulitis. The service has been operating successfully in **Greater Huddersfield** (through Locala), finishing its expansion in 2018. The service can significantly reduce admission to acute hospital beds: the Greater Huddersfield programme is saving the system around 1800 bed days per year (although significant additional uptake of this programme, to create additional impact over the next 5 years, is unlikely).

**Calderdale** instead provides a hospital model, but intends to develop a similar outpatient programme. The CCG is looking to reach a similar level of effectiveness to the programme in Greater Huddersfield.

### DVT pathway expansion (mature in 2018/19)

The DVT pathway provides primary care with access to diagnostics and community therapy for deep vein thrombosis patients. GPs are paid for each DVT appointment, and for the D-Dimer scan and review, and for provision of appropriate medication. This programme has reduced A&E DVT attendances (patients with a DVT diagnosis) from 60-70 per day to 6-7, primarily overnight. The programme reached maturity in 2018/19, but Greater Huddersfield could consider rolling out a similar initiative.

### Community respiratory services (expanding through 2018-2021)

**Calderdale** has an existing community respiratory services programme, which includes out-of-hospital specialist support and advice as well as training and support for GP practices. The service has been refunded for 2018/19, and although the programme was fully rolled out by 2017/18, the CCG does not believe its full impact has been realised.

The CCG intends to keep its focus on the respiratory pathway, and to use this programme to provide more primary care delivery and targeted prevention strategies for patients and GPs: much of the programme has been instead on early discharge rather than admission or attendance avoidance.

It is expected that the programme will develop and be redesigned once the primary care alliance model is up and running, to become part of the integrated care model in Calderdale.

Locala provides community respiratory services in **Calderdale**. It is part of the focus of the 2018/19 Local Incentive Schemes (see separate box).

## 2 j Swift and appropriate access to care: Access to specialist care (2/2)

### Transforming frailty and falls programme (mature by 2019/20)

Both CCGs offer a range of services to support the frail elderly, and to reduce the impact of falls. The services offered do work together, but consist of a large number of separate teams operating simultaneously with different mandates. Both CCGs have started to map their range of services and the existing gaps, with a view to consolidate them and streamline the care pathway.

Both CCGs are served by a (mature) **front-end frailty service** at HRI, led by **CHFT**, which works closely with the Hospital Avoidance Team. A more comprehensive frailty service is planned to expand this programme, over 2019/20. This would assist patients presenting at the Emergency Department and the Surgical Assessment Unit, as well as offering an ambulatory hub that could take referrals. Extension of the team's current operational hours to 8-6 (8-8 for nurses) would happen at the same time. The existing front-end service is not serving all currently eligible patients. The system plans to work with ED, YAS and community nursing to promote the use of the Silver Phone – their “single point of access” for acute frailty services.

As part of this expansion of services, **CHFT** started a **falls response pilot** in 2018/19, that consists of the Crisis intervention team and two therapists. They offer multi-factorial risk assessments to frequent fallers, and rapid access to equipment and support, with an aim of preventing attendances at A&E. The service takes referrals from YAS, the Crisis team, and the frailty team.

Both CCGs are planning a **fracture liaison service**, that would reduce the risks of 2<sup>nd</sup> fractures for the frail elderly. A community hub would offer radiology and broad assessments of patients' bone health and risks of falls. The team would provide personalised care plans to improve and maintain bone health and mobility. If implemented in 2019/20, it is expected that the service could reach around 900 patients.

The services catering to the frail elderly in **Calderdale** are fragmented at present. Crisis response teams, the falls response from YAS, front-end acute frailty services at HRI, and reablement teams are all separate services. A 2018 pilot joined the virtual ward (discharge support) team with the Crisis response team, with some success. The CCG is planning a more complete integration of community response teams for frail patients in 2019/20.

In **Greater Huddersfield CCG**, **Locala** provide focussed case co-ordination, remote monitoring and preventative case management to fallers and high-risk frail elderly in their care. This includes preventative teams working in care homes and sheltered housing, as well as targeted support for repeat fallers. (See Locala local incentive schemes overview.)

## 2 k Swift and appropriate access to care: Appropriate referral and medication practices

### Medicine management programmes (mostly mature by 2019/20)

Both CCGs, and the System Recovery Group more broadly, have a range of medicine management QIPP schemes. Many of these have a solely financial benefit, but those impacting most on care quality are set out below.

#### CALDERDALE

- **Calderdale** runs schemes to reduce OP testing: a **Near Patient Testing Service** (ongoing initiative) for specialised medicines, in which GPs take over after the first doses from the OP specialist; and a **Gonadorelin** service (chemical castration), which is now performed by GPs (introduced 2018/19). Neither of these will likely have major impact on NEL care.
- **Calderdale** is implementing *ab initio* a **point of prescribing software** (OptimiseRx), which will provide advice over both cost and quality, given patient information and NICE recommendations. The software is able to indicate medicines that are unsuitable for patients, flag polypharmacy concerns, and suggest cheaper or more efficacious alternatives.
- Additionally, **Calderdale** is setting up a **community pharmacy initiative with GPs**, by which pharmacies will be encouraged to recommend to GPs that patients come off medications where appropriate.
- Finally, the team run **quarterly pharmacy safety audits** for patients in community care.

#### HUDDERSFIELD

- **Huddersfield** are also rolling out **OptimiseRx**, but they had an existing software solution in place. OptimiseRx is fully implemented in all Locala practices and most GPs.
- **Huddersfield** have a range of other initiatives that will improve quality, including changing the medicines given to asthmatics (covering all practices by end of 2019/20), and a reduction in anticholinergics that create falls (rolling out in Nov 2018). The final impact on NEL bed days of these programmes is likely to be less than initiatives designed to reduce polypharmacy.
- **Polypharmacy reviews** have been an informal part of the MDT annual review process offered to care homes in **Huddersfield** for the past few years. This is intended to be made explicit as part of the re-procurement of care home support in the area. Polypharmacy reviews were part of GPs' responsibilities between 2016 and 2017/18, but the programme was discontinued. GPs were not happy that they were given sufficient resources to perform the reviews, and were not convinced that they offered sufficient impact for the time required. As the responsibilities and effectiveness of pharmacists embedded in GP practices grow, there may be an opportunity to restart polypharmacy reviews for the wider population – although no specific plans exist yet in this area. Locala do currently provide medicine reviews by pharmacists to care home residents.

## 3 | Support with care transition: Discharge support

### Delayed Transfers of Care programme (mature in 2018/19)

**CHFT** is leading a programme to implement and embed the 8 high-impact actions to reduce DToCs, and to implement the SAFER patient flow model, working with **both CCGs**. As of mid-2018, most programme components are established, but not all are fully embedded. In particular, 7-day services are developing, and trusted assessor roles are still being hired.

### Transfers of care: Hospital Avoidance Team (HAT) (mature in 2018/19)

The HAT supports patients to avoid admission and to discharge more quickly from hospital. A more developed service operates in Greater Huddersfield: **Calderdale** has moved to match this with a shift to 7-day services in mid-2018, and continuing efforts to embed a 9am to 9pm service in this CCG.



## 3 m Support with care transition: Intermediate care (1/2)

### Enhanced Reablement and recovery at home packages (mature in 2018/19)

The enhanced reablement SRG plan encompasses provision of more home-based assessment and reablement capacity to support the closing of 12 beds in CHFT's rehabilitation ward 8C. The ward has now been closed, but the community support will be developed through 2018/19.

### Discharge to assess programme : provision of step-up and step-down beds (mature in 2018/19)

The nursing home SRG plan suggests the block purchase of step-down intermediate care beds for September 2018.

The pilot started in September 2018, with an original ambition of 14 beds (7 for each CCG), under a shared funding model between CHFT & the local authority.

**Calderdale** have instead committed to improve the turnover of their existing community bed-base. They are focussing on 33 community beds, ensuring that people are set up with packages of care as early as possible, to ensure lengths of stay do not exceed 6 weeks. Their approach has already freed 5 beds, which they are now intending to dedicate as step-up/step-down, flexible choice and recovery beds.

**Greater Huddersfield** and the Kirklees authority have purchased 3 EMI and 5 nursing beds (with the same numbers in addition for North Kirklees), and will use this capacity as flexible choice and recovery (step up or step down) beds. They are only funded for winter 2018 at the moment.

### Home care reorganisation (mature from 2019-2022)

**Calderdale** local authority intends to remodel its domiciliary and home care services around the 5 new primary care localities. The objective is that care capacity can be better designed and more flexibly allocated, so that there is always sufficient capacity in the right area. The authority is just starting a re-procurement exercise for home care to achieve these objectives. The authority intends to offer guaranteed hours contracts to providers, as well as arranging spot contingency cover, in order to guarantee that support will be available to patients when needed.

## 3 m Support with care transition: Intermediate care (2/2)

### Redesign of the rehabilitation pathway in Kirklees (from 2019-2021)

**Kirklees** and **Greater Huddersfield** have identified three significant challenges with their current intermediate care offerings:

1. Many, varied access points to intermediate care for both patients and carers, causing confusion and limiting successful uptake
2. A significant lack of capacity in reablement services, in part because these teams are frequently keeping patients on their case-load, continuing to provide longer-term domiciliary care than is explicitly in their scope.
3. Many, overlapping services running as independent teams. For example, reablement or home support services are provided by the Locala Community Intermediate Care teams, the START short-term intervention teams, the Hospital Avoidance Team, the intake and support management team, the Short Term and Urgent Support Team, the Home Care service, in addition to the services provided by district nursing.

Intermediate care and reablement will be reorganised, rolling up existing services within the planned primary care networks (localities) to provide:

A single point of access intermediate care and reablement,

Block purchase of nursing home beds,

A central, co-located independent living team (MDT) to co-ordinate care, and

Additionally, an expansion of domiciliary care capacity, that will free up reablement services.

The intermediate care model will also reform how the existing 80 intermediate care beds are used. At present, all are used as step-down provision. In the future, they will be flexibly assigned as discharge to assess beds, step-down beds, step-up beds or rehabilitation beds. Beds will have MDT support with cover into evenings and weekends. An additional series of choice beds will be purchased, to support medically stable patients who are awaiting nursing home placement.

As part of the transition to this model, Locala are working to free capacity and reduce length of stay in the current bed base. This involves:

1. Working with the acute trust to pull patients out into the community services, this will include the educating ward staff on appropriate referrals;
2. Maximising therapy input into community beds to ensure patients reach their optimal potential in the shortest possible time; and
3. Running outreach initiatives into patients' homes at the point of discharge for up to 7 days.

**Calderdale** has also expressed an ambition to remodel its intermediate care and rehabilitation offering, to address significant problems of delayed transfers and long stays in community beds. However, a detailed vision of what this remodelling will look like is still to be articulated. They intend to describe their approach by the end of November 2018.

# The proposed changes to method of care delivery will underpin the success and continued redesign of these initiatives

## Locality models for integrated primary and community care (mature in 2021/22)

Both CCGs are developing locality models of primary care (also called Primary Care Networks), in line with the Five Year Forward View. Localities cover patient populations of 30,000-50,000, and consist of networks of GP practices that will collaborate to organise and provide care in the area. The intention in both CCGs is that these networks will meet on a regular basis to shape patient pathways in the local area. Both CCGs have identified five relevant groupings of GP practices, and all will have had their first meeting by the end of 2018.

In addition, the community services procured by CCGs as part of the Care Closer to Home schemes will be designed around these locality structures – although detailed plans for what this will look like are still to be developed in both systems. Calderdale and its Health and Wellbeing Board has made this explicit through its Calderdale Cares strategy and plans for development of Care Closer to Home. The area will use an Alliance model, in which providers will work closely together within localities. Required care provision will be designed around detailed stratifications of the population. All providers will be equal partners within an Alliance Contract to deliver all community and primary care services. North and Central Halifax are piloting this model from late 2018. The first phase is set to integrate district nursing and community matrons, most community services and specialist nursing. It is currently intended that social care and public health services be incorporated at a later date. The full MDT model and care packages to be provided, as well as population segmentation, are still in progress.

Similar plans, although slightly less advanced, exist in Kirklees. Management of the primary care network programme in Kirklees and Greater Huddersfield will be undertaken by an external agency, and meetings of the networks will be facilitated with support from CCGs. The first pilot site intends to integrate and co-locate Locala, the Kirkwood Hospice and social service teams. Kirklees Local Authority and Greater Huddersfield CCG's plans for integrated intermediate and rehabilitation care will also be structured around the emerging primary care networks.

Moving to a place-based model of care, that integrates with community and social care services, and with wider public health and the third sector, is a key enabler of many successful integrated care systems. Estimating the potential impact on NEL hospital care is difficult, save through comparison to the total potential that these case examples have achieved. As the schemes in Greater Huddersfield and Calderdale are just starting, it is expected that the full benefit of the care model transition will not be felt until 2021/22.

## Overview of new and expanding system plans: source list (1/2)

Initiative name	Key sources
Atrial fibrillation stroke prevention	Greater Huddersfield CCG, Stroke prevention in atrial fibrillation - additional information, SMT paper (2017); interview with Greater Huddersfield CCG.
Remote monitoring of LTC patients at home	Interviews with Calderdale CCG.
Care home support and interim service	North Kirklees CCG, Business change case – care home support team (2018); Greater Huddersfield CCG, Business case: Providing health care to care homes for older people in Huddersfield (2017).
End of life care model reconfiguration	CHFT, End of life care strategy 2016-2017 (2016); Greater Huddersfield CCG, 057 PMO Tracker (Excel, 2018).
Expansion of the EPACC programme	057 PMO Tracker (Excel, 2018).
Single points of access	System Recovery Group, Nursing home system recovery plan, version 0.5 (2018); Calderdale CCG SPoC mapping and services draft document.
Active Calderdale	Calderdale CCG, Local Delivery Pilots Stage 2 assessment (2017); Calderdale CCG, Process evaluation - Active Calderdale (LDP) (Powerpoint, 2018); Calderdale CCG, Active Calderdale Elevator Pitch draft document (2017).
Kirklees Wellness Model	Kirklees LA, Kirklees Integrated Wellness Model Service Specification (2018).
National Diabetes Programme relaunch	Interviews with Calderdale CCG
YAS: hear and treat; paramedic car response; 111 online	Interview with YAS.
Access incentive schemes	
Extended and improved access schemes	
High-impact changes	Greater Huddersfield CCG, Primary Care Programme Board minutes, October 2018 (2018).
Extended primary workforce	
Locality models for primary care	Greater Huddersfield CCG, Primary Care Programme Board minutes, October 2018 (2018); Greater Huddersfield and North Kirklees CCGs, SMT & LA meeting papers, October 2018 (2018); Calderdale CCG's draft prospectus for Care Closer to Home (2018).

## Overview of new and expanding system plans: source list (2/2)

Initiative name	Key sources
Digital primary care development	
OPAT	CHFT, CHFT OPAT data August 2018 (Excel, 2018).
DVT pathway expansion	
Locala Local Incentive Schemes	Greater Huddersfield CCG, Locala Local Incentive Schemes (LIS) 2018/19 draft document (2018).
Community respiratory services	Calderdale CCG, Review of services, contracts and investments: Specialist integrated respiratory service (2017).
Transforming frailty and falls	
Medicines management programmes	Greater Huddersfield CCG, Polypharmacy initiative service guide 2017-2018 (2017).
Delayed transfers of care	Calderdale CCG, iBCF - Task and Finish Group Update (2018); Calderdale and Greater Huddersfield CCGs, 8 High-impact changes: self-assessment review April 2018 (2018); Calderdale and Greater Huddersfield CCGs, SAFER Annual Plan (2018); System Recovery Group, Nursing home system recovery plan version 0.5 (2018); Minutes of the acute frailty task and finish meeting September 2018 (2018).
Hospital avoidance team	Calderdale CCG, HAT service descriptor (Excel, 2018).
Enhanced reablement and recovery at home	CHFT, Enhanced reablement financial overview - SRG scheme (presented in August 2018).
Discharge to assess: step down beds	System Recovery Group, Nursing home system recovery plan version 0.5 (2018);
Intermediate care beds	
Redesign of the rehabilitation pathway	Greater Huddersfield and Kirklees CCGs, Kirklees LA, Outline reablement business case v.31 (2018); Calderdale CCG, Update to SRG nursing home beds task and finish group, September 2018 (2018).
Home care reorganisation	Calderdale CCG, Report to the Cabinet on Personal Care and Support at Home v10 (2018)

# Contents

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Annexe 1. What a top-performing out-of-hospital system could look like in Calderdale and Greater Huddersfield

Annexe 2. Plans assessed as part of this report

**Annexe 3. Assessment of the impact of existing plans against the total potential**

Annexe 4. Qualitative assessment of existing plans against best practice

Annexe 5. Capacity required to produce a top-performing out-of-hospital system

Annexe 6. Relationship between the size of proposed localities and services offered

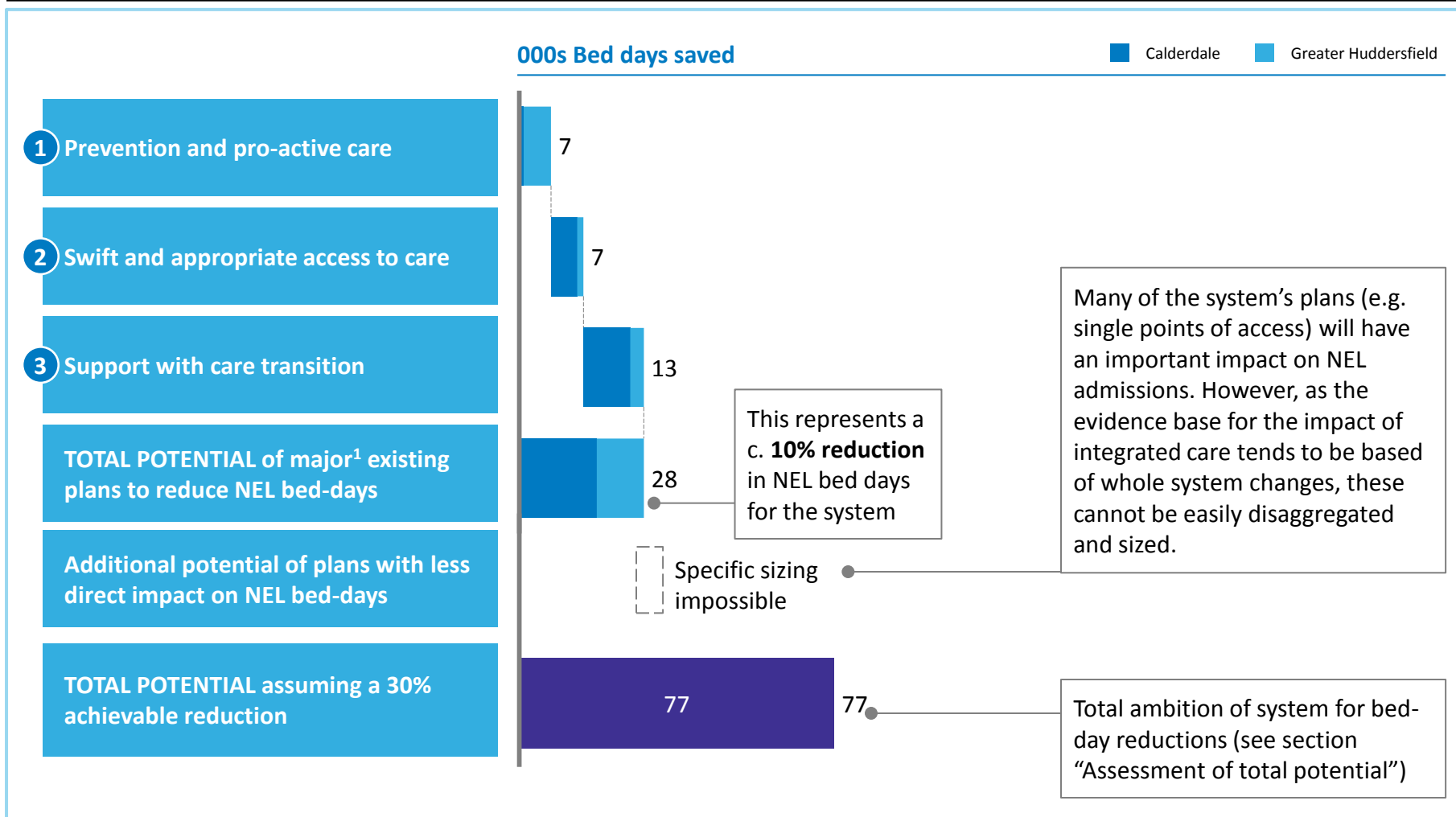
Annexe 7. Implementation plans for the development of an integrated care system

Annexe 8. Case studies of top-performing out-of-hospital systems

# CCGs' plans for further reducing NEL bed days over the next 5 years have been grouped against the framework for complete integrated care systems

	Innovation	Activity
1 Prevention and pro-active care	a Case management	Pro-active case finding, assessment, care planning and care co-ordination for patients with long term conditions, putting them, their families and carers at the centre of decision making
	b Multidisciplinary teams	A regular whiteboard session with a core group of professionals to pro-actively discuss patients or users who are at risk of requiring increased input. Additional professionals may participate ad hoc
	c Care co-ordination	Provides a single point of contact and helps the patient and their supporters to navigate complex services. Often provided by a care navigator, or care co-ordinator, but this can also be the patient
	d Individualised care plan	Develop a patient-centric care plan based on their current and future needs, focusing on what is important to the patient, beyond clinical treatment. It takes a 'whole life' approach
	e Frequent touch points	Pro-active, regular and frequent contact with health professionals for at-risk patients to reduce the risk of crisis events
	f Scheduled service user follow-ups	Use of regular scheduled follow-ups to reduce the requirement for urgent care services
	g Self-empowerment and education	Patient education programs and use of technology to support self-care, with the aim of empowering the patient to become independent and resilient, taking responsibility for their own health
2 Swift and appropriate access to care	h Rapid response	A multidisciplinary team that can be deployed to assess patients and prevents hospital admissions by providing health or social care support for those experiencing an episode of illness or injury
	i Rapid access to primary care	Facilitating access to primary care in the acute setting, after appropriate triage. Also includes improved access from extended opening hours or other channels, eg eConsult
	j Access to specialist care	Access to consultant support and specialist care in the community, including diagnostics
	k Appropriate referral and medication practices	Avoid unnecessary interventions by only referring patients as appropriate
3 Support with care transition	l Discharge support	Community, primary and social care in-reach to support early assessment and discharge of patients from acute care. Dovetails with intermediate care and overseen by a care navigator
	m Intermediate care	Provision of step-up or step-down care in a patient's home or a community hospital inpatient facility to prevent unnecessary admissions to, and to facilitate early discharge from, acute care

