The journey to integration

Learning from seven leading localities

Acknowledgements

Disclaimer

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Introduction

Across the country most areas are now pursuing a vision for integration to deliver better sustainable health and care to respond to the pressure of an ageing population, gaps in care today, and the tight fiscal environment. Starting locally, some areas have led the way, demonstrating the potential to do things differently: investing more in prevention and community based care, reducing unnecessary hospital activity, and facilitating both of these with the key enablers of information management, new payment models, system-wide governance arrangements and workforce reform. These developments have in several areas shown what is possible in the UK and also tracked the emergence of similar models elsewhere across the globe. National policy has come to follow these in the form of devolution, the Care Act, Better Care Fund, Five Year Forward View and the new care models, among others.

And within that there is a clear push among commissioners to commission on the basis of a place, overcoming artificial barriers established within the NHS and between health and care. After an extended time focusing on commissioning, there is now renewed emphasis on how provider models need to be different, and the requirements from commissioners and the system as a whole to facilitate this. The main thrust has been on moving towards embracing population health and the integration of health and care. That is easier said than done. This report has attempted to understand the successes and challenges of some of the leading areas in pursuing this agenda.

All of this comes against a backdrop of a settlement from the Spending Review which, although including allocations for social care and the NHS, also brings significant additional responsibilities and pressures. The implication is that it is more critical than ever for commissioners to shift their focus to a greater emphasis on promoting the health and wellbeing of individuals and local communities, delivering care more proactively and avoiding unnecessary use of hospitals. For providers seeking to respond to this agenda with the new care models, it means huge changes are needed in how care is delivered and the enablers put in place to support it. Increasingly too, the focus of integration is going beyond a narrower definition of health and care services to encompass more preventative approaches which draw on the full range of assets and services in a place, including services such as housing and employment as well as social and community activity.

It is clear from the findings in this report that in some areas significant impact has been achieved through integrated care approaches. The extent to whether or not this impact has been achieved is closely related to whether or not there have been any changes in the flow of money and information or in governance arrangements. It may seem obvious, but putting these in place has been hard work in which many have invested sufficient effort. It has also taken a long time.

The highest levels of achieved impact are in areas that have been pursuing integration from 10 to 15 years. While areas that are earlier in their journey may not have achieved as much, these examples serve as a benchmark for what can be achieved and provide a strong learning opportunity.

This report, commissioned from Carnall Farrar by the Local Government Association (LGA), synthesises the findings from seven programmes in England. The extent to which integrated care has aspired to and/ or achieved measurable benefit has been examined. This has been reviewed in parallel with whether differences in the design and execution of integrated care contributes to the impact each programme can have. Of particular interest is the focus and care model of the integrated care system and the presence of key enablers such as the information management (including better information governance, sharing and management), payment model (including new ways of creating incentives for providers such as capitation) and governance arrangements (starting with binding together joint action and leading to new combinations of providers to respond to the opportunities and challenges to deliver integrated care). The report draws out key messages and conclusions that should be considered locally and nationally within the development of integrated care.

The LGA has long advocated the benefits of integrated, person-centred care as a key vehicle to improve people's health and wellbeing and experience of care, alongside bringing financial sustainability to the health and care system. The findings in this report highlight how through determined collective and collaborative leadership which engages and empowers everyone in their locality, it is possible to make great strides towards these outcomes. I hope this report informs and inspires us all to achieve the step change our communities deserve.

Executive summary

Integrated care programmes vary in their level of maturity, focus and context. The seven case studies in this report are intended to be representative of the potential experience of integration in England and present sufficient breadth to allow meaningful conclusions to be drawn. The case studies have been synthesised to identify the common features and to analyse the differences between localities in terms of context and place, the focus and care model and how they have used the enablers of information management, commissioning and payment, workforce and governance as well as the leadership environment.