# Calderdale and Greater Huddersfield’s most impactful current plans could achieve a c. 10% reduction in NEL bed days over 5 years

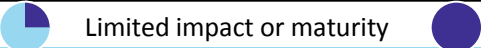





**For full details, refer to accompanying excel model**

1 Plans judged likely to have an impact on NEL admissions within 5 years, and for which a specific evidence base exists



# CCGs and LAs have several important plans for more integrated out-of-hospital care which are supported by a disaggregated evidence base

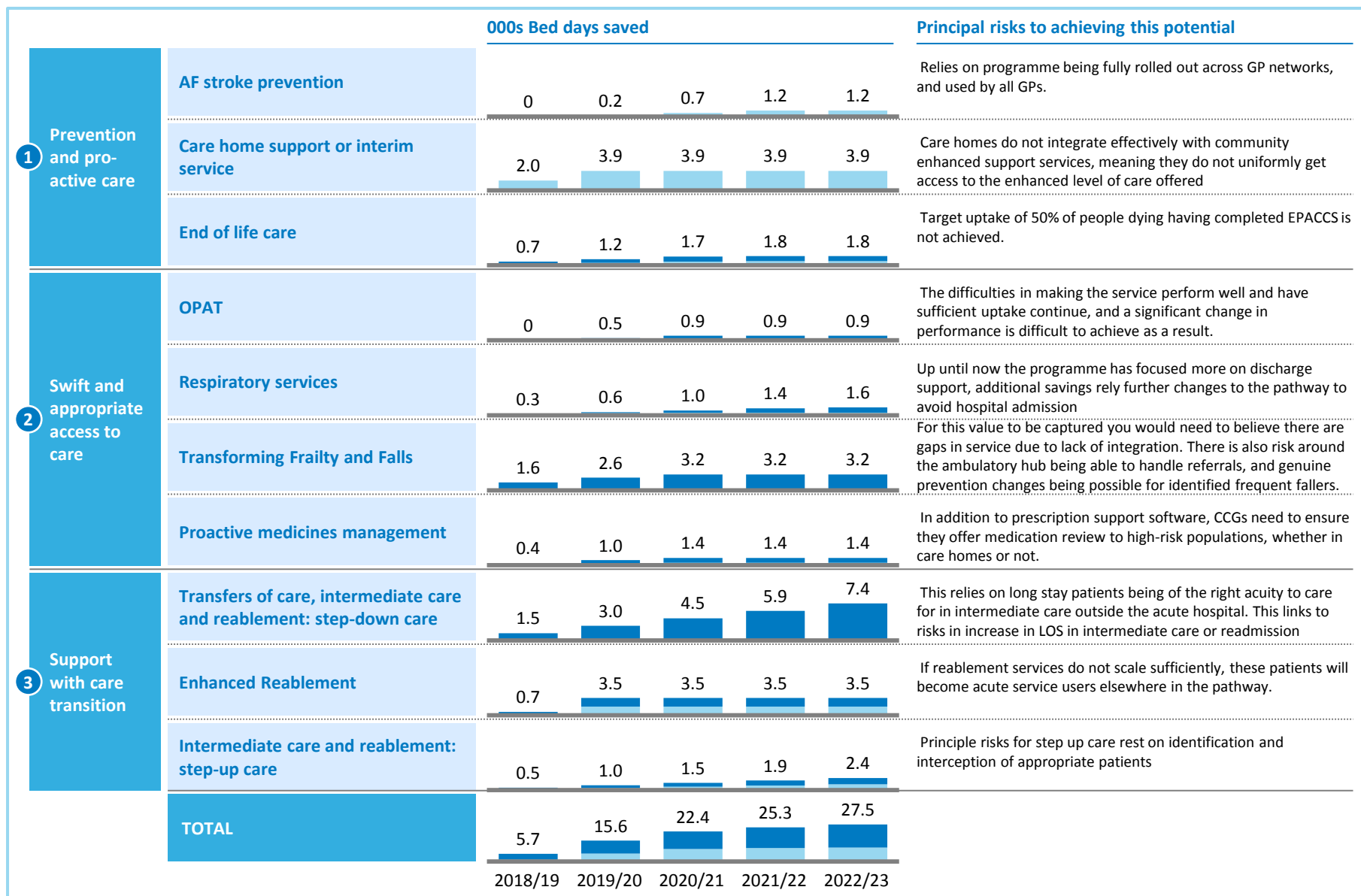
						
		Likely impact on NEL admissions	Ambition of plans vs best practice	Strategy and implementation plan in place	Plans assessed	Comment
1	Prevention and proactive care				<ul style="list-style-type: none"> <li>Single points of access</li> </ul>	<ul style="list-style-type: none"> <li>Multiple SPAs</li> <li>Plans to consolidate some, not all</li> <li>Implementation plan not in place</li> </ul>
	<ul style="list-style-type: none"> <li>c Care co-ordination</li> <li>g Self-empowerment and education</li> </ul>				<ul style="list-style-type: none"> <li>Active Calderdale</li> <li>Kirklees Wellness Programme</li> <li>National Diabetes Prevention Programme</li> </ul>	<ul style="list-style-type: none"> <li>Kirklees' plans are clear in requirements, and looking to procure single provider</li> <li>Calderdale is just starting its strategy &amp; implementation</li> </ul>
2	Swift and appropriate access to care				<ul style="list-style-type: none"> <li>Access Incentive Schemes</li> <li>Extended Access Schemes</li> <li>Digital Primary Care Development</li> <li>10 High Impact Changes</li> <li>Wider Workforce Roles in Primary Care</li> </ul>	<ul style="list-style-type: none"> <li>CCGs are responding to national initiatives to put expand patients' access to primary care</li> <li>This involves both increased capacity, a broader range of hours of operation, and a wider range of accessible specialties (including nursing or pharmacists)</li> <li>The move to locality-based primary care will assist in the rapid provision of access to primary care</li> </ul>

## Development of these plans will go some way towards realising the full 30% NEL bed-day reduction potential of the system

- The evidence base that covers these types of intervention consists of systems that have implemented multiple initiatives as part of a larger transformation
- It is not possible from these cases to identify specific support for each plan, or group of plans
- We have provided a qualitative assessment of these schemes' maturity and ambition against best practice

# Most of Greater Huddersfield and Calderdale's current acute demand reduction plans will reach maturity within 1-3 years

■ Calderdale ■ Greater Huddersfield



SOURCE: Note: The impact of Locala's local incentive schemes will be covered by calculations for respiratory patients, frailty and falls, and for the step-up beds calculation.

# Methodology for sizing most impactful existing plans

		Overview of sizing methodology
1 Prevention and proactive care	AF stroke prevention	Academic Health Science Network's model for avoided strokes and created bleeds.
	Care home support or interim service	Assume that that the potential impact of the scheme is similar to that of the QUEST programme, for a given population
	End of life care	Greater Huddersfield to increase uptake of EPACCS from 33% on death to 50%. As part of CHFT's care co-ordination initiative, Calderdale to reach 2016 top decile for proportion of deaths in hospital, in line with local reductions in this value over last 10 years.
2 Swift and appropriate access to care	OPAT	The OPAT programme is to be scaled and improved in Calderdale. We assume that it is at 50% of the performance of GH CCG's mature programme, with a remaining 50% of impact to be realised.
	Respiratory services	Calculated bed days due to ambulatory sensitive respiratory conditions and the saving if these bed days moved to equal top quartile performance nationally
	Transforming Frailty and Falls	Calculated bed days due to ambulatory sensitive conditions linked to fall, e.g. UTIs and the saving if these bed days moved to equal top quartile performance nationally
	Proactive medicines management	Academic literature suggests that 5% of all NEL admissions are avoidable and attributable to acute drug related events. Of these, a case study in care homes suggests 20% can be controlled using targetted interventions. We assume that the programmes in Calderdale will cut 10% of avoidable admissions, and those in Greater Huddersfield (with more mature programmes), 5%.
3 Support with care transition	Transfers of care, intermediate care and reablement: step-down care	Calculated excess bed days and assumed these could be reduced to top quartile performance nationally
	Enhanced Reablement	Ward 8C, with 12 beds, has closed. They system is putting in place reablement services to cover this loss of capacity.
	Intermediate care and reablement: step-up care	Calculated bed days on 0-1 day LOS admissions with no treatment code and assumed these could be reduced to top quartile performance nationally

For full details, refer to accompanying excel model

# Contents

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Annexe 1. What a top-performing out-of-hospital system could look like in Calderdale and Greater Huddersfield

Annexe 2. Plans assessed as part of this report

Annexe 3. Assessment of the impact of existing plans against the total potential

**Annexe 4. Qualitative assessment of existing plans against best practice**

Annexe 5. Capacity required to produce a top-performing out-of-hospital system

Annexe 6. Relationship between the size of proposed localities and services offered

Annexe 7. Implementation plans for the development of an integrated care system

Annexe 8. Case studies of top-performing out-of-hospital systems

# 1 Prevention and pro-active care: summary assessment and risks (1/4)

## The path from current plans to best practice

### SELF CARE

- **Active Calderdale** and the **Kirklees Wellness Plan and Community Plus**: Both CCGs are putting in place schemes to improve the physical activity, health and wellbeing of their local population. These schemes are clearly valuable, even though their potential impact is difficult to estimate. CCGs should consider how these plans will target the people that would most benefit from increased activity and wellbeing, and who might be the least likely to actively engage in local initiatives. This is an acknowledged focus of both plans, but can be difficult to ensure in practice. Providing support and facilities to the already active is important, but the hardest to reach may also be the greatest to benefit.
- The third sector, as well as wider social care services, have an important role in promoting health and wellbeing. Community Plus, run by Kirklees authority, is explicitly linking patients with these services and looking to promote supportive communities. However, CCGs should find ways to closely link the third sector with the new primary care networks or locality models of community care delivery. Co-location of some teams or support services from the third sector, into community hubs, may be one way to do this.

### MULTI-DISCIPLINARY TEAMS FOR ASSESSMENT AND CARE PLANNING

- **MDT support and integrated assessment**: MDT assessment is built into most aspects of existing community care plans (e.g. MSK assessment, or the proposed Kirklees Independent Living Team), although the potential for follow-up MDT reviews of patients is less well embedded. A notable exception is Greater Huddersfield's Care Home Support initiative, or Calderdale's QUEST programme. Developing ways to provide MDT support and review for patients who are living independently should be part of the expansion of community care programmes in the system. The CCGs should also ensure that MDTs align with the new locality model of GP networks, to ensure that they are as integrated with, and accessible to, primary care as much as possible.

### END OF LIFE CARE (EOLC)

- **CHFT and the Kirkwood Hospice are improving the EoLC model** in both CCGs. It already includes many elements of best practice: out of hours support, integration with the hospices, hospital-based discharge teams, and electronic palliative care co-ordination (EPACC) records.
- A best-in-class EoLC model would include a single point of contact hotline for patients and carers to access community services, home care and intermediate care. Additionally, a named care co-ordinator who can meet patients in person to plan their care needs and organise care on their behalf should be available. Explicit capacity from hospice at home or hospital at home teams should be available for EoL patients. CHFT, as the designated organisation leading on EoLC, should ensure it aligns its improvements against the ambitions set out by the National Palliative and End of Life Care Partnership.<sup>1</sup>
- **Improving the uptake of EPACC records** within both CCGs, and ensuring that all providers (including YAS and GPs) are trained to use them, will be an important way of ensuring that patients' wishes at the end of life are respected.

<sup>1</sup> National Palliative and End of Life Care Partnership, Ambitions for palliative and end of life care: a national framework for local action 2015-2020, (2015).

# 1 Prevention and pro-active care: summary assessment and risks (2/4)

## The path from current plans to best practice

### CARE CO-ORDINATION

- **Single point of contact:** Both CCGs are developing plans for a single point of contact / access for entry into health and social care services out of hospital (in Kirklees, this would link to the proposed Independent Living Team). It is intended that this service is primarily used by health workers and clinicians. These plans are important to simplify the many access routes into care, to ensure that MDT assessment can take place, and to ensure that appropriate care co-ordination is taking place.
- **Fragmentation of current pathways:** Many patient segments are served by a fragmented set of community teams. Services for the **frail elderly in Calderdale** illustrate this point: community crisis response teams, frailty services at HRI, falls response services, discharge support teams and reablement support are all provided by separate groups. This may be confusing for patients, and makes it difficult for health workers and clinicians to access the right services. The CCG has taken steps to integrate these many pathways, with a pilot joint frailty team in 2018, and is planning a more integrated community response team for frail patients. However, co-ordination of care for these patients could be more easily improved if all relevant community and social services for these patients were co-located and integrated within the hubs serving localities and primary care networks – beyond just the teams that focus on this vulnerable patient demographic.
- **Care co-ordinators:** Top-performing integrated care systems provide named care co-ordinators for the most high-needs patients. These people plan and organise care for patients, and can meet patients in their home if necessary. Co-ordinators provide a single, personal point of contact for high-risk patients and their families to reduce un-necessary calls to 111, out of hours GPs and 999. Making this service available to all high-need patients would be an important part of a more developed out-of-hospital system. Care co-ordinators should additionally be located within the community MDT, and assigned to specific GP practices. This would enable GPs to make one call to coordinate out of hospital care for patients at risk of admission or to enable swifter discharge from hospital for complex patients. Co-ordinators should be able to organise domiciliary care and equipment, coordinate support from district nurses, social workers and community therapy teams. They should also be able to arrange short term placements in intermediate care as necessary. Finally, care co-ordinators can play an important role in linking patients with wider support for healthy living – Kirklees authority's Community Plus programme has already started to do this.
- **Scale of care co-ordination:** CCGs should decide at what scale they should be providing care co-ordination services. Is it for the whole population with a centralised call centre approach, or a series of more local coordinators linked to the GP networks? The optimal solution may be a combination of both. This might involve local coordination for very complex patients, backed up by a centralised service for lower level need patients and the ability to provide a basic service out of hours and on weekends.

1 National Palliative and End of Life Care Partnership, Ambitions for palliative and end of life care: a national framework for local action 2015-2020, (2015).  
[www.endoflifecareambitions.org.uk](http://www.endoflifecareambitions.org.uk)

# 1 Prevention and pro-active care: summary assessment and risks (3/4)

## The path from current plans to best practice

### SUMMARY

- Greater Huddersfield and Calderdale CCGs have several programmes for managing health proactively in the community. However, **different packages are currently offered for specific higher-need groups** (primarily diabetics, respiratory condition sufferers, end of life patients, frail elderly and care home residents) – and in many cases, multiple separate teams co-ordinate response even within one group (such as frail elderly). Where these care packages are designed, organised or provided by different teams, patients in need can be passed around or fall through the gaps if they fail to meet the relevant access criteria.
- A top-performing version of out-of-hospital care in Calderdale and Greater Huddersfield would **offer all elements of pro-active care programmes to all patients classed as high-need**. This means that personal care co-ordinators, MDT assessment and review, pro-active case management and follow-up, must all be offered to each class of patient: whether they have serious long term conditions, mental health needs, are care home residents or are at the end of life. This complete package should be co-located, operating as a centrally-managed and integrated team, and aligned to GP practices and locality networks.
- A comprehensive offering of this kind to all higher-need groups has not yet been developed. The redesign of primary care in both CCGs offers an opportunity to trial the complete integration of community, primary and social service teams for the provision of care to high- and medium-needs patients. This approach should ensure that care provision is tailored to the risk profile of the local population, and all patients are assessed for and offered the care that best reflects their needs.

1 National Palliative and End of Life Care Partnership, Ambitions for palliative and end of life care: a national framework for local action 2015-2020, (2015).  
[www.endoflifecareambitions.org.uk](http://www.endoflifecareambitions.org.uk)

# 1 Prevention and pro-active care: summary assessment and risks (4/4)

## Risks to successful implementation

### ABILITY TO DELIVER ON AMBITIONS FOR POPULATION WELLNESS

**High ambitions** have been set for the impact of the Active Calderdale and the Kirklees Wellness Programme and Community Plus. This is important, but without a clear implementation plan and strong PMO, there is a risk that the ambitions will not be realised. Tracking the impact, in particular, will be challenging, as it is difficult to relate these types of intervention to reductions in service usage. One substitute is to track the rates of smoking, obesity, diabetes and similar population health indicators. Finally, CCGs should be aware that health and wellbeing initiatives will do little to change the profile of hospital activity in the short term, although they will likely reduce primary care workload.

To address these risks, CCGs should ensure that they have concrete and **tangible implementation plans** for these programmes. In particular, they should ensure that these **plans will improve the health and activity of the least healthy**. CCGs could consider the role of primary care within their population health programmes, for example by deploying health coaches in GP practices in a similar fashion to the Somerset health system. These coaches serve the dual purpose of educating and stimulating the population to improve the health and wellbeing, as well as explicitly reducing GP workload.

### ABILITY TO CREATE AND FOLLOW AN IMPLEMENTATION PLAN FOR ORGANISING CARE AROUND LOCALITIES

CCGs should have an ambition of providing comprehensive care packages to all high-needs patients, regardless of condition. This will only be possible if they capitalise on the re-organisation of care around locality-based hubs. This model of co-located services means that even from the first contact, a high-needs patient can be assessed and have the full support network they require put in place. Integration of these services with GPs is also vital if primary and community care are to function effectively as one integrated body. While CCGs' strategies have set out the initial direction, there is a risk that without a clear and directive process to follow, implementation of these changes will be delayed, piecemeal or unsuccessful. CCGs need to put in place a clear implementation plan, and use it to hold the system to account.

### ABILITY TO INVOLVE ALL SYSTEM PARTNERS IN DESIGN AND DEPLOYMENT OF NEW MODELS OF CARE

Collaborative working and whole-system initiatives require investment in relationships between the different institutions. If insufficient time is invested, then not all parties feel that they have co-created the initiatives and solutions. For example, the Calderdale programme to provide remote monitoring of LTC patients at home has stalled because the proposed solutions are not considered workable by all stakeholders. All organisations will need to focus on the shared creation of solutions to avoid further initiatives being similarly stalled.



## 2 Swift and appropriate access to care: summary assessment and risks (1/3)

### The path from current plans to best practice

#### ACCESS TO SPECIALIST CARE

- Clear routes into care:** The Care Closer to Home programme in both CCGs has brought numerous specialist services into the community. Much of this programme has focussed on OP clinics, but some of the changes in access to care (as highlighted in this report) will impact NEL admissions. As this transition in care provision continues, it is vital that patients and clinicians can appropriately find and make use of these community services. Streamlining the many access points within the system is crucial: both systems should provide a sole single point of contact (triage service) for access into community, intermediate care, rehab and social services within an area. If patients and GPs have multiple routes in, it is more difficult for them to access the right service and more patients will go to hospital or be referred in. Both CCGs currently have numerous entry points, including multiple “single points of access” (e.g. separate single points of contact for MSK, Locala, Gateway to Care in Calderdale, Calderdale respiratory services, SWYPFT adult mental health, acute frailty services, and for adult social care in Greater Huddersfield) operating at the same time across the CCGs. This needs to be simplified, to make integrated community services the easiest option for all. In addition, GPs will need to be trained to use these community pathways and point of access.

#### INCREASED, MORE RAPID, ACCESS TO PRIMARY CARE

- MDT triage and assessment:** both CCGs have committed to making MDT models central to their reformed services. One example is the MDT triage into MSK services, operated in both CCGs. Both systems should continue this commitment, and should ensure that MDT assessment is available as part of the single point of contact route into their out of hospital services.
- Workforce models and primary care capacity:** Both CCGs are expanding access to primary care. Their programmes include increased capacity, extended hours or weekend access, improved abilities for patients or other services to book appointments, and efforts to free up GPs’ time through workplace efficiency programmes. Both CCGs have committed to providing an additional 30 minutes of GP contact time per week per 1000 patients (an additional 45 minutes in Calderdale). A top-performing system in Calderdale and Greater Huddersfield might require 50-120 minutes of primary care contact per patient per year (depending on their needs) – but this is not all from GPs. CCGs may not require significantly greater GP capacity, but may need to invest in wider workforce roles, including pharmacists, therapists and nurses. The hiring of pharmacists for each GP practice is a good beginning for this process.
- Digital transformation of primary care:** both CCGs have recently ensured that GP appointments can be booked online. There is significant work still required to enable more fluent **direct booking** of GP appointments from 111 and from out of hours providers, but this programme should be complete in 1-3 years. **eConsultation** systems, that offer email and video consultation options, will be rolled out in both CCGs by the end of 2019/20. CCGs should monitor the success of app-based consultation and 111-triage systems in the rest of the country (for example, Babylon Health’s GP at Hand or PushDoctor, with a view to improving GP access once eConsult is up and running.

1 Some authors estimate that 5% of NEL admissions are attributable to adverse polypharmacy events. Kongkaew et al. “Risk factors for hospital admissions associated with adverse drug events,” *Pharmacotherapy* 33(8), 827-837 (2013).

2 The Northumberland Care Homes Vanguard used pharmacist-led reviews of care home patients’ medication to reduce drug-related NEL admissions by 21% (NHS England).

## 2 Swift and appropriate access to care: summary assessment and risks (2/3)

### The path from current plans to best practice

#### RAPID RESPONSE

- **111 and 999:** YAS is already implementing programmes to expand the effectiveness of its “See and Treat” and “Hear and Treat” pathways, for both 111 and 999, in line with national guidance. These initiatives include the creation and expansion of clinician teams that can assess patients by phone. This should improve the rapid access that patients have to assessment and care.
- **Rapid MDT assessment:** An improved system in Calderdale and Greater Huddersfield might be able to provide MDT assessment and triage for patients within 2 hours of a call to the single point of contact – in the patient’s home, if necessary. This level of service is provided by the Hospital Avoidance Team in Calderdale already, but not comprehensively for all services and patients in both areas.

#### APPROPRIATE REFERRAL AND MEDICATION PRACTICES

- **Medication management:** Adequate control of polypharmacy and adverse outcomes from inappropriate medication is a large opportunity for NEL admission control.<sup>1</sup> Of the CCGs’ and SRG’s medicine management initiatives, many focus on cost reduction, but the largest quality of care impact may come from the introduction of OptimiseRx, a prescribing decision support software.<sup>4</sup> There are two areas for further improvement:
  - Introduction of similar software packages for secondary care, so that the hospital has similar access to decision support for prescribing. This system would need to integrate with OptimiseRx and with the new system-wide development of personal health records (LHCRE).
  - Operation of a more comprehensive medication review programme. Leading case examples<sup>2</sup> use pharmacist-led reviews of patients’ medication on an at least quarterly basis. This process could be implemented, where it does not happen already, within care homes by CCGs as part of their existing MDT-based quality improvement and QUEST programmes<sup>3</sup>. Community pharmacies and GP-based pharmacists could provide this service to the wider community.
  - **Thresholds of care:** Both CCGs operate a Thresholds of Care programme, to reduce unnecessary procedures in line with clinical best practice. These have not been included in this review, as the majority of their impact is on outpatient and elective care.

1 Some authors estimate that 5% of NEL admissions are attributable to adverse polypharmacy events. Kongkaew et al. “Risk factors for hospital admissions associated with adverse drug events,” *Pharmacotherapy* 33(8), 827-837 (2013).

2 The Northumberland Care Homes Vanguard used pharmacist-led reviews of care home patients’ medication to reduce drug-related NEL admissions by 21% (NHS England).

3 Medicine review has been proposed as part of the commissioning of care home support packages in Kirklees CCG, but yet not in Greater Huddersfield.

4 The opportunity is largest in Calderdale: Huddersfield had an existing solution in place.

SOURCE: See source compilation at the end of this section.

## 2 Swift and appropriate access to care: summary assessment and risks (3/3)

### Risks to successful implementation

#### PROGRAMME MANAGEMENT

Care Closer to Home has brought many new services into the community, creating multiple access points to out of hospital services. The process to simplify the routes in, and to organise community care provision around the new locality model of primary care, will not be simple. To succeed, both CCGs need a clear statement of the end-point, the concrete steps for their route there, and then comprehensive PMO of all elements of this programme under single accountable leadership.

#### RECRUITMENT AND RETENTION

The transition to a more varied and flexible workforce for primary and community care, particularly in rural areas, may prove challenging. Both CCGs struggle to provide capacity in the right place at the right time, and face challenges apprenticing new nurses and recruiting therapists. In particular, as more care is delivered in patients' homes, and a phone call is required for the care team to access advice from more senior colleagues, retaining experienced nurses and care workers becomes increasingly important.

This risk can be partially offset by opportunities for staff to broaden their work across existing professional boundaries – once the integrated community team model is working well. Broader-skilled workers can be used across rehab, nursing and social care to reduce the pressure on higher-qualified staff.

#### GP ENGAGEMENT

Developing the locality model such that it fully underpins out-of-hospital care will require significant commitment from GPs themselves. This process is just starting, but ensuring GPs' full involvement in design, development and implementation of the new model should be a priority as the scheme progresses.

### 3 Care transition: summary assessment and risks (1/2)

#### The path from current plans to best practice

Between national guidelines and best-practice case examples, several features emerge for how transfer of care from acute settings and intermediate care should be organized:

- When possible, a single point of contact for assessment into community and intermediate services should operate;
- MDT assessment models should operate both in intermediate care settings and home care;
- Social care and domiciliary care services should be integrated into assessment and local integrated care hubs to help ensure that patients are rehabilitated as much as possible, and then provided with an on-going support plan to reduce the risk of un-necessary long-term care placements;
- Within community hospitals and nursing homes, there should be bed capacity into which to discharge patients before assessment (discharge to assess). Additionally, intermediate bed capacity on each site should be flexibly assigned daily according to need (for example, step-up / step-down / stroke rehab, etc.); and
- The system should have access to digital tools that provide visibility of capacity and patient demand to users across the pathway. These systems enable rapid and proactive management of patient flow.

Calderdale and Greater Huddersfield have **clear plans to deliver national frameworks on transfers of care and SAFER**. They are already following good practice in provision of short-term intermediate care beds in nursing homes, often with MDT support. Some intermediate care services, including intermediate beds and HAT, have capacity out of hours and at weekends. Additionally, the Kirklees local authority has set out a vision of a **simplified intermediate care and reablement model** that aligns with many of the elements of best practice above. It will implement one single point of access to an MDT assessment team, that will triage into all intermediate and rehabilitation services in the area. Additionally, it will join and simplify the current multitude of home-based care and reablement services, redesigning the care provision around the new primary care localities. Calderdale could learn from this well-developed plan as it seeks to simply and improve these pathways, and as it implements and develops its Care Closer to Home strategy for community care.

### 3 Care transition: summary assessment and risks (2/2)

#### The path from current plans to best practice (continued)

Both CCGs and local authorities understand the importance of releasing capacity in wider social care (including domiciliary and residential care) and housing services for improved transitions of care. Both authorities are working to provide a wider range of more appropriate accommodation options that will enable people to remain independent for longer and enable them to return to the most appropriate accommodation if they cannot go back to their previous home.

Both CCGs could do more to **make visible the capacity with the system** to discharge, placement and assessment teams. Visibility of where care packages, or beds, are available, on a day-to-day basis, can underpin rapid decision making and system-wide integrated planning. Both CCGs and local authorities have nearly completed the implementation of a **bed state tool** (“capacity tracker”) for long term care-home placement in 2018, but neither area has a comprehensive overview of out-of-hospital capacity in one place.

#### Risks to successful implementation

The principal risks to realising the large potential impact of intermediate care and transfers of care initiatives are:

1. Not enough functional capacity is created, in the right location, because:
  - Releasing capacity in the system at the right place and time is difficult, because there is **no way to easily see and monitor the state of patient pressure and capacity** are day-to-day. Improvements to real-time data sharing will require investment into digital tools, and into the underlying information governance
  - A **lack of capacity in reablement, domiciliary care or specialist long-term beds** limits patient flow out of intermediate care settings (capacity limitations may be driven by a physical lack of beds, or by a lack of specialist staff to support patients in these beds)
  - **Funding** runs out for existing initiatives (principally replacement funding to iBCF supported initiatives), or **investment** is not available to expand the intermediate care capacity in nursing homes, and for additional community staff
  - **Recruitment and retention** of sufficient nursing and care staff is difficult, because of the reputation of the sector, recruitment is happening in a period of full employment, or difficulties drawing staff to rural areas
2. Having taken out rehab beds in ward 8c, the **support services for reablement at home do not scale successfully** over 6 months to support this reduced secondary care capacity.

## Locality model of care delivery: summary assessment

### The path from current plans to best practice

- **Full implementation of a locality model of care:** Both CCGs have designed locality models of primary care (or primary care networks), in line with the Five Year Forward View. These plans are developing: all GP networks (covering 30k-50k patients) will have held their first meetings by the end of 2018. However, systems need to ensure that this model involves more than structured meetings and decision making between groups of GP practices.
- Top-performing systems link the organisation of their community services with their locality model of primary care. Local hubs should provide, organise and manage primary, social, rehab, intermediate and specialist community care. It is the co-location of all of these services that leads to more rapid, holistic reviews of patients and more rapid and effective allocation of care resources. In particular, the role of social care within this integrated system is crucial, to ensure that patients are not bounced between health and care services.
- Greater Huddersfield has started this process by linking their new vision of intermediate and rehabilitation care to the new primary care network model. They are also intending to join social care with the local hospice and Locala community care provision, from the outset. Calderdale, in contrast, is considering a successive expansion of services that are integrated within its two locality pilot sites. Social care, in particular, is not included from the outset.
- Some systems that have successfully developed integrated care systems have focussed on complete integration of all primary, social and community care services, right from their first pilots. Whether complete integration is achieved from the outset or not, starting with one pilot location and expanding this across the area, rather than gradually integrating services everywhere, is probably the right approach to scaling up.
- Both CCGs will need to design and follow a clear implementation plan, that covers their model of services and workforce, their patient stratification, and how they will scale from their pilot sites, to realise this vision of a more complete integrated care system.

### Risks to successful implementation

- There is significant effort involved in piloting and rolling out this new model of care, not least in ensuring that existing services and wider system plans (including for all Kirklees area) are appropriately linked and integrated to the community hubs and primary care networks.
- A more detailed assessment of the enabling factors that need to be in place, and the need for a clear implementation plan, is discussed in the final section of the main report.

# Contents

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Annexe 1. What a top-performing out-of-hospital system could look like in Calderdale and Greater Huddersfield

Annexe 2. Plans assessed as part of this report

Annexe 3. Assessment of the impact of existing plans against the total potential

Annexe 4. Qualitative assessment of existing plans against best practice

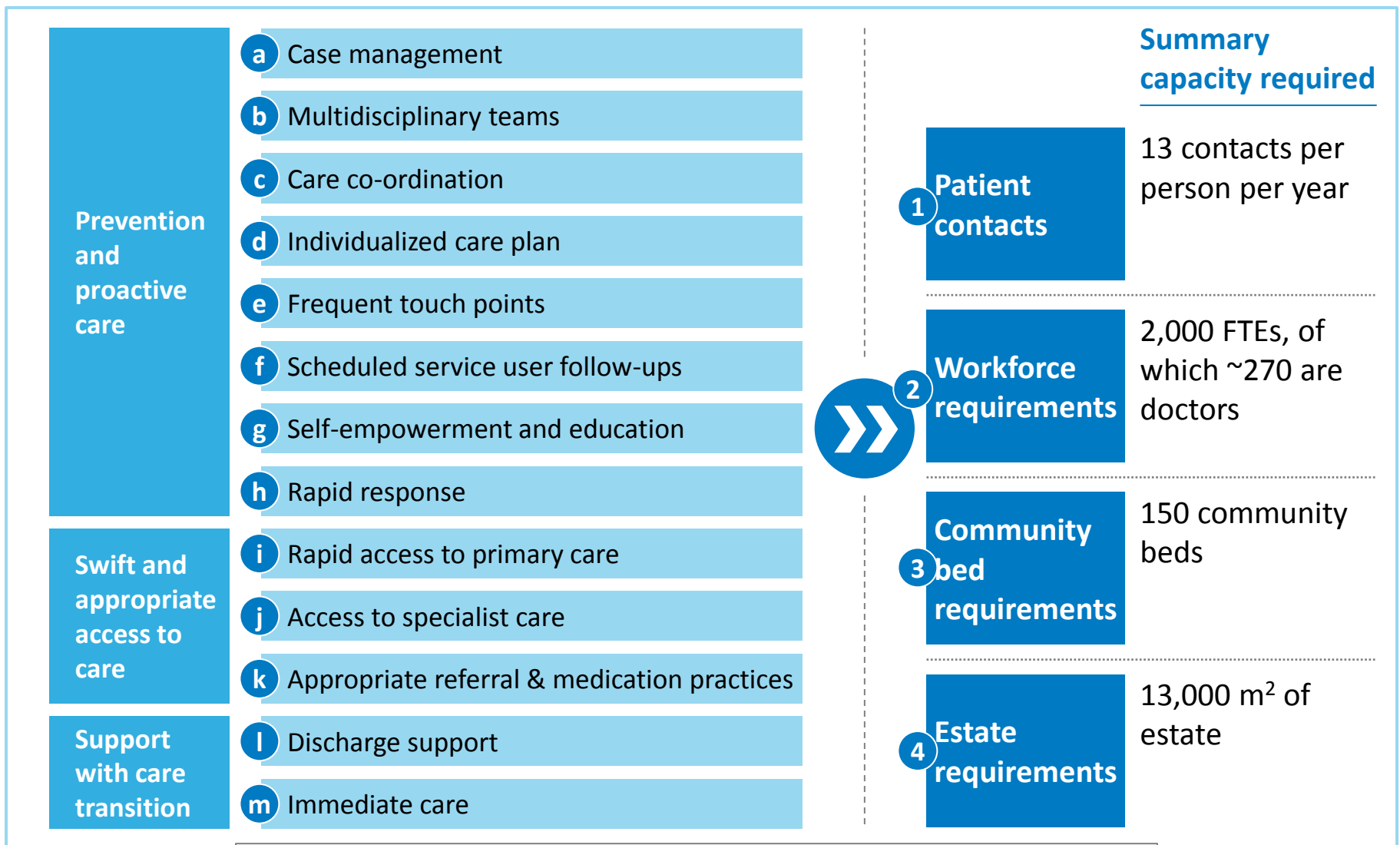
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Annexe 8. Case studies of top-performing out-of-hospital systems

## The package of care required for each need group has been mapped against Greater Huddersfield's and Calderdale's population, to evaluate the capacity required to implement the programme

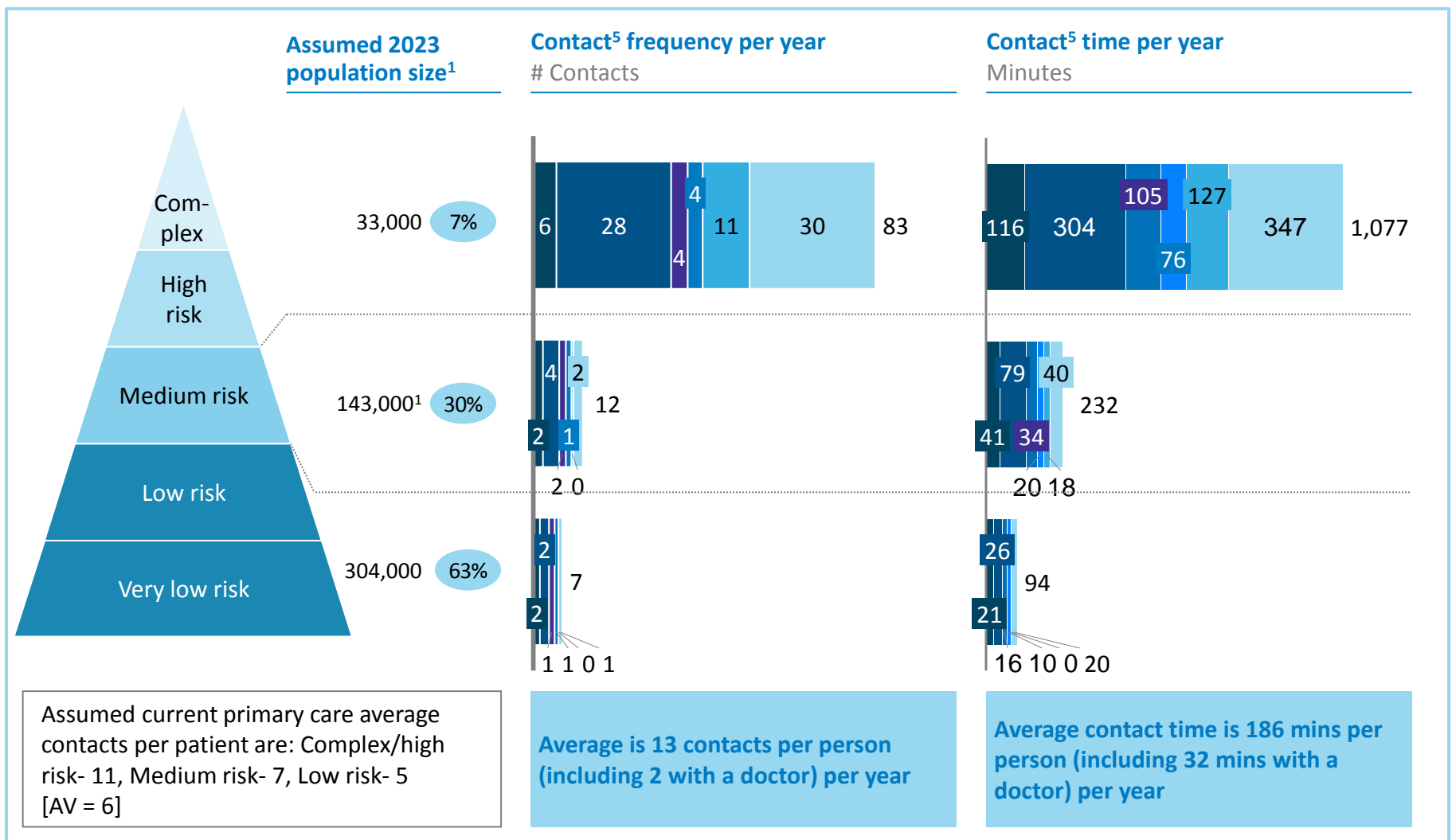


For full details, refer to accompanying excel model



# 1 Contact frequency and contact time per patient, by population group

■ Doctor<sup>2</sup>    ■ Allied Health Professional    ■ Formal Carer  
■ Nurse<sup>3</sup>    ■ Mental health practitioner    ■ Other<sup>4</sup>



1 30% of population assumed to have at least 1 LTC, based on comparable CCG data. Approximately 10% of population considered frail or high risk, with the top 4% of the population flagged as highly complex. Assumed all complex elderly and LTC – high risk have at least one LTC. Primary care contacts are based on national benchmarks applied to the population

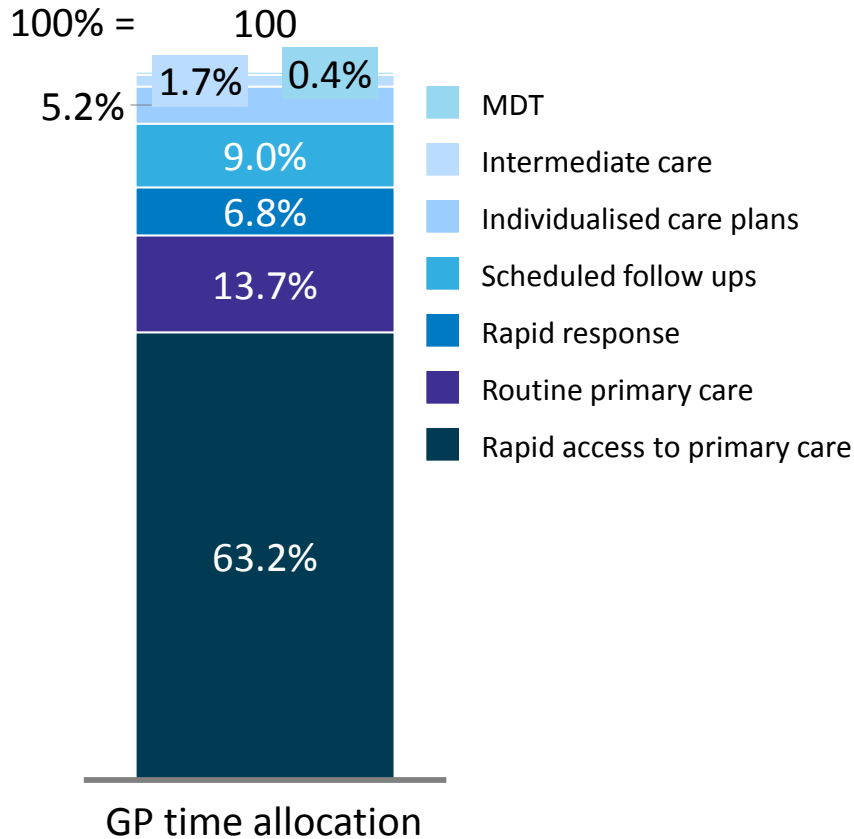
2 Includes GPwSIs, specialist doctors and generalist doctors    3 Includes generalist nurses, specialist nurses, and healthcare assistants

4 Includes social care worker, pharmacist, paramedic, wellness coach

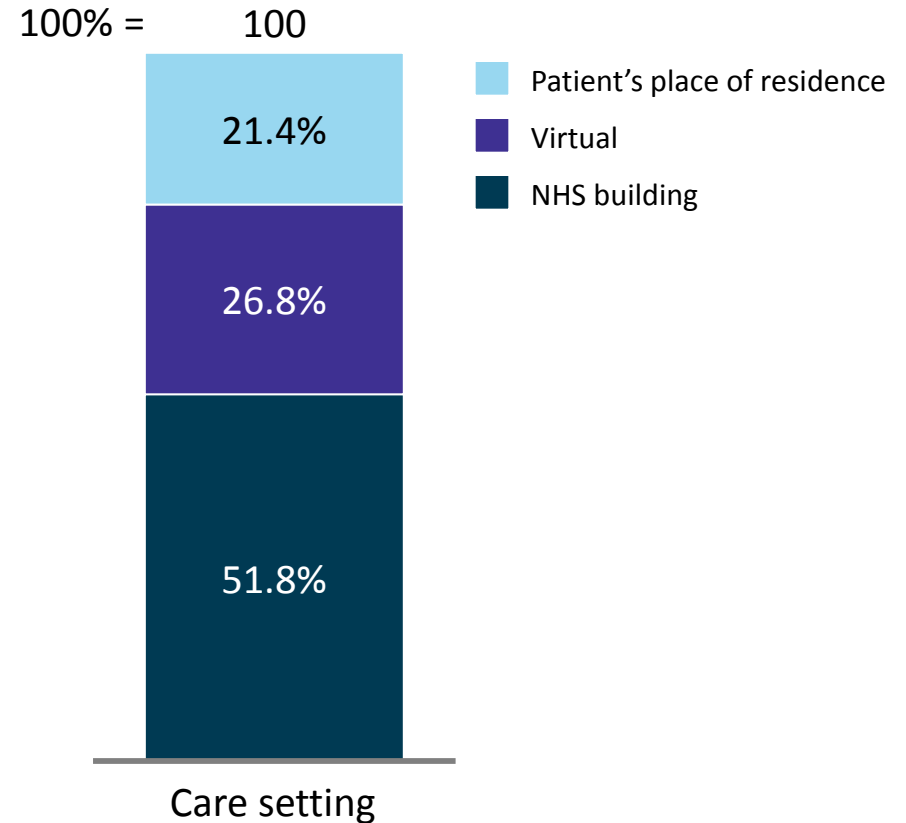
5 Contact includes all activities related to patient care. All contacts involve interaction with the patient except for the MDT which accounts for ~10% of all contacts