Looking across the experience of seven integrated care programmes, several headlines stand out. All are explored in more detail in the report:

1. **It is possible to have dramatic impact**. Three of the most impressive examples are the 36 per cent reduction in emergency admissions achieved in Northumberland, the halving of the rate of growth of health and care costs (versus national average) in Torbay, and the double digit increases across a wide range of outcomes in Tower Hamlets. While much of the focus has been on reducing emergency admissions through proactive care, it is clear there are also big gains to be had through reducing how long older people stay in hospital, as in many cases, 20 per cent of the total beds in a hospital are occupied for stays longer than 10 days for those aged over 65. In addition, the shift to put accountability in place for population health management suggests a greater emphasis on controlling elective and outpatient levels

can have a material impact on referrals and conversions. Major (double digit) impact is possible in each of these areas (emergency admissions, bed usage, elective and outpatient). More broadly, impact is evident too in improved health outcomes, such as in Tower Hamlets in terms of prevention for various chronic diseases across the entire borough.

2. **An essential starting point is a shared vision and commitment from a leadership coalition**. There is a clear requirement to have a strong leadership coalition, with clinical and managerial leaders empowered across the system. These leaders, once they are signed up to the approach, create significant drive and momentum and are key to the delivery of the change. This, coupled with bottom-up development of a strong vision, a person-centred narrative and a compelling reason to change, and widespread engagement across the system, are essential to deliver and embed the change.

3. **Long-term tangible changes in how care is delivered at scale across the whole area are required**. Care will change only if individuals' interactions with the health and care system change. This means there must be changes in how core processes operate, in what information people have in front of them, in who does what. This will require changes in staffing type and level which need to be paid for on a recurrent basis. As a result, there must be changes in payment. To enable changes in decision-making, risk management and operational management, there are in all likelihood changes in governance

and organisational form that follow. All of this takes time and must be supported by changes in the flow of information management, payment and governance, and this set of changes are likely to be pursued over a substantial period of time, such as a decade or more.

4. **Population focus and segmentation are critical but it is not enough to focus on the top 1 to 2 per cent of the population**. While the care system might aspire to deliver care tailored to each individual it is not possible to plan for a system on this basis and so it is essential to understand the population broken down into relevant groups and how their needs can be best met. Much of England has heard this message and the most common approach is now to focus on the top 1 to 2 per cent of the population. This, however, will not be more than 10 per cent of the total system costs and the needs of this group of the population will be significantly different from the next 20 to 30 per cent which make up the majority of costs in the system. It is these population groups that need to be broken down, understood and addressed. This will include addressing the frail elderly (about 4 per cent of the population) but also a much wider spectrum of the population with chronic conditions (another 10 to 20 per cent depending on the area) and very small, very complex groups including those with dementia, severe and enduring mental illness, learning disability or physical disability. When looked at in the combination of health and care spend these groups can be overlooked when using risk stratification based on acute admissions and primary care data only.

5. **Care delivery changes have common themes of more preventative, proactive and also more responsive care**. More preventative care can help keep people active and independent. More proactive care includes identifying named individuals at risk and supporting proactive planning of how best to meet their needs. This can include

the development of care plans and establishment of care coordination and carrying out routine checks (such as falls prevention). More responsive care includes the ability to respond rapidly to emerging risks to create alternatives other than admission to hospital or continued stay in a hospital bed. This can include rapid response teams to keep patients out of hospital, liaison psychiatry to respond urgently to mental health issues and reduce acute admission, or discharge planning and reablement to see people returned to their homes as quickly as possible.

6. **Significant differences exist across the case studies in the specific care models adopted and the balance in who does what, and this seems to be driven by the relative strength of leadership and where it sits**. Where primary care is very strong there seems to be more of an emphasis on the 'front end' of proactive care rooted in primary care (such as risk stratification or care coordination). Where community care has been integrated into acute providers and that integration is seen to be successful, there appears to be more of a focus on the 'back end' of integration of community and acute care. More broadly, the drive towards integration has tended to reflect the leadership and drive of the strongest parts of the system.