# 1 Breakdown of generalist doctor time by activity and location

Percentage of generalist doctor time spent on different activities



Location where care will be delivered by generalist doctor

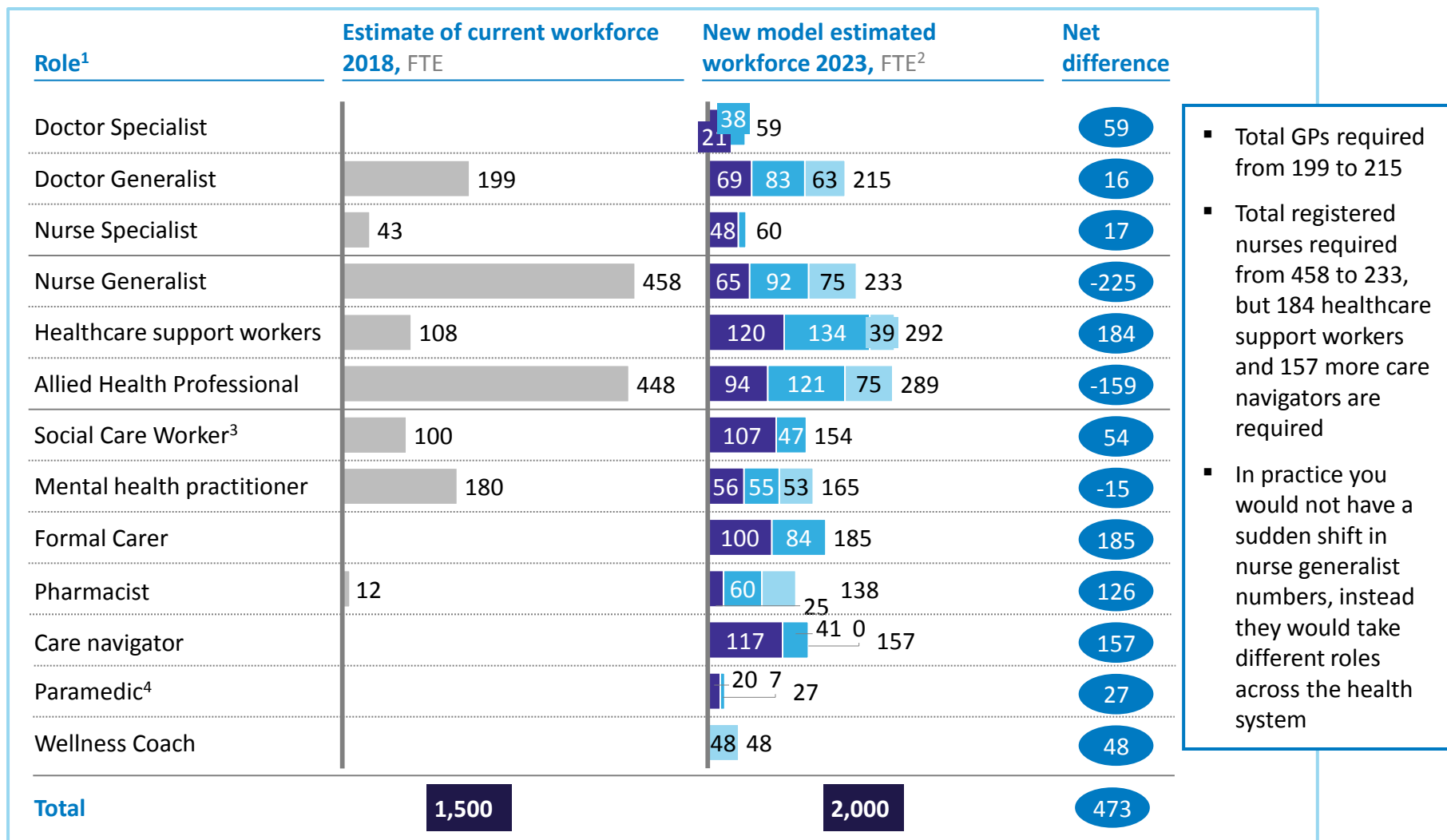


Generalist doctors will focus on providing **rapid access to primary care, routine primary care and rapid response** within different settings of care

# Future workforce requirements

## 2 under new models of care

■ High risk   
 ■ Medium risk   
 ■ Low risk  
xx Change 2018-23



**Note: current workforce 2018 is a best estimate based on available data. As more information becomes available this should be refined and updated.**

1 Roles match those described in the NMOC. Where no figure entered, data is not currently available  
 workers with similar roles to NMOC, e.g. adult social care outside of care homes

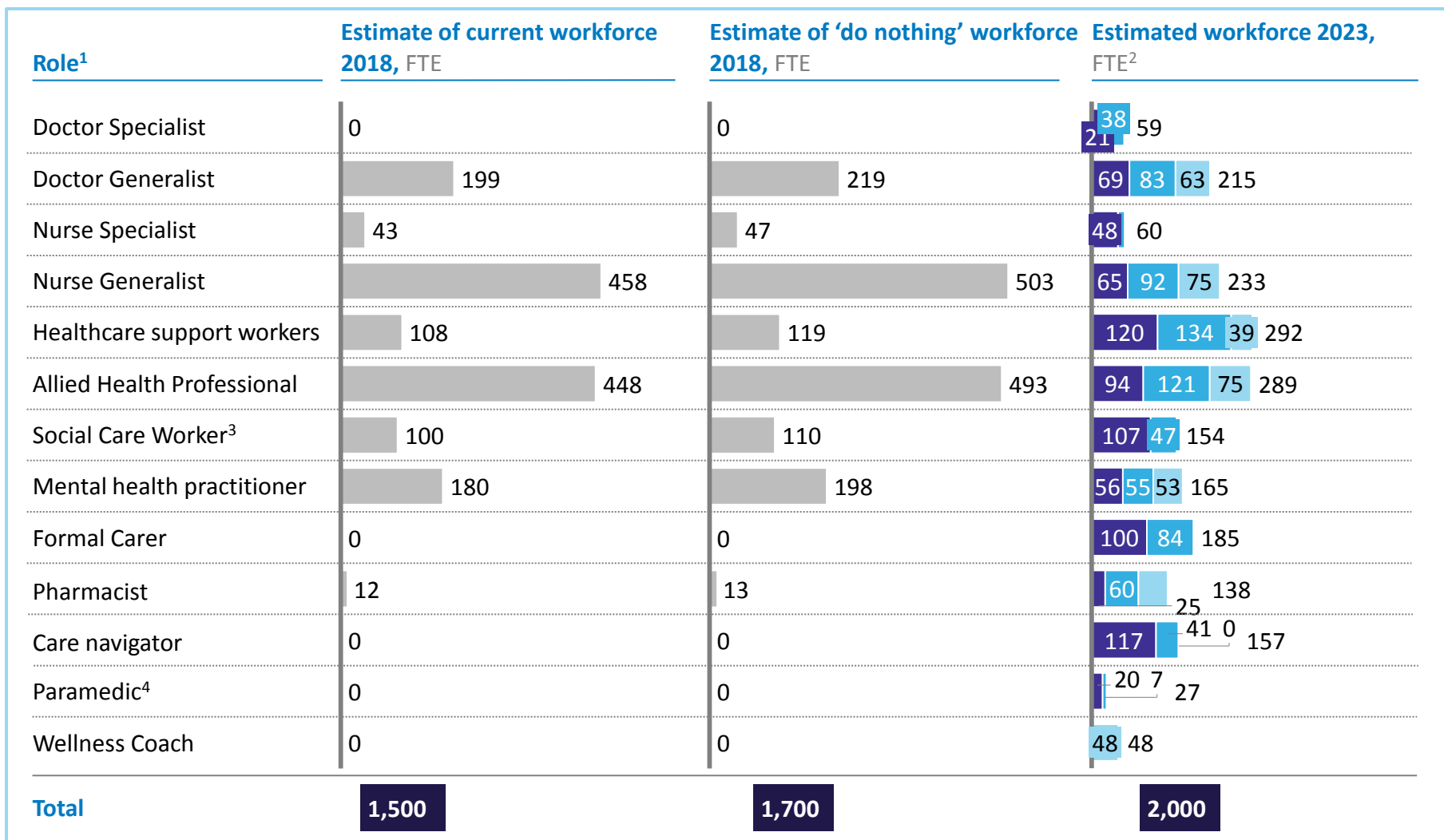
2 Assumes 70% utilisation for all staff

3 Approximation of social care

4 As per roles in NMOC, does not include those currently working in ambulances

## 2 Future workforce requirements under new models of care in comparison to the do nothing estimates

High risk Medium risk Low risk  
xx Change 2018-23



**Note: current workforce 2018 is a best estimate based on available data. As more information becomes available this should be refined and updated.**

1 Roles match those described in the NMOC. Where no figure entered, data is not currently available

2 Assumes 70% utilisation for all staff

3 Approximation of social care

workers with similar roles to NMOC, e.g. adult social care outside of care homes

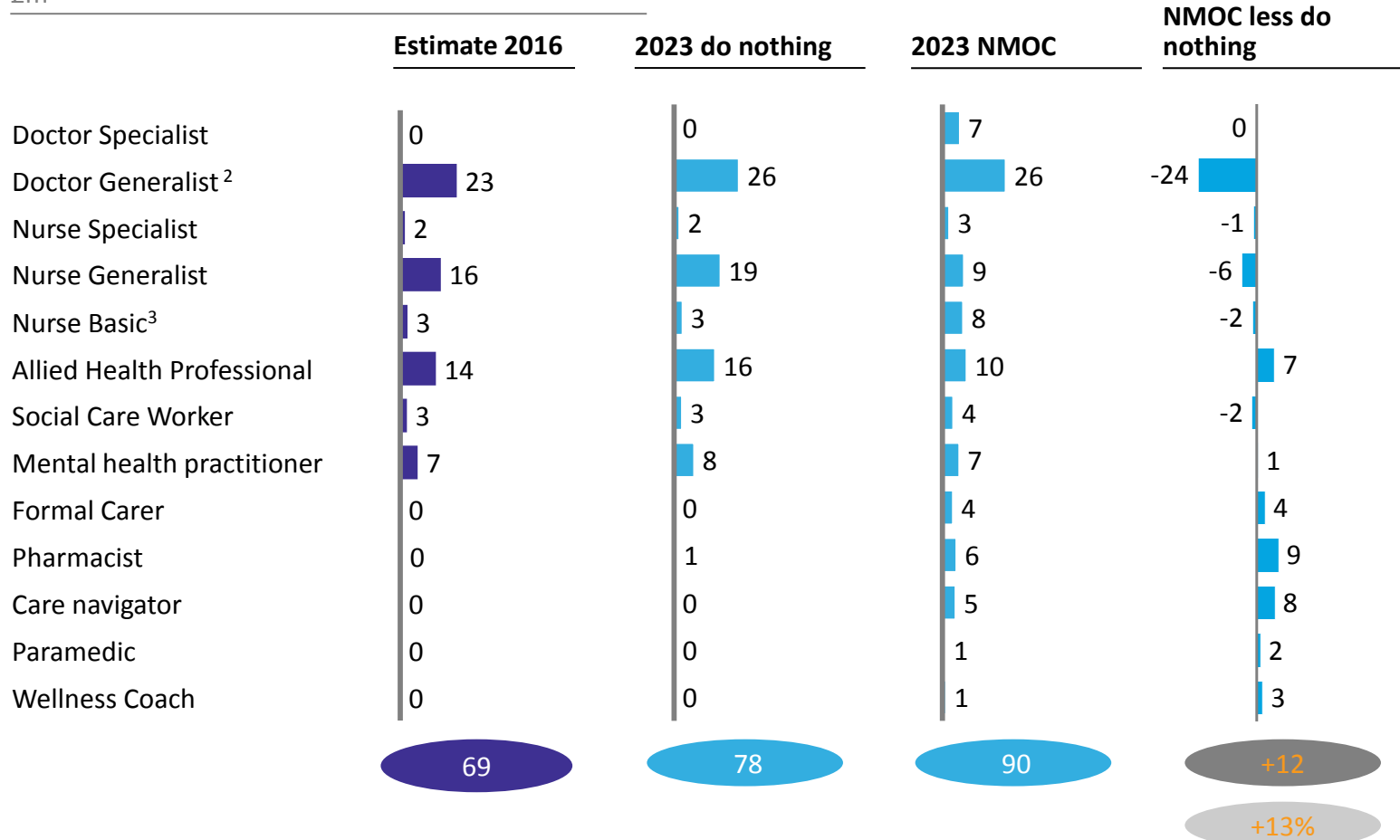
4 As per roles in NMOC, does not include those currently working in ambulances

Source: Greater Huddersfield and Calderdale CCG capacity model, NHS digital primary care workforce 2018 <https://digital.nhs.uk/data-and-information/areas-of-interest/workforce>

## 2 The forecast workforce for the new model of care would require an investment of £12 million, vs the 'do-nothing' baseline

### Change in cost of different workforce groups<sup>1</sup>

£m



<sup>1</sup> Based on midpoint of salary banding for each specialist. Workforce costs assumed to grow 1% pa. Doctor salary equivalent to band 9, Nurse Specialist – 50% band 7 50% band 6, Nurse Generalist – 50% band 6 50% band 5, Nurse Basic – band 4, AHP – band 5, Social Care Worker – band 4, MHP – band 5, Formal Carer - £16209 - £17955 based on HCC data, Pharmacist – band 6, Care navigator – band 5, Paramedic – band 6, Wellness coach – band 4

<sup>2</sup> Excludes GPs working in MIU and GPwSIs providing specialist OP care

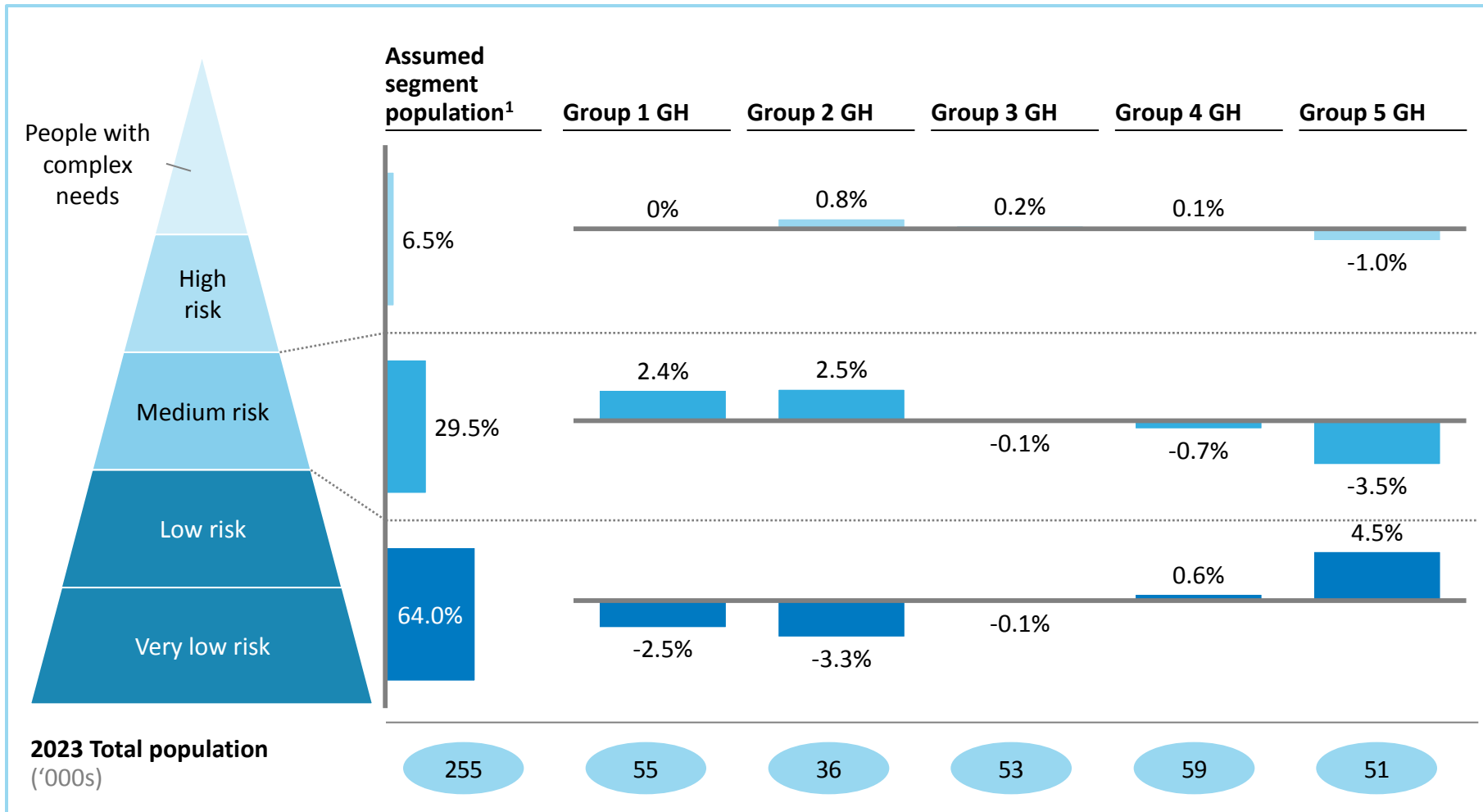
<sup>3</sup> Includes health care assistants

Source: HES 2016/17, Agenda for Change 2017/18, Greater Huddersfield and Calderdale CCG capacity model

# Greater Huddersfield localities 1 and 2 may require more proportionately

## 2 more support than locality 5 which has a lower risk population

2023 Population segmentation variation<sup>1</sup> by locality (%)



1 Percentage changes represent deviation for each locality from the total population segment size

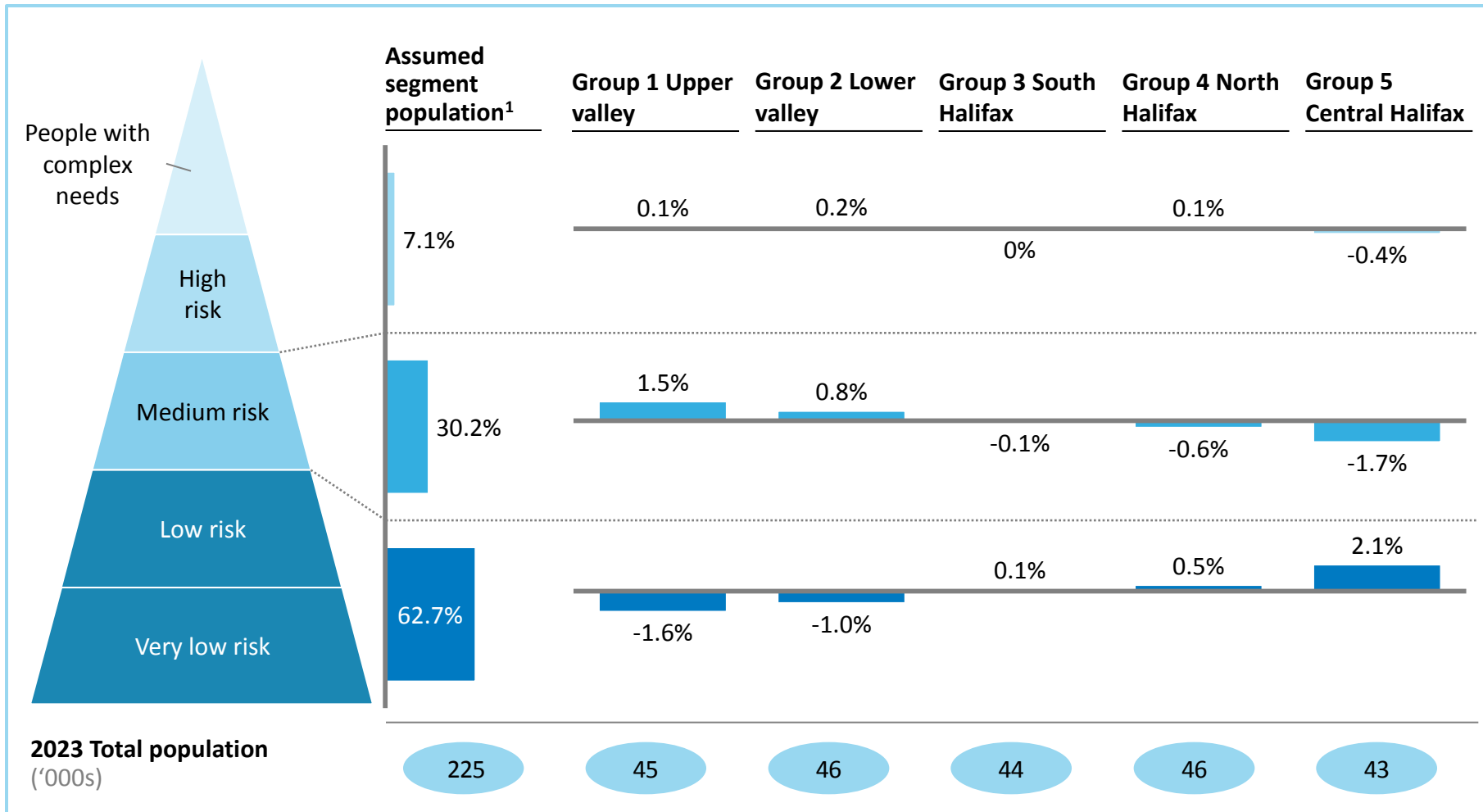
# In Greater Huddersfield, based on locality population needs future workforce requirements could look as follows

HIGHLY PRELIMINARY



# Calderdale localities 1 and 2 may require more proportionately more support than locality 5 which has a lower risk population

2023 Population segmentation variation<sup>1</sup> by locality (%)



<sup>1</sup> Percentage changes represent deviation for each locality from the total population segment size



# In Calderdale, based on locality population needs future workforce

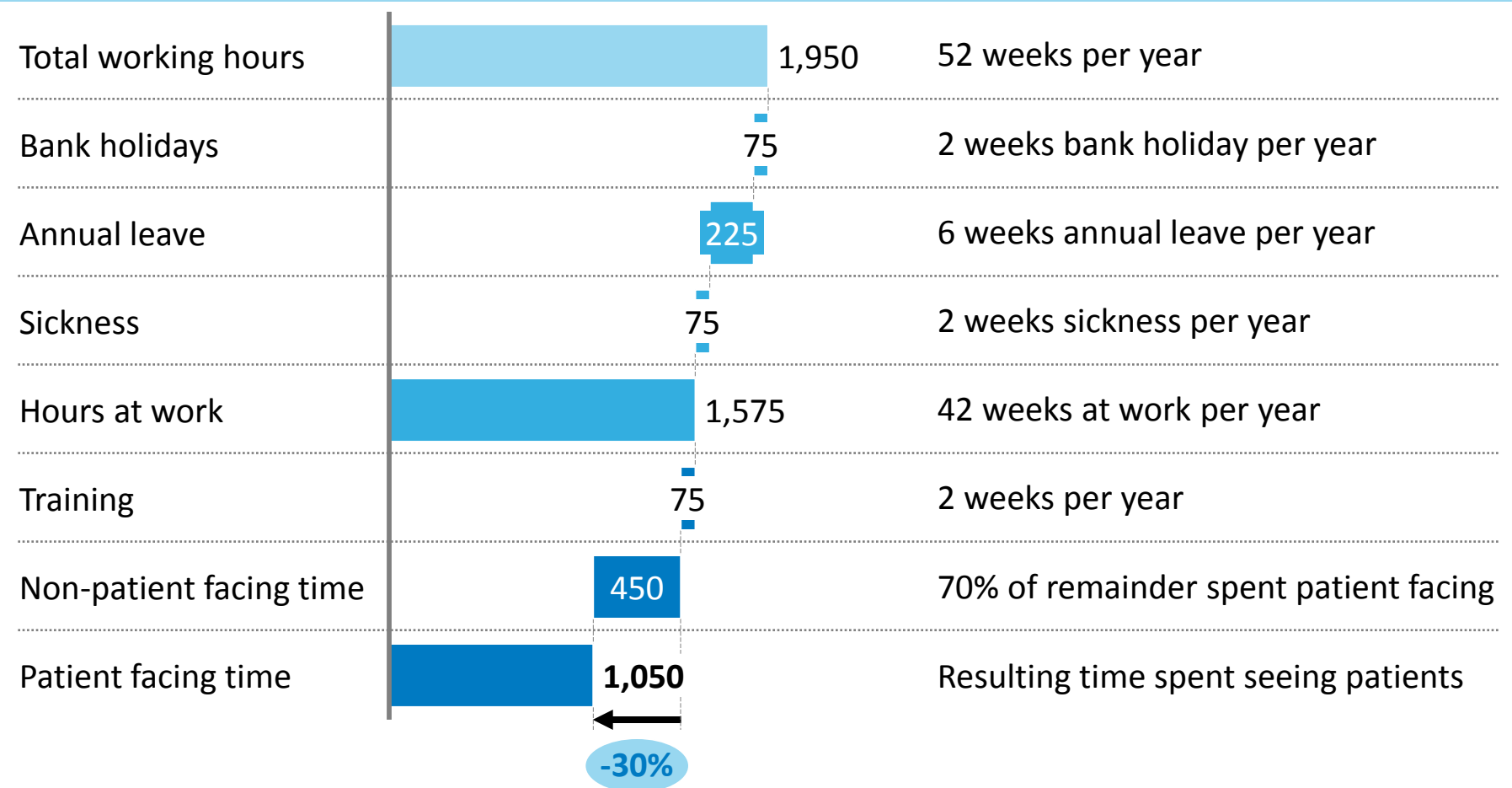
## 2 requirements could look as follows

HIGHLY PRELIMINARY



## 2 Bottom-up FTE requirement modelling assumes 70% of staff hours at work are patient facing

**Staff working hours**, assuming 37.5 hours worked per week (9am – 5.30pm with one hour break)

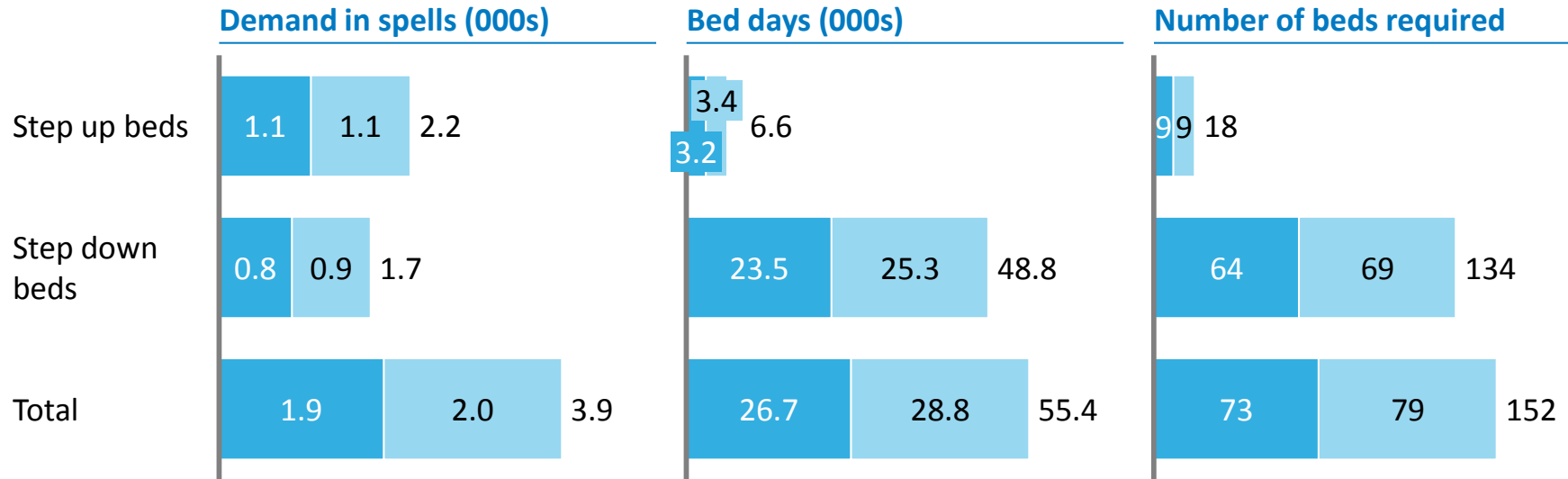


A similar methodology will be used to calculate the patient facing time of all clinical staff

### 3 In the new integrated care model, approximately 169 community beds will be required to provide intermediate care

■ Calderdale CCG   ■ Greater Huddersfield CCG

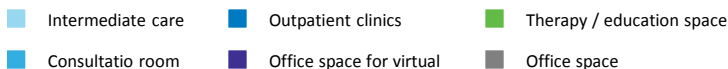
#### Intermediate care bed demand in new model of care, 2023



Current number of beds: 87

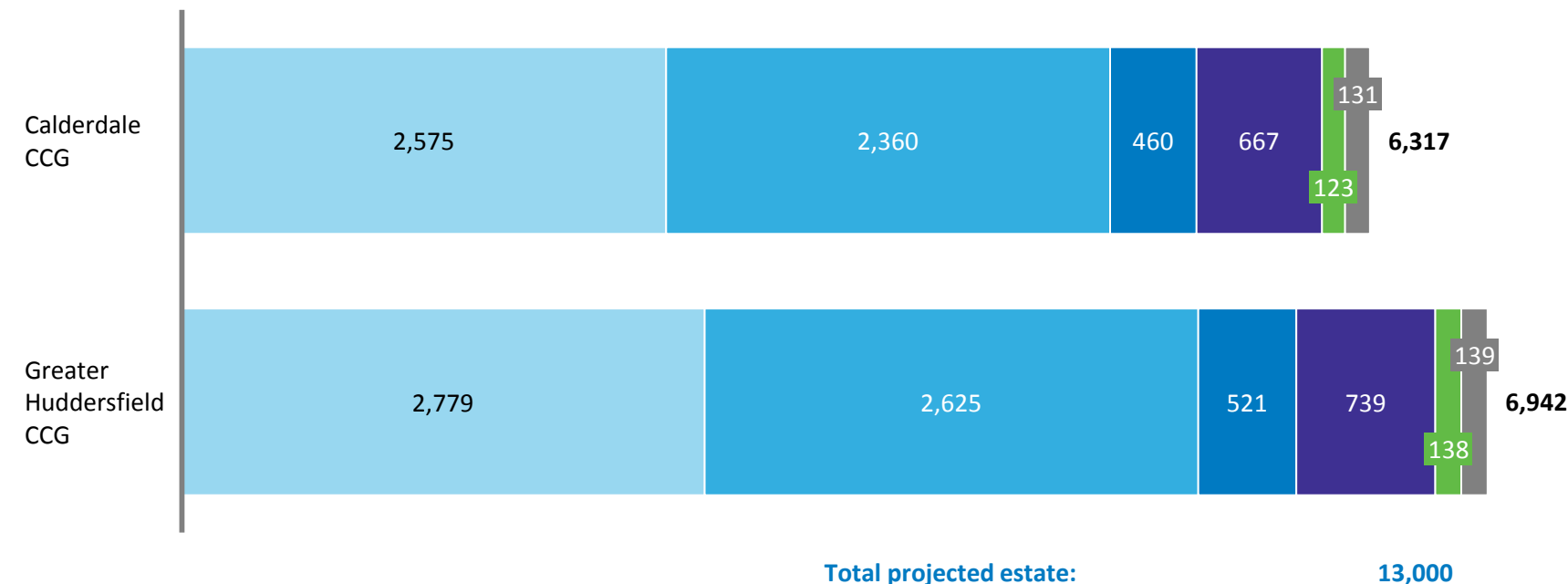
- In 2023, Greater Huddersfield and Calderdale is projected to have 60,000 acute non-elective admissions
- The **cost of a growth in intermediate care beds from 87 to 152 could be around £2.4 million**, assuming £100 per bed day
- Step up care demand assumed to be equivalent to 1 in 10 avoided non-elective admissions a year
- Step down care demand is assumed once yearly for 5% of the high risk population (60% of admitted); 50% delivered in an NHS building, and 1% of medium risk population; 65% delivered in NHS building
- Temporary step up care length of stay assumed to be 3 days. Step down care length of stay assumed to be 28 days
- Full occupancy assumed for step up and step down beds

# 4 In the new model of care, Calderdale and Greater Huddersfield CCGs require ~13,000m<sup>2</sup> of community estate



## Potential community estate required<sup>2</sup>

Projected 2023, m<sup>2</sup>



- In the new model of care, requires ~13,000m<sup>2</sup> of community estate in order to deliver community care (including primary care, intermediate care, preventative care and MIUs/ UCCs)
- This is XX than the current available estate
- However, this is the minimum viable estate as it does not take into account scale considerations for efficiency & does not include diagnostics estate

1 Only includes community hospitals shown, for which data was available. Some estate at Andover and LNFH is currently used for acute services

2 This excludes estate required for diagnostics, estate calculated based on 9 m<sup>2</sup> for a consultation room/therapy room/MIU consultation room, 3 m<sup>2</sup> for a unit of open plan office space, 20m<sup>2</sup> for an MDT room. Circulation space e.g. for corridors, receptions and toilets, were included with a multiplying factor of x2.

Step up care demand assumed to be equivalent to 1 in 10 avoided non-elective admissions a year. Step down care demand is assumed once yearly for 5% of the high risk population (60% of admitted); 50% delivered in an NHS building, and 1% of medium risk population; 65% delivered in NHS building. Temporary step up care length of stay assumed to be 3 days. Step down care length of stay assumed to be 28 days. Full occupancy assumed for step up and step down beds

Calculations based on projected 2023 activity in MIU's/UCC's, given projected growth and shifts of activity into the community. Assumes opening hours of 16 hours, 7 days a week

SOURCE: Previous work in a similar healthcare system, projected activity based on population projections from ONS database and current activity data from Calderdale and Greater Huddersfield CCGs

# Contents

---

Annexe 1. What a top-performing out-of-hospital system could look like in Calderdale and Greater Huddersfield

Annexe 2. Plans assessed as part of this report

Annexe 3. Assessment of the impact of existing plans against the total potential

Annexe 4. Qualitative assessment of existing plans against best practice

Annexe 5. Capacity required to produce a top-performing out-of-hospital system

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# Calderdale and Greater Huddersfield have already identified localities of 30k-50k that will be the basis of primary care networks and community service hubs

<u>Locality</u>	<u>Practice name</u>
Group 1 GH	Oaklands Health Centre
Group 1 GH	Honley Surgery
Group 1 GH	Elmwood Family Doctors
Group 1 GH	Slaithwaite Health Centre
Group 1 GH	Meltham Group Practice
Group 1 GH	Colne Valley Family Doctors
Group 2 GH	Dearne Valley Health Centre
Group 2 GH	Skelmanthorpe Family Doctors
Group 2 GH	Lepton and Kirkheaton
Group 2 GH	Kirkburton Health Centre
Group 2 GH	Shepley Health Centre
Group 3 GH	New Street and Netherton
Group 3 GH	Meltham Road Surgery
Group 3 GH	Thornton Lodge Surgery
Group 3 GH	Fieldhead Surgery
Group 3 GH	Crosland Moor Group Practice
Group 3 GH	Newsome Surgery
Group 3 GH	Paddock & Longwood Family Practice
Group 3 GH	Lockwood Surgery
Group 4 GH	The Grange Group Practice
Group 4 GH	Woodhouse Hill Surgery
Group 4 GH	Fartown Green Road Surgery (Dr
Group 4 GH	Bradford Road Surgery
Group 4 GH	Marsh Surgery
Group 4 GH	Westbourne Surgery
Group 4 GH	Lindley Group Practice
Group 4 GH	Lindley Village Surgery
Group 4 GH	Birkby Health Centre
Group 4 GH	Nook Surgery
Group 5 GH	The Whitehouse Centre
Group 5 GH	Greenhead Family Doctors
Group 5 GH	Dr Glencross practice
Group 5 GH	University Health Centre
Group 5 GH	Dalton Surgery
Group 5 GH	Waterloo Health Centre
Group 5 GH	The Junction Surgery
Group 5 GH	Almondbury Surgery

<u>Locality</u>	<u>Practice name</u>
Group 1 C - Upper Valley	Hebden Bridge Group Practice
Group 1 C - Upper Valley	Todmorden Group Practice
Group 1 C - Upper Valley	Church Lane
Group 2 C - Lower Valley	Longroyde Surgery
Group 2 C - Lower Valley	Northolme & Kos
Group 2 C - Lower Valley	Rastrick Health Centre
Group 2 C - Lower Valley	Rydings Hall
Group 2 C - Lower Valley	Southowram Surgery
Group 2 C - Lower Valley	Bankfield Surgery
Group 3 C - South Halifax	Brig Royd Surgery
Group 3 C - South Halifax	Burley Street
Group 3 C - South Halifax	Meadow Dale Group Practice
Group 3 C - South Halifax	Stainland Road
Group 3 C - South Halifax	Station Road Surgery
Group 3 C - South Halifax	Beechwood Surgery
Group 4 C - North Halifax	Caritas Woodside Surgery
Group 4 C - North Halifax	Keighley Road Surgery
Group 4 C - North Halifax	Lister Lane Surgery
Group 4 C - North Halifax	Plane Trees Group Practice
Group 4 C - North Halifax	Boulevard Medical Practice
Group 5 C - Central Halifax	Horne Street Surgery
Group 5 C - Central Halifax	King Cross Surgery
Group 5 C - Central Halifax	Rosegarth Surgery
Group 5 C - Central Halifax	Queens Road Surgery
Group 5 C - Central Halifax	Park Community Practice
Group 5 C - Central Halifax	Spring Hall Surgery

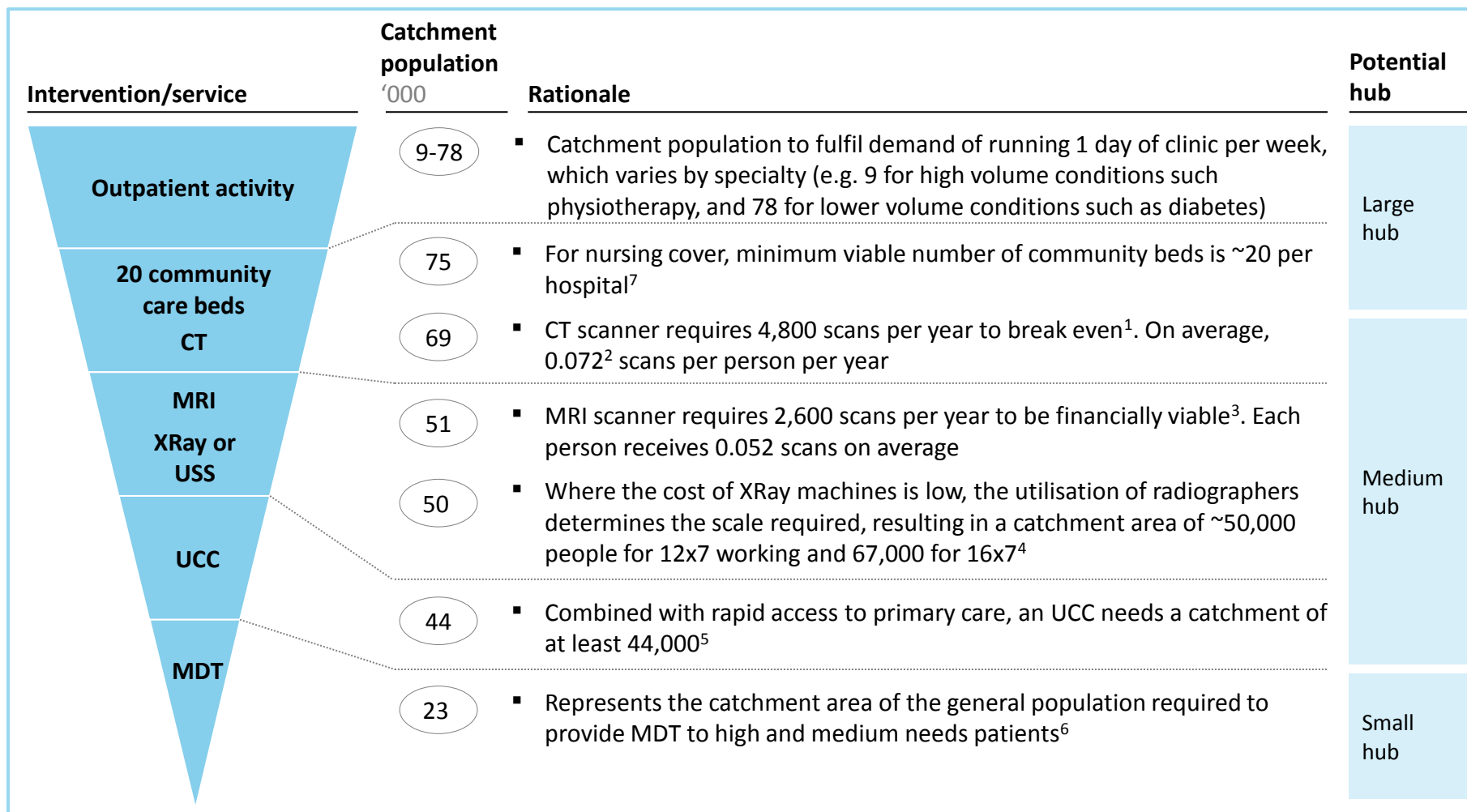
# Calderdale and Greater Huddersfield should consider how best to design community hubs to serve the localities they have designed

Localities of 30k-50k have been defined

		GP practice (8-10k)	Small hub (25k+)	Medium hub (50k+)	Large hub (75k+)
Proactive care	MDT		✓	✓	✓
	Case management		✓	✓	✓
	Care coordination		✓	✓	✓
Access to care	Access to OP		✗	✓	✓
	Access to UCC			✓	✓
	Access to urgent primary care	✗	✗	✓	✓
	Routine primary care	✓	✓	✓	✓
Care transition	Intermediate beds				✓

- Large hubs provide the largest range of services to the underlying population, with decreased access as a trade-off
- Small health hubs can be co-located with GP practices to increase efficiency
- A series of smaller hubs, with access to fewer UCCs, could serve the system's choice to cover populations of 30k-50k

# The scale of a locality is related to the services and interventions that a community hub based there can provide



1 Based on staff costs of £285k, fixed costs of £190k (£60k equipment depreciation, £60k maintenance, £75k building depreciation/ other costs), with an additional £23 for supplies per scan

2 Taken from WH/NHCCG data and HHFT radiology data

3 Based on staff costs of £285k, fixed costs £255k per year (£90k equipment depreciation, £90k maintenance, £75k building depreciation/ other costs), with an additional £21 for supplies per scan

4 Assuming 4 procedures an hour and open for 52 weeks per year with each pers on receiving 0.346 procedures per year on average