7. **The flow of information is an essential pre-requisite to make change happen and must be taken out of the 'too difficult' box**. There are no policy constraints that prevent putting in place the essential requirements for information governance to permit the free flow of information to support targeting/ segmentation, care delivery, performance, payment and patient engagement. The only block in addressing these is a lack of willpower or drive to invest the time and energy required to tackle the technical topics. Leaders need to overcome this and realise it is impossible to pursue the potential of integrated care without putting

in place the flow of information required to underpin it, with information governance contracts signed by every provider in each place.

8. **Changes in payment need to be made to fund direct costs of changes in care and change incentives for organisations**. This is, perhaps, the most disappointing and underpowered area of integration in England. It is obvious that care cannot change without the resources to deliver it. There are three essential requirements which combine to require payment innovation. First, new care models require more resources upfront to provide the preventative, proactive and responsive care discussed above. These models require more people to do things in different ways. These people need to be paid for. To the extent that programmes aspire to have community and/or primary care providers deliver this care the resources need to be provided up-front to hire staff. Second, there is a need to reward providers for the results they deliver and to achieve this requires breaking down the barriers in the current payment models including the general medical services (GMS) contract and payment by results (PbR). Third, there is a need to be able to pool resources and funding across health and social care to focus on the needs of people in a specific place. So it is obvious that changes in the flow of funds and payment models are essential. Very few places in the UK have done anything significant in this area and it is an area that needs dramatic acceleration.

9. **Changes in governance are essential to allow change to happen but form must follow function**. At the outset, what is required is a leadership coalition dedicated to a common purpose which makes joint commitments and resourcing decisions. Over time, this needs to evolve to meet the needs of care delivery. For instance, in Torbay the programme reduced decision making from six weeks to two hours as a result of changing where decisions about care packages were made, including the ability to commit health and care resources. In Tower Hamlets the GP partners formed networks as organisations not just affiliations because of the amount of money and risk being channelled through them.

Putting all these elements in place is what is needed to make truly transformational change possible. This will not happen overnight but, rather, will realistically take a journey of close to a decade to realise the full potential. It is, however, a potential worth the effort.

The aim of this report is to help make clear what the development needed looks like and provide some practical examples of how places in England have achieved this. It also introduces an evidence-based maturity matrix tool which may be a useful device for leaders in any given place to assess where they are today and where they aspire to get to in the future.

Methodology

The seven case studies in this report are intended to be representative of the potential experience of integration in England and should resonate with all local systems, regardless of where they are on their integration journey. There is a consistent pattern of the significant issues that face health and social care across England. There are, however, differences in the specific context in terms of complexity and challenge between the local case study areas across the country. The selection of case studies all have high levels of deprivation, most under the national median.

The report draws out key messages and conclusions that should be considered locally and nationally with the development of integrated care. It is structured to enable the reader to access three levels of information about the findings from the case studies:

• Through the executive summary section where the synthesis of the findings from the case studies are triangulated. The exhibit on page 16 maps the case studies against the maturity matrix and nine areas of differentiation. The population challenges across the case study sites are explored and their challenges identified.

• Through more detail on the nine areas of differentiation; each area of differentiation has its own chapter where findings from across the case studies are captured, and key lessons summarised.

• Through each individual case study, which can be found at: http://bit.ly/1TkK4TV

The nine areas of differentiation

The case study findings have been synthesised to identify the common features and to analyse the differences between localities in terms of the impact, context and place, the focus and care model and how they have used the enablers of information management, commissioning and payment, workforce and governance as well as the leadership environment. These nine areas of differentiation are summarised in Exhibit 2 overleaf.

Exhibit 1: Nine areas of differentiation

1. Impact	• Impact Estimated (planned for) • Staff and patient experience changes measured • Outcome, cost and activity changes measured

2. Place	• Stable/challenged health economy • Simple/complex commissioning structure

3. Focus	• Top 1-2% - very high risk complex • Older people, chronic conditions • Spread to include mostly healthy population • Specific other segments (e.g.SMI)

4. Care model	• Single setting, narrow focus • Several settings, larger segment • System wide, multiple settings and population segments

5. Information Management	• Information flows developed • Integrated data sets • Patient access to integrated care record • Use of new technologies such as telemedicine

6. Commissioning and payment model	• Non-recurrent funding of initiatives • Adjusting incentives for providers delivering improvement (CQUINS, LES, etc.) • Place based pooling of budgets • Capitation

7. Workforce	• Small changes to roles and staff training • Development of new roles and skills • Significant development of workforce and development of leadership capability

8. Governance	• Working groups established • Formal programme board and other committees • Formal partnership mechanisms implemented • New organisations formed

9. Leadership	• Agreed vision • Significant commitment to change • Strong leadership at senior and system wide level • Clinical and Service User • Dedicated resources to programme • Cultural and behavior change

Source: Interviews, case studies, Carnall Farrar analysis

Maturity matrix

Perhaps the most critical question is what is the nature of impact (process, experience, activity, cost, outcome) and scale of impact aspired to. Several places have a significant track record of impact. In others, this question is too early to ask, but it is a critical one to consider both at the outset and as progress is made.

Among the seven case examples reviewed, there is a range in the extent to which each factor is present. This has been used in analysing the journey of each area and in understanding the contours of integrated care programmes across the country.

Exhibit 2 displays a maturity matrix which suggests how far developed each of the case studies is against these nine factors. This is a first attempt at mapping the case studies to understand the distance these localities have travelled on their integration journey as well as mapping progress to date. This matrix will be investigated in more detail below.

Capitation: a payment arrangement for health care service providers such as GPs or nurse practitioners in which the service is paid a set amount for each enrolled person assigned whether or not this person seeks care.

Exhibit 2: Maturity matrix

Impact	Small start	Implementing	Well developed	Embedded
Domains of impact	Process changes	Patient experience / Staff opinion	Activity changes visible but not yet outcomes and cost	Outcomes and cost as well as activity and process
Degree of impact	0%	1-5%	5-9%	10%+
Place and context	Simple	Low complexity	Significant complexity and challenge	High complexity and challenge
Population	Mostly healthy	Healthy population relative to the national average with good outcomes	Multiple areas of poor health and some poor outcomes	Highly challenging population with poor population health and poor outcomes
CCG/LA structure	1:1 CCG and Local Authority	Small number of CCGs and Local Authorities	Small group of CCGs and Local Authorities	Multiple CCGs and/or Local Authorities with competing visions and footprints
Provider structure	Acute and community provider with direct alignment of commissioning and provision footprints; Well-organised primary care	Acute and community provider that cuts across a footprint of multiple localities/CCGs	Multiple providers within a given locality	Multiple providers and multiple commissioners across complex footprint; fragmented primary care
Provider performance	Strong provider performance	Relatively well performing provider with some quality and financial challenges	Provider with significant challenge (quality/ financial)	Numerous providers across sectors with significant financial challenge
Focus	Focused	Narrow	Broad	Holistic
Population addressed	Top 1-2% (e.g. exclusively frail elderly and very high risk)	Top 10% incorporating multi-morbidity	Segmented approach to top 1-2%, 10%, 20% and rest of population	Segmented approach for 1-2%, 10% and severe and complex populations (e.g. LD, SMI, etc)
Spend included	Single setting (e.g. community, primary care, acute)	Several settings (e.g. primary & community care or community & acute)	Multiple settings but short of all settings	All settings
Care model	Specific	Focused	Broad	Holistic
Care model	Specific care model that focuses on a narrow set of interventions	Care model that focuses on a number of interventions	Broad care model that covers a number of interventions across several areas	Holistic care model that covers a range of interventions across prevention, emergency admission avoidance, discharge and rehabilitation
Providers involved	Primarily a single setting of care	Dominant leadership from one provider type with limited involvement of other providers	Multiple providers involved substantially	All providers substantially involved
Information Management	Small start	Implementing	Well developed	Embedded
Information governance	No IG agreements in place to enable integrated care	Data sharing agreement in place to cover single setting of care	Data sharing agreement in place to cover multiple settings of care	Robust IG in place with datasharing agreements across all providers
Care delivery	Information sharing through standard systems	Care records and plans shared through continuity of care record on top of existing systems	Shared care record and ability to view care data in other settings of care live	Shared care record integrated into clinical system with full interoperability (read/write)
Performance	Performance monitoring through historical approaches	Performance information shared periodically only with provider	Transparent use of performance information shared periodically	Transparent use of performance information shared in real time
Payment	Payment through standard approaches	Payment linked to measurable changes on an annual basis	Payment linked directly to provider performance on a quarterly basis	Payment directly linked to measurable changes in performance monthly/quarterly
Patients	Basic patient discussion with service provider and capture of information	Basic patient input of information	Patient input of information, access to telemonitoring equipment and ability to participate in goal setting	Patient control of care record used for goal setting and telemonitoring