5 Based on the number of doctor and physical health consultations required for 'rapid access to urgent care' from the New Model of Care, and incorporating minor and standard emergency activity

6 Assumes scaled for the professionals needed 100% of the time, and that minimum viable volume is 1 4 hour sitting per week. If virtual MDT is used, then service may be provided outside a hub



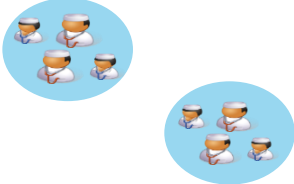

7 Note that it may be more viable to co-located 2 or more wards, increasing the catchment population by the relevant multiple



# Scale requirements under the model of care can be represented for different catchment areas

## Minimum estate required for different catchment areas

PRELIMINARY

	GP Premises (8,000 - 10,000)	Small hub (25,000+)	Medium hub (50,000+)	Large hub (75,000+)
<b>Unit of measurement</b>				
<b>Enhanced primary care<sup>1</sup></b>	▪ 99 m <sup>2</sup> of estate required	• 252 m <sup>2</sup> of estate required	▪ 476 m <sup>2</sup> of estate required	▪ 714 m <sup>2</sup> of estate required
<b>Radiology<sup>2</sup></b>	▪ Service not currently scalable	▪ Service not currently scalable	▪ 125 m <sup>2</sup> of estate required	▪ 240 m <sup>2</sup> of estate required
<b>UCC/MIU<sup>3</sup></b>	▪ Service not currently scalable	▪ Service not currently scalable	▪ 256 m <sup>2</sup> of estate required	▪ 384 m <sup>2</sup> of estate required
<b>Outpatients</b>	▪ Service not currently scalable	▪ 86 m <sup>2</sup> of estate required	▪ 173 m <sup>2</sup> of estate required	▪ 259 m <sup>2</sup> of estate required
<b>Intermediate care beds</b>	▪ Service not currently scalable	▪ Service not currently scalable	▪ Service not currently scalable	▪ 690 m <sup>2</sup> of estate required
<b>Total</b>	▪ <b>99 m<sup>2</sup></b> of estate required	▪ <b>339 m<sup>2</sup></b> of estate required	<b>1030 m<sup>2</sup></b> of estate required	▪ <b>2287 m<sup>2</sup></b> of estate required

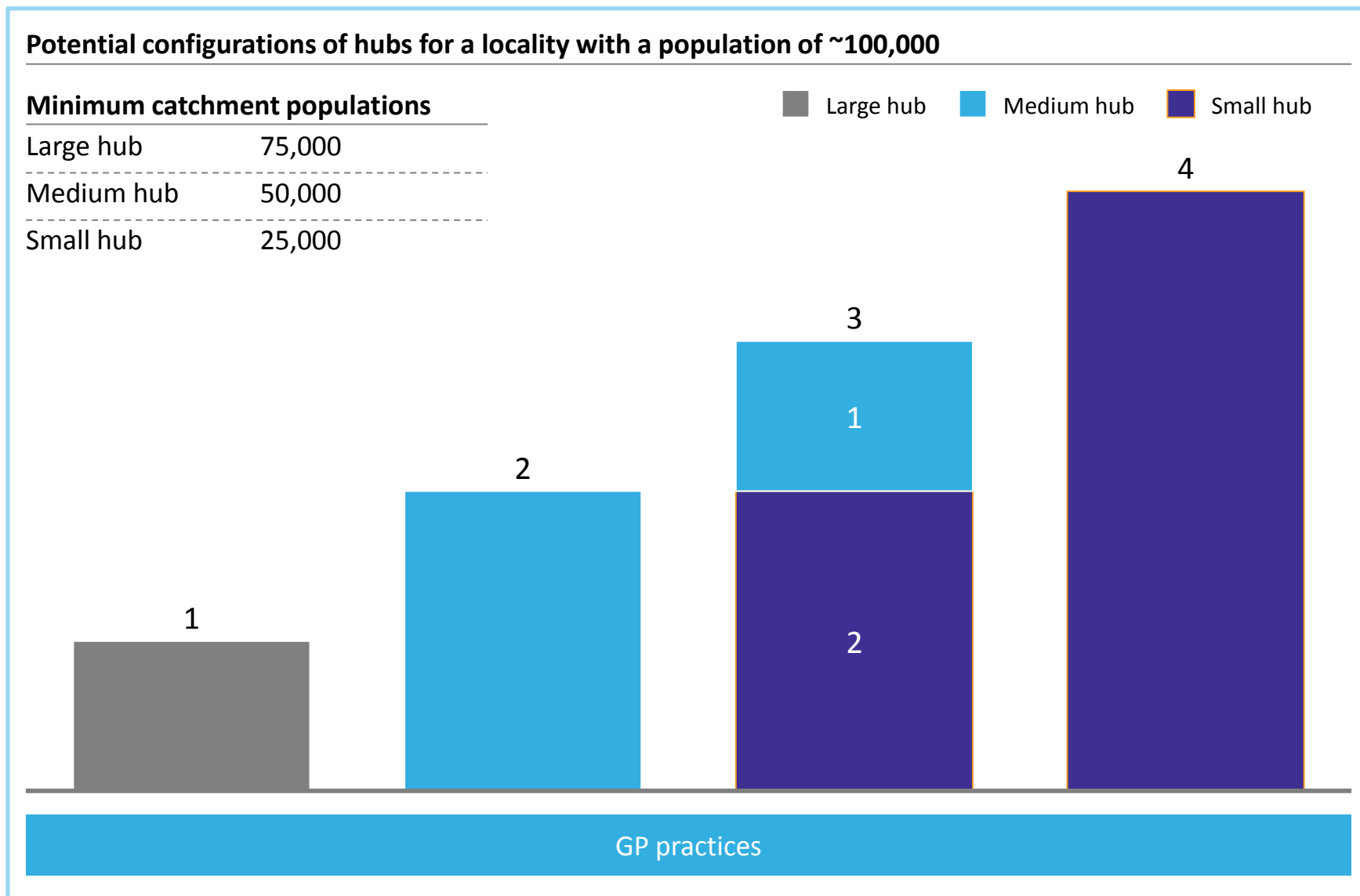
- Services provided in a large hub can be provided by using practitioners' time most efficiently, because of the high room-to-practitioner ratio
- Efficiency for services provided on established GP premises may be limited by space restrictions

1 Includes all proactive care services, routine primary care, and access to care

2 Assumes 1 X-ray for small hub, and optional additional CT scanner for medium and large hubs. X-ray room is 40 m<sup>2</sup>, MRI scanning room is 45m<sup>2</sup>, CT scanning room is 30m<sup>2</sup>, Control room is 25m<sup>2</sup>, Waiting area is 20m<sup>2</sup>. For a medium hub, scales suggest 1 X-ray, 1 MRI; for a large hub, 2 X-rays, 1 CT scanner, 1 MRI

3 Assumes opening hours are 16 hours a day, 7 days a week

## EXAMPLE: Possible care configuration options for a population of ~100,000.



# Contents

---

Annexe 1. What a top-performing out-of-hospital system could look like in Calderdale and Greater Huddersfield

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Annexe 3. Assessment of the impact of existing plans against the total potential

Annexe 4. Qualitative assessment of existing plans against best practice

Annexe 5. Capacity required to produce a top-performing out-of-hospital system

Annexe 6. Relationship between the size of proposed localities and services offered

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# To design, setup and pilot the new out of hospital model an implementation plan that includes implementation steps, KPIs and a view of the desired end-state

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## In the following pages we have begun to lay this out

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- 1** *Implementation steps:* Set out a clear and tangible series of steps to move the system from its current state to this desired goal. It is important to **indicate who is responsible** for each step, and the **anticipated timeline**. The plan should be designed to encourage early progress on aspects of the transformation – it is important not to get held up on the planning of the end state.
- 2** *KPIs:* The system should track KPIs against each component of the implementation plan to ensure that progress is tracked, monitored and celebrated. Additionally, KPIs for financial impact and quality of care improvements should be measured.
- 3** *End-state:* Agree with all stakeholders in Greater Huddersfield and Calderdale CCGs' area the desired model for integrated care in the community, building on existing strategic frameworks.

# 1 Over the next 2-3 years the system will need to take the following steps to change its model of care

■ Changes to the model of care ■ Human factor enablers ■ Structural enablers

Element of plan	First 3 months	First year	Next 2-3 years
Remodelled patient pathway	<ul style="list-style-type: none"> <li>Pick a locality to pilot a full integrated model.</li> <li>Agree a population segmentation with locality workforce and select a segment to focus on</li> <li>Agree what fantastic care looks like for each population and the activity assumptions behind this with locality workforce</li> </ul>	<ul style="list-style-type: none"> <li>Design and trial-run model of service provision.</li> <li>Begin reorganising how lists are run in general practice</li> <li>Develop and implement care coordination function</li> <li>Start proactive daily huddles with MDTs and GPs to discuss at risk patients</li> </ul>	<ul style="list-style-type: none"> <li>Expand the pilot into other localities.</li> <li>Seek to include additional providers into model, e.g. mental health, voluntary sector</li> <li>Look to further pull out medical specialties into the community in broader outpatient redesign</li> </ul>
Workforce and training	<ul style="list-style-type: none"> <li>Decide which services will be co-located and integrated. This will likely include social services, community rehab and home teams, and district nursing</li> <li>Launch org design team development training to get staff used to working in different teams</li> </ul>	<ul style="list-style-type: none"> <li>Select system leadership for pilot</li> <li>Teams start working from same site</li> <li>Adjust team composition during the pilot to improve service provision</li> <li>Further training programs to include cross training e.g. district nurses trained in safe guarding</li> </ul>	<ul style="list-style-type: none"> <li>Train and develop generalist health workers, who can be flexibly assigned to release capacity from the specialist nurses and doctors.</li> </ul>
Estate and beds	<ul style="list-style-type: none"> <li>Identify a hub on which to collocate services (ideally in primary care)</li> </ul>	<ul style="list-style-type: none"> <li>Build out the hub for the pilot locality from existing community estate</li> <li>Evaluate potential additional intermediate capacity, look for capacity in nursing homes</li> </ul>	<ul style="list-style-type: none"> <li>Move towards the end-state bed and estate requirements to ensure that each locality is well-served, with local physical hubs.</li> </ul>
Transport		<ul style="list-style-type: none"> <li>Understand any limitations and difficulties in existing transport infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Work with local authorities to implement creative solutions as necessary: for example, provision of specific community buses.</li> </ul>

# 1 Seven enablers will support the cultural and structural changes required to make interventions successful

	Current situation	Where the system needs to be
<b>Organizational design</b> 	<ul style="list-style-type: none"> <li>Localities designed around networks and meetings of GPs</li> </ul>	<ul style="list-style-type: none"> <li>Local hubs integrate all of primary, social and community care with a single accountable manager in each locality</li> </ul>
<b>System-wide decision making, ownership, accountability</b> 	<ul style="list-style-type: none"> <li>Partnership boards used as decision making body across localities</li> </ul>	<ul style="list-style-type: none"> <li>Partnership board used to hold locality managers to account, but not for day-to-day action</li> <li>Strong executive sponsorship in all partners</li> </ul>
<b>Change management for patients and staff</b> 	<ul style="list-style-type: none"> <li>Early engagement with GP partnerships started</li> </ul>	<ul style="list-style-type: none"> <li>Bold clinical leadership and role modelling</li> <li>Engagement with population and patients so that they understand how to navigate the new system</li> </ul>
<b>Funding</b> 	<ul style="list-style-type: none"> <li>Plans for new model of care to be funded under existing budgets</li> </ul>	<ul style="list-style-type: none"> <li>Early investment to ensure that pilots are successful</li> <li>Locality manager has a pooled budget</li> </ul>
<b>Design of contractual incentives and reimbursement models</b> 	<ul style="list-style-type: none"> <li>Contractual arrangements for locality model still being decided, although an Alliance framework in Calderdale is proposed</li> </ul>	<ul style="list-style-type: none"> <li>Incentives aligned across all players, in hospital and out, to maximise care quality and value for the CCG</li> </ul>
<b>Information sharing</b> 	<ul style="list-style-type: none"> <li>Limited current frameworks for sharing and agreeing performance metrics quickly and easily</li> </ul>	<ul style="list-style-type: none"> <li>Operational and performance information quickly between all system partners</li> <li>Clinical information shared between all health professionals as appropriate in the integrated teams</li> </ul>
<b>Digital system and analytics capability development</b> 	<ul style="list-style-type: none"> <li>CCGs will be able to use integrated EHRs when LHCRE is complete, but progress is slow</li> <li>Digital and mobile tools are already used in places to make remote assistance to, and monitoring of, patients simple and cost effective</li> </ul>	<ul style="list-style-type: none"> <li>LHCRE rolled out into routine use, with electronic records accessible to all relevant care staff</li> <li>Growing capability to turn available data into valuable digital operational tools and reports</li> </ul>

# 1 Implementation plan: Outline of steps to get to the end-state (2/3)

■ Changes to the model of care
 ■ Human factor enablers
 ■ Structural enablers

Element of plan	First 3 months	First year	Next 2-3 years
<b>Organizational design</b>	<ul style="list-style-type: none"> <li>Hire a fantastic, hands-on managerial lead for the pilot. They need excellent relationship skills, and outstanding drive and leadership.</li> </ul>	<ul style="list-style-type: none"> <li>Set up a clear structure for shared decision making and accountability across the system.</li> <li>Start to finalise the team and organisational model in the pilot, then plan how to use this for the next localities.</li> </ul>	<ul style="list-style-type: none"> <li>Build out a clear operational structure to oversee all localities, that reports into the decision-making body.</li> </ul>
<b>System-wide decision making, ownership, accountability</b>	<ul style="list-style-type: none"> <li>Start conversations with senior leaders across the whole system to ensure committed support from all partners.</li> </ul>	<ul style="list-style-type: none"> <li>Pro-actively use executive support to ensure problems and difficulties are overcome.</li> <li>Use regular meetings of the steering committee and decision-making body to supportively keep the pilot on track.</li> </ul>	<ul style="list-style-type: none"> <li>Standardise process for joint decision making.</li> <li>Work to ensure that all system partners have mutual trust over which decisions can be taken locally, and which need joint approval.</li> </ul>
<b>Change management for patients and staff</b>	<ul style="list-style-type: none"> <li>Ensure full, committed support of all executives in the system</li> <li>GP engagement on the model so they feel part of the community hub not just referring into it</li> <li>Create a narrative for patients and staff on why integration is going to make a difference</li> </ul>	<ul style="list-style-type: none"> <li>Focus leadership and engagement efforts on the staff involved in the pilot site</li> <li>Ensure that GPs are fully bought in and remain committed.</li> <li>Share information with patients in the pilot locality about the changes to the care model they will experience.</li> </ul>	<ul style="list-style-type: none"> <li>Engage local populations on how the pilot programme will be rolled out.</li> <li>Work hard on bringing the clinical and care teams into the new model. Passionate role models for the new methodology will be critical, as will sharing the success from the pilot.</li> </ul>

# 1 Implementation plan: Outline of steps to get to the end-state (3/3)

■ Changes to the model of care ■ Human factor enablers ■ Structural enablers

Element of plan	First 3 months	First year	Next 2-3 years
<b>Funding</b>	<ul style="list-style-type: none"> <li>Seek to release additional resources to invest early-on in the pilot.</li> </ul>	<ul style="list-style-type: none"> <li>Agree stable funding sources for the pilot and future expansion, sharing costs across all partners.</li> <li>Agree a pooled budget to maximise use of system funds</li> </ul>	<ul style="list-style-type: none"> <li>Review funding model based on early measured impact from the pilots.</li> <li>Use measured impact from the pilot as part of bids for additional national funding.</li> </ul>
<b>Design of contractual incentives and reimbursement models</b>		<ul style="list-style-type: none"> <li>Focus on quickly creating clear contracts, where necessary, to get the project off the ground.</li> </ul>	<ul style="list-style-type: none"> <li>Build in demand reduction targets to providers' contracts, being specific over target patient populations.</li> </ul>
<b>Information sharing</b>	<ul style="list-style-type: none"> <li>Decide which clinical and operational performance measures can and should be monitored routinely.</li> <li>This may require additional effort to measure in a timely fashion, rather than relying on national statistics.</li> <li>Identify any additional IG processes that need to be completed.</li> </ul>	<ul style="list-style-type: none"> <li>Make regular case reviews, across all teams, a routine part of working at the pilot site.</li> <li>Start to regularly collect and share latest performance metrics across the system.</li> <li>Create dashboard to monitor patient flows across the system</li> </ul>	<ul style="list-style-type: none"> <li>Give all health workers appropriate access to electronic health records.</li> <li>Develop standardised procedures and fora to share performance across all system partners.</li> </ul>
<b>Digital system development</b>		<ul style="list-style-type: none"> <li>Engage the team running the LHCRE bid, to ensure that the integrated care model will fully benefit from existing plans.</li> <li>Make use of most effective digital tools already in-use: particularly tele-tracking systems for support of patients with LTCs.</li> </ul>	<ul style="list-style-type: none"> <li>Identify the most important areas for investment in clinical or operational digital tools.</li> </ul>



## 2 Implementation plan: suggestions for KPIs to track

Element of plan	Proposed KPIs <span style="float: right;"> <span style="color: #ADD8E6;">■</span> Changes to the model of care            <span style="color: #0070C0;">■</span> Human factor enablers            <span style="color: #0070C0;">■</span> Structural enablers         </span>
Remodelled patient pathway	<p>Track pathway metrics and health outcomes: <b>the system should not rely on national data</b>, as it wants to be able to demonstrate performance improvements as soon as possible. These metrics could include:</p> <ul style="list-style-type: none"> <li>▪ NEL admissions and bed days</li> <li>▪ A&amp;E attendances</li> <li>▪ Hospital length of stay</li> <li>▪ GP appointments and referrals to secondary care</li> <li>▪ Usage of intermediate care services, both bedded and non-bedded</li> <li>▪ Number of people in long term residential care and in receipt of home care packages</li> </ul>
Workforce and training	<ul style="list-style-type: none"> <li>▪ Number of integrated hubs up and running in localities, and number of different services integrated within these</li> <li>▪ Staff shortages or gaps against the end-state role requirements including primary care vacancies and locum spend</li> <li>▪ Qualitative analysis of staff satisfaction levels</li> </ul>
Estate and beds	<ul style="list-style-type: none"> <li>▪ Usage of existing estate and beds, in comparison to desired end-state vision.</li> </ul>
Transport	<ul style="list-style-type: none"> <li>▪ Patient and home carer satisfaction with travel time and arrangements.</li> </ul>
Organizational design	<ul style="list-style-type: none"> <li>▪ Informal: reported satisfaction from workforce over organisational model.</li> </ul>
System-wide decision making, ownership, accountability	<ul style="list-style-type: none"> <li>▪ Informal: reported satisfaction from system leaders with transparency of decisions.</li> </ul>
Change management for patients and staff	<ul style="list-style-type: none"> <li>▪ Engagement from patients and staff, as measured by formal or informal feedback surveys.</li> </ul>
Funding	<ul style="list-style-type: none"> <li>▪ Secured funding for current and future operations that are explicitly linked to the integrated care model.</li> </ul>
Design of contractual incentives and reimbursement models	<ul style="list-style-type: none"> <li>▪ Total value (in contract value and in health outcomes) of demand-reduction and performance targets built into contracts</li> <li>▪ Patient reported outcomes</li> </ul>
Information sharing	<ul style="list-style-type: none"> <li>▪ Informal: reported satisfaction from system partners on transparency of information within the system.</li> </ul>
Digital system development	<ul style="list-style-type: none"> <li>▪ Proportion of the population with a functional EHR.</li> <li>▪ Proportion of the elderly population with a completed EPACC record.</li> <li>▪ Proportion of clinical and care staff that can access patients' EHRs .</li> </ul>

# Contents

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Annexe 1. What a top-performing out-of-hospital system could look like in Calderdale and Greater Huddersfield