Source: Interviews, case studies, Carnall Farrar analysis

Commissioning and payment	Small start	Implementing	Well developed	Embedded
Contract	No significant changes in contracting mechanisms or budgeting arrangements	Changes in budgeting arrangements and contracting to ensure some support to integrated care programmes	Significant changes to payment model to ensure integrated care is supported	Advanced contractual and payment mechanisms or new contract mechanisms entirely (e.g. capitation, alliance contracts, new contract primary care) that specify place based approaches and facilitate integrated care
Scale of pooling	Minimal pooling of budget per BCF	Small pooling of budgets	Medium to large scale budget pooling	Large pooled budget put together from across health and social care demonstrating place based approach
Performance	No use of performance measures	Light use of performance measures within payment systems	Medium use of performance measures within payment systems	Performance linked to measurable and transparent indicators
Workforce	Small start	Implementing	Well developed	Embedded
New staff	No significant change to recruitment	Small scale recruitment	Recruitment to support shortfalls in existing roles	Significant recruitment drive both to fill new posts and support shortfalls in existing
New roles	No significant changes to roles	Slight changes to existing roles, new tasks and jobs for current workforce	Large changes in existing roles with significant differences in focus	Creation of new roles entirely, large changes in existing roles
New skills	No additional skill changes planned	Small scale up-skilling of small group of workforce	Significant training and up-skilling of workforce	Large scale up-skilling, reorientation and refocusing of the workforce
Development	Small scale training	Small scale organisational development	Significant organisational development of existing workforce and development of leadership capability	Large platform of organisational development used to support programme with place based thinking, leadership and frontline staff development
Governance	Starting point	Implementing	Well developed	Embedded
Governance	No or some small changes in governance arrangements	Some changes in organisational arrangements	Large changes in organisational arrangements	New organisational forms put in place with significant changes in existing structure
Operations	Separate operations and processes between organisations	Some shared operations across organisations	Significant operational collaboration between organisations	Fully integrated operations across organisations
Decision making	Separate decision making processes between organisations	Some shared decision making processes on specific issues	Collaborative decision making processes across organisations	Fully integrated decision making across organisations
Leadership	Small start	Implementing	Well developed	Embedded
Implementation status	Concluded discussion and planning phase for interventions and begun rolling out programmes	In the process of implementing interventions and rolling out model with some evidence of positive change	New model of care in place or mostly in place with evidence for potential or aspired success and positive outcomes	Detailed evaluation of new care model taken place with significant evidence of impact
Commitment	Agreement or commitment from one or a small number of commissioners and providers to engage with intervention	Several commissioners and providers signed up to endeavor	Multiple/main commissioners and providers committed	All major commissioners and providers committed
Leadership	New/changed leaders and no history of joint working	New leaders with some ambition to make changes	Leadership with ambition to change and some history of joint working	Continuity of leadership and strong history of working together
Place-based system leadership and thinking	Leaders and staff aware of need for change but focus on separate organizational requirements	Clinicians, service users and leaders understand and are involved in the process	Across the area common approach with clinicians and service users showing place based thinking/leadership	Leaders at all levels across the area who motivate and are motivated to work differently, across service and organisational boundaries
Culture and Behaviour change	Professional groups and organisations have clear differences in culture and behavior	Vision, Values and behaviours across professions and organisations are aligned	Vision, Values and behaviours across professions and organisations are aligned and articulated by staff	Vision, Values and behaviours are demonstrated by all in the system and recognized by service users
Resources	No additional resources	Low levels of resource provision	Medium level of resource investment	Substantial dedicated resources
Duration	Less than 2 years	2-5 years duration	5-10 years of development	10-15 years of consistent development