Annexe 2. Plans assessed as part of this report

Annexe 3. Assessment of the impact of existing plans against the total potential

Annexe 4. Qualitative assessment of existing plans against best practice

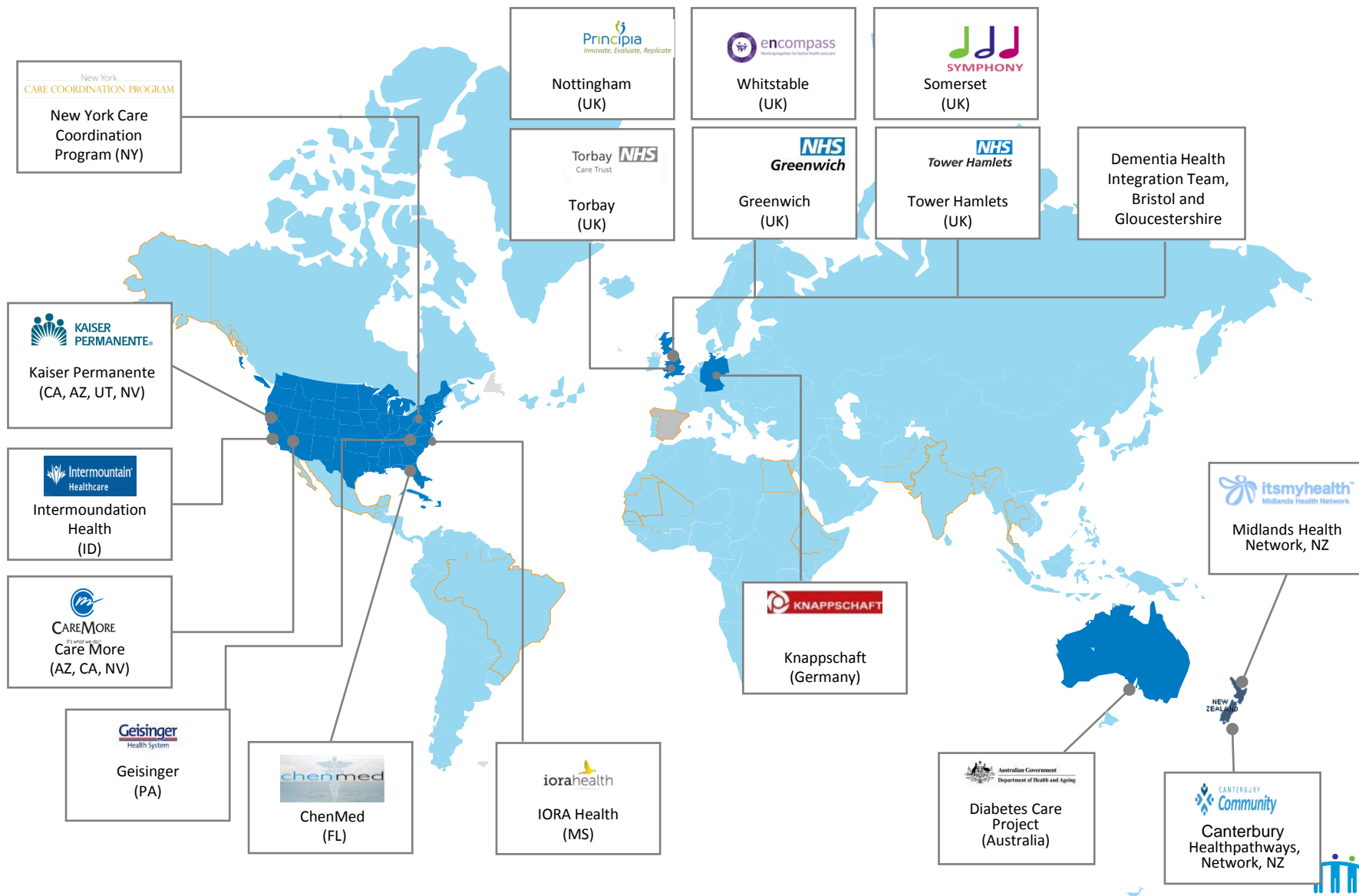
Annexe 5. Capacity required to produce a top-performing out-of-hospital system

Annexe 6. Relationship between the size of proposed localities and services offered







Annexe 7. Implementation plans for the development of an integrated care system

**Annexe 8. Case studies of top-performing out-of-hospital systems**






# There is substantial evidence that transforming out-of-hospital care can reduce admissions, save costs and provide better care for patients





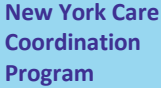


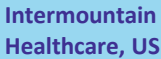

## Case study summary (1/4)

Location	Core elements of model	Impact	Source
<p>NHS Nottingham</p> 	<ul style="list-style-type: none"> <li>Integrated health and social care MCP model in Principia</li> <li>PACS model in Mid Notts, with an alliance between health and social care providers</li> </ul>	<ul style="list-style-type: none"> <li>Nottingham CCGs have some have some of the lowest non-elective bed days for over 65s in the country (HES 2016/7)</li> </ul>	<ul style="list-style-type: none"> <li>King's Fund</li> <li>HES 2016/17</li> </ul>
<p>Encompass</p> 	<ul style="list-style-type: none"> <li>High-intensity integrated case management, care planning and MDT support for high-needs patients</li> <li>Clinics to proactively support medium-needs and LTC patients</li> <li>Focus on delivering healthier and more active communities</li> </ul>	<p>In Year 1:</p> <ul style="list-style-type: none"> <li>5% reductions in emergency admissions and also in A&amp;E minor attendance</li> <li>27% reduction in short-stay admissions</li> <li>25% reduction in catheter admissions</li> </ul>	<ul style="list-style-type: none"> <li>ENCOMPASS website and reports</li> </ul>
<p>Symphony</p> 	<ul style="list-style-type: none"> <li>Networks of primary care practices arranged around hubs providing diagnostics, appointments with specialists, urgent and out-of-hours care</li> <li>Patient risk stratification</li> <li>Multi-disciplinary, nurse led care with care plans</li> </ul>	<ul style="list-style-type: none"> <li>A&amp;E attendance reduced by 29%</li> <li>Emergency admissions reduced by 33%</li> <li>aLoS fell from 10 to 5 days</li> </ul>	<ul style="list-style-type: none"> <li>NHS England 2016</li> <li>Symphony presentation to PSNC, 2016</li> <li>South Somerset Council</li> <li>King's Fund</li> </ul>
<p>NHS Torbay integrated care</p> 	<ul style="list-style-type: none"> <li>Multi-disciplinary care teams with merger of acute, community and social care providers</li> <li>Care coordinator role and individual proactive care plans</li> <li>Rapid response team</li> </ul>	<ul style="list-style-type: none"> <li>Care package <b>within 28 days</b> of assessment increased by <b>45%</b></li> <li><b>Non-elective inpatient bed</b> use in <b>over-65s</b> population <b>reduced by 29%</b>; <b>length of stay reduced by 19%</b></li> </ul>	<ul style="list-style-type: none"> <li>Torbay and South Devon Trust website, 2015</li> <li>King's Fund, Peter Thistlethwaite, March 2011</li> </ul>
<p>NHS Greenwich</p> 	<ul style="list-style-type: none"> <li>Intermediate health and social care teams:             <ul style="list-style-type: none"> <li>Joint Emergency Team</li> <li>Community Assessment &amp; Rehabilitation</li> <li>Hospital Integrated Discharges Teams</li> <li>52 Community beds</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Year 1: admissions</b> to care homes <b>reduced by 35%</b>.</li> <li>After reablement, <b>over 60%</b> people did not require care packages</li> <li><b>&gt; 2,000</b> hospital admissions <b>avoided</b> by Joint Emergency Team</li> </ul>	<ul style="list-style-type: none"> <li>Greenwich CCG Report on integrated care in Greenwich 24/04/2014</li> </ul>
<p>NHS Tower Hamlets diabetes integrated care</p> 	<ul style="list-style-type: none"> <li>Networks of primary care practices arranged around hubs providing diagnostics, appointments with specialists, urgent and out-of-hours care</li> <li>Patient risk stratification</li> <li>Multi-disciplinary, nurse led care with care plans</li> </ul>	<ul style="list-style-type: none"> <li><b>Proportion of diabetics</b> receiving all 9 care processes increased <b>from 19.6%</b> in 2006-2007 <b>to 79.9%</b> in 2014, compared to 60.2% nationally</li> </ul>	<ul style="list-style-type: none"> <li>Interview with Tower Hamlets leadership</li> <li>CCG website</li> </ul>




## Case study summary (2/4)

Location	Core elements of model	Impact	Source
<p><b>Knappschaft Prosper integrated care program</b></p> 	<ul style="list-style-type: none"> <li>▪ Hubs of multidisciplinary providers centred around acute Trust comprising GP, rehab and social care working to agreed clinical pathways</li> <li>▪ integrated IT system and KPI monitoring</li> </ul>	<ul style="list-style-type: none"> <li>▪ Evaluation from year 1 showed:               <ul style="list-style-type: none"> <li>– <b>Reduction of ALOS by 20%</b> from 11.9 to 9.6 days</li> <li>– <b>Fall in hospitalisation rate from 9.3 to 8.1%</b></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>▪ Prosper website and Annual Report</li> <li>▪ Expert interviews</li> </ul>
<p><b>Chenmed primary care for people with complex needs</b></p> 	<ul style="list-style-type: none"> <li>▪ High-frequency consultations (minimum 1/month)</li> <li>▪ Individual care plans and care coordination</li> <li>▪ Co-location of services and GP continuity</li> <li>▪ Weekly meetings to discuss complications or hospitalizations.</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>38.2% lower hospitalization rate</b> and <b>17% lower readmissions rates</b> compared to national average</li> <li>▪ <b>90%</b> of patients would recommend service</li> </ul>	<ul style="list-style-type: none"> <li>▪ Commonwealth Fund, In Focus: Redesigning Primary Care for Those Who Need It Most, 2016</li> </ul>
<p><b>Canterbury Network</b></p> 	<ul style="list-style-type: none"> <li>▪ Over 900 co-developed clinical pathways</li> <li>▪ GP led acute demand management in community with 24 units with observation beds</li> <li>▪ Centralised nurse triage system in community</li> <li>▪ Community rehabilitation teams target reducing length of stay</li> </ul>	<ul style="list-style-type: none"> <li>▪ Weighted <b>acute admissions</b> are <b>30% lower</b> than the national average</li> <li>▪ Weighted <b>emergency department (ED) attendance</b> rate that is <b>25% below</b> the national average</li> </ul>	<ul style="list-style-type: none"> <li>▪ King's Fund, 2013</li> <li>▪ HFMA, Lessons in integration, 31 May 2017</li> </ul>
<p><b>Geisinger, US</b></p> 	<ul style="list-style-type: none"> <li>▪ Nurse care coordinator/navigator per PCMH practice</li> <li>▪ 24/7 phone access</li> <li>▪ Tele-monitoring</li> <li>▪ Patient access to EHR to view lab results and educational content</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>18% reduction</b> in hospital <b>admissions</b>, <b>36% reduction</b> in hospital <b>readmissions</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ ACHP Strengthening Primary Care for Patients: Geisinger Health Plan, 2013</li> </ul>
<p><b>CareMore, US</b></p> 	<ul style="list-style-type: none"> <li>▪ Care is delivered at centralized clinics by MDTs with nurse led care coordination</li> <li>▪ High-risk patients may be enrolled in one or more disease management programs</li> <li>▪ Hospital based staff focus on avoiding admissions, readmissions by doing follow-up</li> </ul>	<ul style="list-style-type: none"> <li>▪ Readmission rate fell <b>from 16.1%</b> in 2011 <b>to 13.9%</b> in 2015</li> <li>▪ In 2015: <b>20 percent fewer</b> hospital admissions, <b>23 percent fewer</b> bed days, and a <b>4 percent shorter length-of-stay</b> than beneficiaries Medicare fee for service members</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Commonwealth Fund, CareMore: Improving Outcomes and Controlling Health Care Spending for High-Needs Patients, 2017</li> </ul>

## Case study summary (3/4)

Location	Core elements of model	Impact	Source
 	<ul style="list-style-type: none"> <li>▪ Around the clock telephone access to nurses for clinical advice</li> <li>▪ Plan-wide electronic health records (EHR)</li> <li>▪ Acute and emergency clinical pathways and protocols have been developed</li> <li>▪ Ambulatory “transitional care” programs</li> </ul>	<ul style="list-style-type: none"> <li>▪ SCPMG Heart Failure Transitional Care Program that <b>decreased 90-day readmissions by 30%</b> (2006-10)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Centre for Health Policy at Brookings, Kaiser Permanente – California: A Model for Integrated Care for the Ill and Injured 2015</li> </ul>
 	<ul style="list-style-type: none"> <li>▪ Integrated care programme for patients with severe mental illness</li> <li>▪ Regional single point of access</li> <li>▪ Active case management</li> <li>▪ Coordination with third parties to develop wrap-around services</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>31% increase</b> in patients in gainful activity; <b>25% fewer arrest</b>;</li> <li>▪ <b>53% reduction</b> in rate of physical harm to others;</li> <li>▪ <b>54% reduction</b> in self-harm;</li> <li>▪ <b>46% reduction</b> in ER visits;</li> <li>▪ <b>53% reduction</b> in inpatient visits</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Resource Center Symposium The ABCs... and XYZs of Behavioral Health Transformation in New York State 2013</li> </ul>
	<ul style="list-style-type: none"> <li>▪ Multi-disciplinary team does outreach care coordination, discharge support for people with dementia</li> <li>▪ Early diagnosis programmes at GP surgeries</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improved diagnosis rates <b>from 49.8%</b> in Bristol <b>and 47.8%</b> in South Gloucestershire (2012/13) <b>to 73.2% and 60.7%</b> respectively (2017)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Bristol Health Partners website</li> </ul>
 	<ul style="list-style-type: none"> <li>▪ Embedding RN care managers in primary care practices to do case management and support high risk and after-hours coverage</li> <li>▪ Enhancing EHR functionality to support chronic care coordination</li> <li>▪ High-cost patients go to small clinics and eventually “graduate” into a regular clinics</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>10% reduction</b> in hospitalizations, with <b>even greater reductions</b> among the subset of patients with <b>complex chronic illnesses</b></li> <li>▪ For patients with <b>diabetes, 30.5% of PCMH group</b> were hospitalized <b>vs. 39.2% of controls</b></li> </ul>	<ul style="list-style-type: none"> <li>▪ Patient-Centered Primary Care Collaborative, The Outcomes of Implementing Patient-Centered Medical Home Interventions 09</li> </ul>

## Case study summary (4/4)

Location	Core elements of model	Impact	Source
<p>Iora Health, US</p> 	<ul style="list-style-type: none"> <li>▪ Rely heavily on non-clinical workforce</li> <li>▪ Health coaches, who provide practical and emotional support to patients and health edu</li> <li>▪ Data-centric approach to risk stratification and case management</li> </ul>	<ul style="list-style-type: none"> <li>▪ <b>Reduced hospitalizations</b> and <b>emergency room visits</b>, by <b>35%</b> and <b>23%</b>, respectively.</li> </ul>	<p>The Commonwealth Fund. “Transforming Care: Reporting on Health System Improvement” (2016)</p>
<p>Diabetes Care Project (Australia)</p> 	<ul style="list-style-type: none"> <li>▪ Flexible funding: ‘single checkbook’ for diabetes disease management</li> <li>▪ Rewards for improvement</li> <li>▪ Shared IT</li> <li>▪ New care coordinator role</li> <li>▪ Shared performance framework</li> </ul>	<ul style="list-style-type: none"> <li>▪ Percentage of participants with a <b>completed annual cycle of care</b> increased <b>from 35 percent to 53 percent</b></li> <li>▪ <b>Reduction</b> in the <b>cost of hospitalisation</b> of <b>\$461</b> per patient</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Department of Health, Australia, Evaluation Report of the Diabetes Care Project, 2015</li> </ul>
<p>Pinnacle Mindlands, NZ</p> 	<ul style="list-style-type: none"> <li>▪ GPs group into networks</li> <li>▪ 24/7 primary care, with out-of-hours centres staffed by network GPs on a rota</li> <li>▪ Increasing virtual consultations</li> </ul>	<ul style="list-style-type: none"> <li>▪ No quantified impact</li> </ul>	<ul style="list-style-type: none"> <li>▪ Nuffield Trust, Securing the future of general practice: new models of PHC</li> </ul>

# Overview: Nottinghamshire

## Why was a change in care delivery considered?

- The system identified a significant upcoming increase in older people within the area, increasing need and acuity of need, for example the growth in the number of people with learning disabilities living into older age, with dementia
- They identified the need for efficiencies through integrated health and social care and an integration with the housing sector and the wider social market
- They also identified variation in health and social care delivery where service interventions were not always evidence-led.

## What was the scope of the care model?

- The integrated care system is in development for 1 million people
- 6 CCGs, 2 acute providers, 1 NHS community and mental health trust, 1 social enterprise providing community health services, 1 ambulance trust, 2 upper-tier local authorities
- Early focus was on Greater Nottinghamshire (part of STP). Now covers whole STP

## What were the changes made?

- MCP model in Rushcliffe (Principia)
  - Health and social care integrated and joined up around populations
  - Prevention and self care
  - Some outpatients and diagnostics moved out of hospital
  - Information sharing
- PACS model in Mid Notts
  - Joined health and social care via an alliance between LA and providers
- Enhanced health in care homes model
  - Joint commissioning with LA, services including dementia outreach team

## How was the care model put in place?

- Co-production of service planning:
- Accounting for changes in social care budgets:
- Joint planning of workforce and enhancement of the role of social care
- Led by the deputy CEO of the county council
- Promote choice and control to the service user Partnerships: Fosters integration/alignment with the wider council and other partners
- Joining up data and information sharing<sup>1</sup>

## What was the impact?

- Nottingham CCGs have some of the lowest non-elective beddays for over 65s in the country (NEIP bed days for 65s, per 100,000 over-65 population: Rushcliffe 86K, Nottingham North and East 102K, Nottingham West 103K, Nottingham city 114 - compared to a UK average of 204K).

1: Data warehouse, a GP repository for clinical care (GPRCC), which has half a billion patient/citizen records. Each day, a million records are updated. One hundred percent of GPs signed up to the data sharing protocols



## Overview: NHS Whitstable multi-community partnership (ENCOMPASS)

### Why was a change in care delivery considered?

- ENCOMPASS was created to serve a population of 175,000. An aging demographic profile and increasing proportion of patients with multiple long term condition and complex needs meant that significant re-organisation of care was needed
- ENCOMPASS won **multi-community partnership (MCP) Vanguard** funding from NHS England as part of a national move towards integrated care systems

### What was the scope of the care model?

- Whitstable multi-community partnership encompasses 16 GP practices situated across Whitstable, Canterbury and Faversham
- The partnership provides 24/7 access to extended primary care and urgent care, and a range of diagnostic services
- 5 community hubs providing a wider range of services to **populations of 30,000-50,000**, including wound and catheter services, as well as intermediate care

### What were the changes made?

- Patients with most complex needs receive **high-intensity integrated case management**, with care plans and MDT support
- Condition management in local clinics for cardiology, respiratory and frailty
- Mixed, multi-specialty workforce operating from GPs and hubs
- Shared training in integrated care for care workers and specialists, with the aim of enabling care workers to access better specialist input

### How was the care model put in place?

- Piloted in August 2016, with a 10-week proof of concept
- Refined, then expanded and scaled through 2017
- Formal alliance model created with partner organisations, then establishment as an integrated accountable care partnership in October 2017

### What was the impact?

Early results in 2017 included:

- 5% reductions in emergency admissions and also in A&E minor attendance
- 27% reduction in short-stay admissions
- 25% reduction in catheter admissions

# Overview: NHS Somerset and Yeovil Hospital IPAC (Symphony)

## Why was a change in care delivery considered?

- Yeovil hospital and Somerset CCG won NHS Vanguard funding to form an integrated primary and acute care (IPAC) system
- Southern Somerset is a rural community with an ageing population. It is expected that the number of 75+ will nearly double by 2035
- Somerset was facing a GP recruitment crisis
- Appropriate and joined-up care is sometimes hard to access due to poor public transport across a series of small market towns and villages

## What was the scope of the care model?

- **Provided:** Currently only acute and primary care providers are currently signed up to the planned joint venture, but the community/mental health provider may join at a later date
- **Accountable:** The ambition is for the whole health and social care budget for the defined population to be united
- Symphony is a joint venture between the acute provider and the GP federation
- Ambition is for a single capitated contract, with 2.5% at risk on outcomes

## What were the changes made?

- Collaboration with Centre for Health Economics helped to identify the complex need patients
- Intensive care for those with most complex needs across community and hospital settings (4% population), supported by core care team and MDT input in local care hubs
- Enhanced primary care model supports less complex patients (18%)
- Proactive health and wellbeing support for mostly healthy patients (78%)

## How was the care model put in place?

- First Symphony Care Hub established in 2015, with care co-ordinators and MDTs
- From this pilot, an enhanced primary care model was developed with health coaches and pharmacists integrated into practices
- Three new complex care hubs then developed to cater for patients medium needs and complex needs

## What was the impact?

- A&E attendance reduced by 29%
- Emergency admissions reduced by 33%
- aLoS fell from 10 to 5 days

# Overview: NHS Torbay

## Why was a change in care delivery considered?

- The regional health payor (NHS Torbay) merged with the Adult Social Services division of the local council in 2005, with the aim of delivering of care delivery model based on Kaiser Permanente's integrated care program
- Region is a popular retirement destination, and has a large frail elderly population, many living without routine access to family. The goal was to reduce the reliance on residential care services and inpatient care for the frail elderly population

## What was the scope of the care model?

- ~36,00 over-65s population in the region (26% of the total population)
- Total budget of £225m
- In 2015, the two NHS trusts merged to form Torbay and South Devon
- Community health and adult social care merged with acute Trust so one single organisation is now responsible for acute and community healthcare and social care (first such example in the UK)

## What were the changes made?

- Care delivery was re-structured to focus on integrated care:
  - Multi-disciplinary care teams (spanning health and social care)
  - Care coordinator role and individual proactive care plans introduced
  - Rapid response team
  - Investment in intermediate care
- Since 2015 there has been one single provider(health and social care) working alongside GP to deliver care

## How was the care model put in place?

- The program was piloted in one area (population, 23,000) prior to full roll-out
- Following the pilot, a single management team for integrated care was formed and joint manager of operations appointed
- Implementation was delivered by 5 'zones' covering a defined local population of ~30,000

## What was the impact?

- Impact prior to 2015 Trust merger:
  - The number of patients with a care package in place (supporting independent living and avoiding need for residential care) within 28 days of assessment increased by 45%
  - Non-elective inpatient bed use in over-65s population reduced by 29%; length of stay reduced by 19%
- Evaluation of impact of single integrated provider pending

# Overview: NHS Greenwich

## Why was a change in care delivery considered?

- In 2007, the Greenwich local health economy was financially challenged, the local acute hospital was in deficit and was experiencing frequent, unmanageable congestion due to high volumes of emergency admissions
- Goals include: supporting people to live independently with reduced need for hospitalisations and intensive interventions; reduction in total health costs through fewer non-elective admissions; pooling of professional expertise

## What was the scope of the care model?

- 240,000 people in the London borough of Greenwich and adjacent areas in South East London, Bexley and Kent
- The delivery program covers primary, community, social and acute care
- A clear service user pathway was agreed with an emphasis on enabling people, wherever possible, to maximise their independence.

## What were the changes made?

- Joint intermediate and social care teams focus on specific user needs:
  - Joint Emergency Team
  - Virtual Admissions Avoidance Team
  - Community Assessment and Rehabilitation Teams
  - Hospital Integrated Discharges Teams
- 52 Community-based Intermediate Care Beds are available
- GP practice syndicates align to local IC teams

## How was the care model put in place?

- Co-location of staff and services (eg in – house social care team alongside community beds)
- In the early stages, the push came from the local authority, (responsible for funding social care) and the community provider
- Primary care practices and the London Ambulance Trust were engaged initially in admissions avoidance

## What was the impact in terms of quality and costs?

- The cost of packages of care and number of referrals to residential care was reduced by £900k in the first year of operation
- In the first year, admissions to care homes reduced by 35%.
- After reablement, over 60% people required no care packages
- Over 2,000 patient admissions were avoided through immediate intervention from the Joint Emergency Team

# Overview: NHS Tower Hamlets

## Why was a change in care delivery considered?

- NHS Tower Hamlets commissions care for a deprived inner-city London borough with a high prevalence of diabetes
- Patients experience of care was fragmented, passive and reactive; per capita spending on primary care was low but spending on acute exacerbations of chronic conditions was high, with a small group of disproportionately high-cost patients
- The program aims to improve outcomes and reduce costs for people with diabetes by improving out-of-hospital delivery

## What was the scope of the care model?

- 12,000 people with diagnosed type 2 diabetes from a total population of 230,000
- 36 GP practices in the borough
- The program focused on the £17m annual spend on diabetes care
- Program performance goals focused on clinical measures of disease control

## What were the changes made?

- A package of care which is delivered consistently by all NHS GP practices in the area was developed
- Primary care practices were organized into networks with a central hub providing diagnostics, appointments with specialists, urgent and out-of-hours (e.g. evenings/ nights/weekends)
- Patients were stratified by risk, given proactive care plans, and care is delivered by NP-led multi-disciplinary teams

## How was the care model put in place?

- The effort was led by the NHS commissioning body (regional public payor) who undertook extensive stakeholder engagement
- Clinical working groups (with representatives from all settings of care) developed best practice care packages which were tested with patient groups
- IT services which allows clinicians to track their performance against targets

## What was the impact in terms of quality and costs?

- In one year, the program saw improvements in measures of disease control: BP, cholesterol and HbA1c
- In 2006-2007 only 19.6% of people with diabetes in Tower Hamlets were receiving all nine care processes. In 2014 this figure had increased to 79.9%, compared to 60.2% nationally
- The program led to an increase in spending on primary care from 9.4% to 13.8% of health care spend; modelling suggests savings of 12-14% in non-elective hospital spending (ER visits and unplanned admissions)

# Overview: Knappschaft Prosper integrated care program

## Why was a change in care delivery considered?

- Knappschaft's Prosper programme started in 1999, developed in response to legislative changes (in GE) which provided a regulatory framework for integrated care contracts
- The aim is to improve patient outcomes and payor/provider financial performance by focusing on quality and efficiency

## What was the scope of the care model?

- Covers the 250,000 members of the Knappschaft sickness fund. Organised into 8 networks with 10 – 65 K members Population is focussed in certain regions of Germany with a high proportion of former miners (thus COPD and respiratory diseases common)
- Provides full range of medical services, including general practice, outpatient specialists and inpatient treatment; set of standardized clinical treatment and referral pathways
- Accountable for all healthcare costs

## What were the changes made?

- Flexible network model comprising hospitals, GPs, rehab facilities and social-medical services forming a group around a hub Knappschaft hospital
- Clinical pathways and protocols co-developed by both levels of care
- Enhanced IT with focus on data transparency and security
- Focus on quality by setting up a monitoring of adequate KPIs and information transparency
- Financial incentives for patient: 100 EUR for in-network admission
- Hospitals and physicians participate in savings of network care

## How was the care model put in place?

- The program was developed by Knappschaft (a social insurance provider) but each Prosper program is self-managed within a clearly defined governance structure
- Highly integrated IT system facilitating seamless coordination of care which is key to successful management of the network
- The program expanded gradually over 10 years prompted by the growing evidence of the savings achievable

## What was the impact?

- 8-12% average savings for Prosper integrated care program compared to control group sustained over multiple years
- 15% saving on drug spend
- 97% patient satisfaction
- In first year of programme:
  - Reduction of alos by 20% from 11.9 to 9.6 days for enrolled patients (control group: reduction from 11.7 to 11.6 days)
  - drop of hospitalization rate from 9.3 to 8.1% (control group: increase from 10.6 to 10.7%)

# Overview: ChenMed

## Why was a change in care delivery considered?

- ChenMed is a family-owned private primary care provider franchise based in Florida but now operating out of multiple states in the South East acting as Medicare Advantage provider
- It was founded 25 years ago by a physician who saw an opportunity to provide better care at lower cost by focusing on proactive case management, barriers to adherence and incentives for clinicians to reduce avoidable hospitalizations

## What was the scope of the care model?

- The program is aimed at low to middle income Medicare Advantage patients with complex chronic care needs:
- 73% have  $\geq 5$  long term conditions
- Average age 72 yrs
- Covers ~60,000 people
- Started with 5 centres in Miami and as of 2013 there were 36 centres
- Primary care led model

## What were the changes made?

- Patients are offered high-frequency consultations (minimum 1/month), and same day when needed enhanced services in a single location and free transport to appointments
- Physicians are offered small panel sizes (typically 1:400) and financial incentives to manage patient care out-of-hospital
- High staff-to-physician ratios support task-shifting
- Weekly meetings to discuss complications or hospitalizations.

## How was the care model put in place?

- The ChenMed model was developed over 20 years from a small base
- Clinician-led with strong organizational cultures and shared values
- Strong focus on relationship between GP and patient with 92% of patients visiting the same GP each time
- Very strong IT infrastructure supports care delivery, performance management and revenue optimization

## What was the impact?

- 38.2% lower hospitalization rate and 17% lower readmissions rates compared to national averages for patient group
- 1,000 65+ Medicare patients in 2011, had 1,058 total hospital days (compared to national average 1,712)
- In 2015, ChenMed's average 'recommend to a friend' score among 37 centers was 90 percent
- 73% medication adherence for people with diabetes, compared to 44% previously

# Overview: Canterbury, New Zealand

## Why was a change in care delivery considered?

- Canterbury's journey towards integration began in 2007, driven by pressures
- The health board was already running a deficit (about 1.5% or NZ\$17m on a turnover of about \$1.2bn) and faced rising admissions, growing waiting times and a rapidly ageing population
- If nothing changed, by 2020 it would need another hospital nearly as big as its main 500-bed Christchurch facility

## What was the scope of the care model?

- Whole system transformation focused on entire population
- Population of around 510,000
- More than 13 per cent of the population is aged over 65
- Work across the whole system to enable hospitals to focus on those patients who need specialist care
- Social care comes under the umbrella of health boards in New Zealand so this was in scope

## What were the changes made?

- Development of more than 900 HealthPathways that allocate greater responsibility to GPs, with input from GPs and specialists
- Acute demand management system with general practice managing patients with input from specialists
- Community rehabilitation enablement and support team targets reductions in length of stay
- Falls management: reducing trip hazards in hospitals and home

## How was the care model put in place?

- Working groups co-developed new clinical pathways
- Implemented 24 hour general practice with a centralised nurse triage system and GP led unit with 5 observation beds
- Introduction of electronic referral system where data goes to a central repository and can be re-routed
- Electronic Shared Care Record View; portal that draws on existing hospital, GP and other data
- Training staff in quality and service improvement skills and techniques

## What was the impact?

- Canterbury had not shrunk its hospital base however, it had avoided the growth in bed numbers
- Medical admissions per 100,000 population are 30% lower than the national average (growing but at lower rate)
- Emergency department (ED) attendance rate that is 25% below the national average
- Reduction in the rate of ED attendances by over-65s to 260 per 1,000 – well below the national average
- In 2010/11: 35,000 referrals were made for community radiology and 2,200 skin lesions were by general practice



# Overview: Dementia Health Integration Team, Bristol and South Gloucestershire

## Why was a change in care delivery considered?

- The number of people with dementia is growing due to an ageing population: 2,160 people in Bristol have been diagnosed with the condition, but historically low diagnosis rates mean the real number is estimated at 4,500.
- The number of dementia patients in Bristol is expected to increase by 23 per cent over the next two decades
- People with dementia often have inordinately high rates of readmission, hospitalisations and complications, and are less able to manage their conditions at home than many people

## What was the scope of the care model?

- The care model was considered for all 2,100 people with late stage dementia living in Bristol and South Gloucestershire & launched in 2012
- The interventions were also targeted at the larger population in these areas to attempt to make Bristol and South Gloucestershire into dementia-friendly communities

## What were the changes made?

- The Dementia Health Integration team is a multi-disciplinary team that does outreach, care coordination, discharge support, and supports research on dementia and care interventions
- They focus on using evidence-based policies
- The HIT also focuses on carrying out studies on dementia to benefit patients

## How was the care model put in place?

- The team uses a multidisciplinary approach with experts from local universities, councils, NHS trusts, volunteer organisations and charities
- They are trying to tackle low dementia diagnosis rates by developing early diagnosis programmes at GP surgeries rather than specialist clinics
- They also gather data about attitudes towards dementia

## What was the impact?

- Improved diagnosis rates from 2012/13 rates of 49.8% in Bristol and 47.8% in South Gloucestershire to 73.2% and 60.7% respectively at the end of March 2017. The national diagnosis rate target is 67 per cent

# Overview: Pinnacle Midlands Health Network, New Zealand

## Why was a change in care delivery considered?

- GPs in New Zealand work as independent business people, and were finding that the fractured system was not providing the best care
- Patients wanted better access to primary care
- Care coordination was poor and many GPs were unsupported because they were working as single practices

## What was the scope of the care model?

- The Midlands Health Network in New Zealand covers half a million people registered with 97 general practices

## What were the changes made?

- Many of the GPs are co-located, and those that are, engage in team huddles each morning to discuss patient care for the day and any outstanding issues that need to be addressed
- GPs join the network in order to share workload and create more stable patient lists
- Provide 24/7 primary care, having developed a network of out-of-hours centres (staffed by network GPs on a rota) to support its member practices. The network is increasing the number and nature of virtual consultations to enable senior medical advice to those in rural communities 24/7.

## How was the care model put in place?

- GPs work together at dedicated primary care centers in order to provide integrated patient care and improved access
- Nurses and nurse practitioners help to coordinate patient care
- Patients are able to speak with GPs on the phone or over video conference, which frees up GP time

## What was the impact?

- Improved patient satisfaction amongst those covered within the network
- Increased inter-GP referrals within the network
- GPs have a more satisfactory work/life balance

# Overview: Australia Diabetes Care Project

## Why was a change in care delivery considered?

- Regional governments in Australia recognized that care of people with diabetes was poor by international standards and that the system did not support optimal care delivery for chronic diseases:
- Half of people with diabetes have inadequate disease control and 60-80% do not have a comprehensive care plan
- Fee-for-service primary care funding model does not encourage population health
- Information sharing and co-ordination between clinicians is sub-optimal

## What was the scope of the care model?

- The pilot program covers ~10,000 people with diabetes and 150 primary care practices across 3 states
- If successful, it will be rolled out nationally to the ~1 million people with diabetes in Australia

## What were the changes made?

- The Diabetes Care Project has 5 core components:
  - Flexible funding: 'single checkbook' for diabetes disease management
  - Rewards for improvement
  - Shared IT
  - New care coordinator role
  - Shared performance framework

## How was the care model put in place?

- The National Health and Hospitals Reform Commission convened a National Diabetes Advisory Group to oversee the DCP
- A delivery consortium designed, implemented and evaluated the pilot
- Extensive stakeholder engagement program
- Clinical Advisory Groups developed all protocols and care packages

## What was the impact?

- Participants in Group 2 (intervention group) showed a statistically significant improvement in HbA1c levels compared to Control Group. There were also improvements in other secondary clinical outcomes in Group 2—including systolic blood pressure, cholesterol, triglycerides, waist circumference, incidence of depression, and diabetes-related stress
- Percentage of participants with a completed annual cycle of care increased from 35 percent to 53 percent
- Reduction in the cost of hospitalisations, particularly potentially-preventable hospitalisations of \$461 per patient in Group 2

# Overview: Kaiser Permanente

## Why was a change in care delivery considered?

- Many people with long term conditions in the Western US are unable to properly manage their conditions
- Lack of integration of services means that patients often slip through cracks in the system and end up in the emergency room unnecessarily
- Kaiser saw an opportunity to create a fully integrated system that owns its own hospitals, primary care facilities, pharmacies, transportation services, and uses a fully integrated and advanced IT system

## What was the scope of the care model?

- Kaiser covers 10.2 million members, 18,652 physicians and 186,497 employees.
- They operate across 10 US states
- Their focus is on managing long term conditions, especially in the elderly.

## What were the changes made?

- Kaiser owns the majority of its facilities and employs most of its staff directly
- Kaiser patients have access to their full EMR online, with a scheduling tool and mobile access
- KP HealthConnect updates its system in real time, so its records are never out of date.
- Around the clock telephone access to nurses for clinical advice.

## How was the care model put in place?

- Model includes a health insurance plan run by Kaiser that covers all care provided in Kaiser facilities
- A focus on primary care and prevention helps lower rates of hospitalisation and readmission
- Kaiser achieves strong results from its many cooperating agencies.

## What was the impact?

- Have a 24/7/365 system for access to health information that is accessible by patients and providers
- Reduction in ancillary utilization, including a drop in redundant testing and imaging, and reduced phone and letter traffic
- Increased patient satisfaction measures over other plans, improved pharmacologic intervention in coronary disease
- SCPMG Heart Failure Transitional Care Program that decreased 90-day readmissions by 30% from 2006-2010

# Overview: Geisinger Health System

## Why was a change in care delivery considered?

- Geisinger serves 2.6 million people in rural central and NE Pennsylvania; its patients are on average older, poorer and sicker than the national average, with high prevalence of chronic diseases
- Geisinger uses a PCMH model with GHP-funded care coordinators and telemonitoring, shared information systems and best-practice-defined episode-based payments for (some areas of) acute care

## What was the scope of the care model?

- GHP is an open system: serving GHP enrollees (~33% of all patient care revenues), Medicare/ Medicaid, Capitol Blue Cross, Coventry and Highmark
- PCMH aims to manage costs and quality for patients with chronic conditions, responsible for:
  - 80% of costs
  - 91% of prescriptions

## What were the changes made?

- Enhanced PCMH model:
  - GHP-funded RN care coordinator/navigator per PCMH practice
  - Case management nurses are embedded into practices at a ratio of 1: 1,000 Medicare Advantage
  - 24/7 phone access
  - Tele-monitoring
  - Patient access to EHR to view lab results and educational content, schedule appts and order re-fills

## How was the care model put in place?

- Shared information systems allows non-Geisinger providers (60% or provision) to view GHP patients' EHR
- Web portals facilitate data sharing between fragmented providers
- Regular practice-level performance reports and meetings to monitor results and drive improvement

## What was the impact?

- 18% reduction in hospital admissions, 36% reduction in hospital readmissions
- For the practices performing in the highest quartile, patients with chronic diseases had hospital stays that were 23% shorter
- ProvenCare episode-based best-practice payment system for CABG has led to a 67% reduction in mortality; 10% reduction in complication rate; 4% reduction in mean post-op length of stay

# Overview: CareMore

## Why was a change in care delivery considered?

- CareMore started in 1993 as a medical group providing wellness-focused care for seniors, becoming a Medicare Advantage managed care plan in 1997, operating 26 care centers across CA, AZ and NV
- It was acquired by WellPoint in 2011 who plan to expand to VA and NY in 2013
- It provides nurse-led, tiered and coordinated care at centralized sites supported by ‘extensivist’ physicians in hospitals

## What was the scope of the care model?

- Focused program for 40% frailest Medicare and Dual Eligibles with complex chronic conditions, e.g.:
  - Diabetes
  - ESRD
  - Hypertension
  - CHF
  - COPD
- ~130,000 enrollees in Medicare and Medicaid managed care plans
- CareMore deliver out-of-hospital care with partners for other services

## What were the changes made?

- NPs provide personalized, prescriptive disease management programs tailored to acuity levels
- Care is delivered at centralized clinics by MDTs
- High-risk patients may be enrolled in one or more disease management programs
- “Extensivists” are hospital based staff focus on avoiding admissions, readmissions by doing follow-up
- Starting in 2017, CareMore will be using Medicare Advantage to provide oral care integrated with chronic long-term care

## How was the care model put in place?

- Care is standardized using pathway-based protocols covering a wide range of different conditions and scenarios
- Each patient has an EMR visible to all providers in the network – high use of remote monitoring
- Nurse practitioners, medical assistants, and other nonphysician clinicians to deliver most services, relying on physicians to oversee care for hospitalized patients

## What was the impact?

- Readmission rate fell from 16.1% in 2011 to 13.9% in 2015
- In 2015: 20 percent fewer hospital admissions, 23 percent fewer bed days, and a 4 percent shorter length-of-stay than beneficiaries covered under fee-for-service Medicare

# Overview: New York Care Coordination Program (NYCCP)

## Why was a change in care delivery considered?

- NYCCP is a not-for-profit collaborative project initiated in 2000 by six counties in NY and NY Office for Mental Health
- The aim was to transform the care for Medicaid patients with SMI (serious mental illness) to provide patient-centered, recovery-focused, evidence-based care, and complex case management for those with highest risks/needs
- NYCCP has added “Health Homes” and the Behavioural Health Organisation (BHO) program to their care delivery model.

## What was the scope of the care model?

- The program targets high-needs Medicaid adult members with SMI:
  - Repeated hospitalizations and incarcerations
  - Frequent crises
  - Lack of constructive social /family network
  - Specifically focused on managing mental health costs, but may also address total costs of care

## What were the changes made?

- Regional single point of access (SPOA) identifies and enrolls eligible patients
- Individual care plans developed
- Highest risk patients given case management and priority access
- NYCCP is responsible for engaging third parties in the BHO program which will assess use of peer services for individuals with an admission
- NYCCP reviews behavioral health related to length of stay, prevents unnecessary readmissions, improves engagement rate following discharge.
- NYCCP has a major focus on gathering information on and providing care for children through their Health Homes.

## How was the care model put in place?

- Through a triple aim system to provide better care and health through lower costs.
- Health Homes are provided via a network of community and national organizations, providers, and health plans.
- The BHO program was implemented through a conglomerative effort between NYCCP, Beacon, and CCSI.

## What was the impact?

- 31% increase in patients in gainful activity; 25% fewer arrest; 53% reduction in rate of physical harm to others; 54% reduction in self-harm; 46% reduction in ER visits; 53% reduction in inpatient visits
- As of 2015, Health Homes had nearly 150 thousand enrolled members, with just over 51 thousand disenrolled members.
- From 2012 to 2015, the average number of ER utilizations remained consistent for Health Home enrollees.

# Overview: Intermountain Healthcare

## Why was a change in care delivery considered?

- Intermountain Healthcare Medical Group started implementing the Care Management Plus (CMP) PCMH model in 2001 as health insurance costs are increasing too rapidly, causing the cost of premiums to exceed the inflation rate and the healthcare delivery system lacked a community element.

## What was the scope of the care model?

- Intermountain Medical Group has 22 hospitals and 185 clinics.
- They have 1,400 PCPs and SCs.
- As of March 2016, they had 11,000 people enrolled in their new program.

## What were the changes made?

- High-cost patients go to small clinics and eventually “graduate” into a regular PCP.
- System relies heavily on evidence-based protocols developed by care pathway teams
- Embedding RN care managers in primary care practices
- Case management nurses support high risk and after-hours coverage
- Enhancing EHR functionality to support chronic care coordination
- Web-based EMR generates evidence-based recommendations
- Queuing referrals or tests for approval

## How was the care model put in place?

- Patients enrolled in the new program.
- Each clinic was expected to handle approximately 1,000 patients. By March 2016, a recently constructed clinic only had 140 patients.
- More cost-effective manufacturers were selected to lower cost and increase care quality.

## What was the impact?

- Intermountain Healthcare’s total billing for 2016 was \$700 million less due to its new system.
- As of 2016, Intermountain projected a total savings of \$2 billion.
- 10% reduction in hospitalizations, with even greater reductions among the subset of patients with complex chronic illnesses
  - For diabetes patients, 30.5% of PCMH group were hospitalized vs. 39.2% of controls

SOURCE: Reed Abelson. “A Novel Plan for Health Care: Cutting Costs, Not Raising Them” (2016). New York Times

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# Overview: Iora Health

## Why was a change in care delivery considered?

- Iora Health launched its first practice in 2012
- Iora Health customizes its approach in each of its markets to fit the varying needs of patients (and also works under different payment models).
- It focused heavily on patient education, promotion and prevention through non-clinical staff

## What was the scope of the care model?

- They have over 40,000 patients in 29 practices in 11 states.
- As of March 2016, they were expected to open 20 new practices, totaling 49 by the end of the year.
- Iora physicians typically provide care for 1,000 patients on average.
- Iora Health's focus is on providing patients with the support they need to follow recommended treatment and improve their health.

## What were the changes made?

- Rely heavily on nonphysician staff, particularly health coaches, who provide practical and emotional support to patients.
- Community health workers will focus on several hundred patients
- Iora clinics are small and close-knit, helping provide personalized care.
- When patients visit primary care; coaches remain behind after the doctor leaves to review the treatment plan and provide patient education

## How was the care model put in place?

- Technology - Iora's patient and data-centric approach makes use of texts, e-mails and video conferences to communicate with patients
- In-house IT platform calculates 'worry scores' based on clinical data which inform appointment frequency, outreach, and team size allowing health coaches to focus on priority cases
- Continuous data collection to measure impact and to incentivise physicians

## What was the impact?

- Hypertensive patients "who have achieved guideline-defined control" increased 22% to 86% in 2013-2016.
- On a -100% to +100% Net Promoter Scores (NPS) scale, Iora Health's top providers rank +30%.
- Iora Health patients benefit from reduced hospitalizations and emergency room visits, by 35% and 23%, respectively.