Source: Interviews, case studies, Carnall Farrar analysis

Mapping the case studies to the maturity matrix

The maturity matrix is a first attempt at mapping the case studies to understand the distance these localities have travelled on their integration journey as well as mapping progress to date. The case studies' different approaches to development, and implementation of integrated care and their different contexts have resulted in differences in their mapping.

Torbay, Tower Hamlets and Northumberland have demonstrated significant impact, and with the duration of their programmes, leadership arrangements and progression from narrow to broad focus, these sites could be considered mature. Torbay's recent merger to create an integrated care organisation and Northumberland's work to develop a primary and acute care system will embed integration further.

Other case study areas are less mature in terms of impact but appear the most mature in information management, for example the development in Leeds of the shared care record and the early benefit being realised through its implementation.

Tower Hamlets appears the most mature in terms of payment models and governance arrangements. All, however, have made a 'small start' and implemented programme board arrangements through which to control and govern the integrated care programme and secured commitment to the programme across the local system.

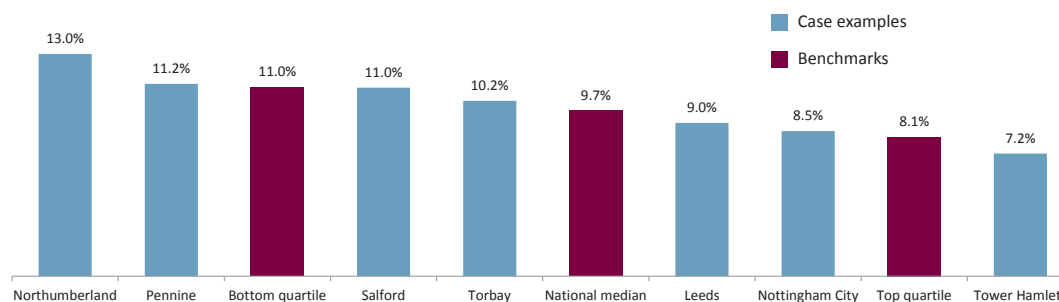# Key population challenges for the case study areas

There is a consistent pattern of the significant issues that face health and social care across England. There are differences, however, in the specific context in terms of complexity and challenge between local areas across the country. Exhibits 3 to 7 display five indicators across the case examples selected compared to the national median to show this spread of challenge.
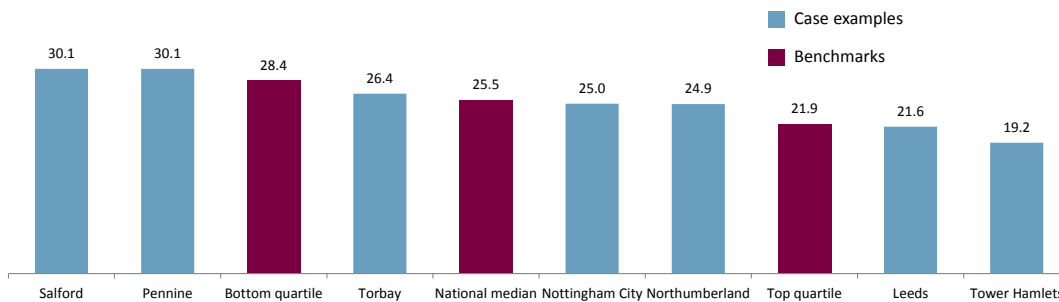
Exhibit 3: Percentage of population over 65
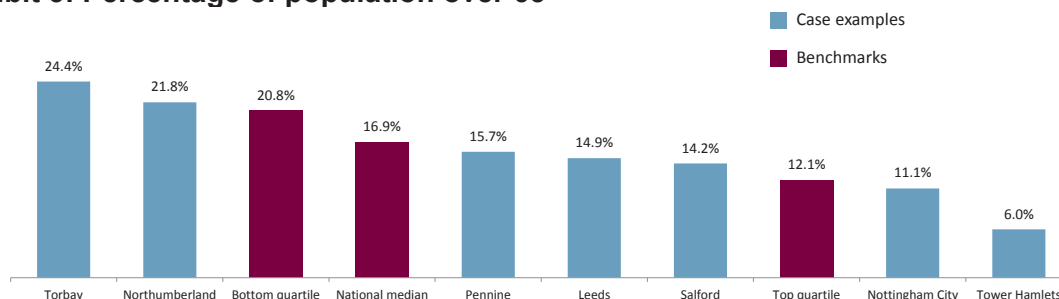
Source: National General Practice Profile, 2014.

Exhibit 4: Percentage of obesity prevalence

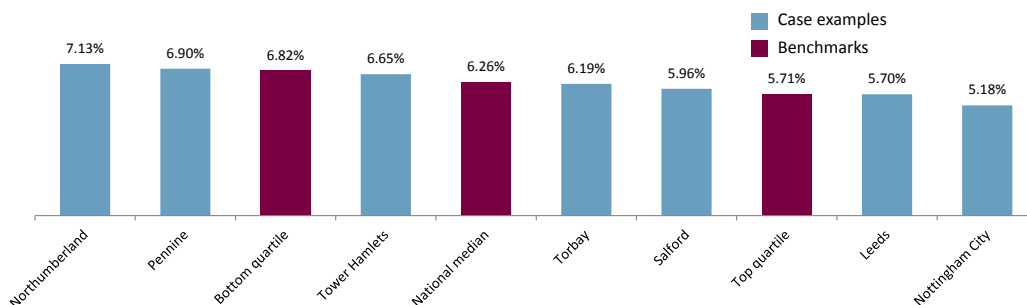**Source**: Quality and Outcomes Framework (QOF) (2013/14).

Exhibit 5: Emergency admissions per 1,000*

Case examples (blue)
Benchmarks (dark red)

Salford	Pennine	Bottom quartile	Torbay	National median	Nottingham City	Northumberland	Top quartile	Leeds	Tower Hamlets
30.1	30.1	28.4	26.4	25.5	25.0	24.9	21.9	21.6	19.2

Source: BCF Better Care Atlas (2014/15).
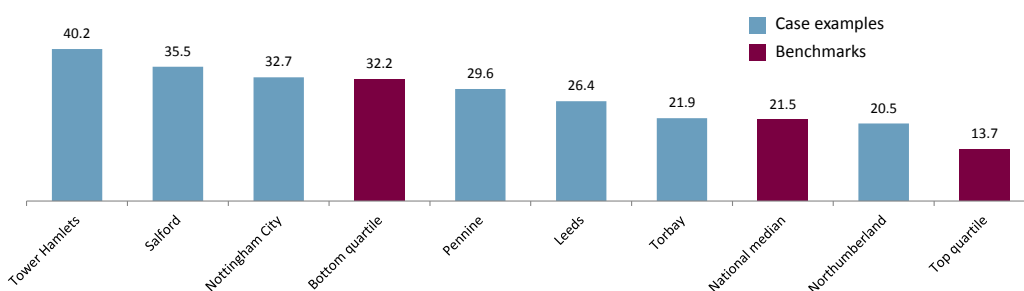*Torbay and Leeds data unavailable, replaced with Devon and Leeds region respectively

Exhibit 6: Percentage of diabetes prevalence

Case examples (blue)
Benchmarks (dark red)

Northumberland	Pennine	Bottom quartile	Tower Hamlets	National median	Torbay	Salford	Top quartile	Leeds	Nottingham City
7.13%	6.90%	6.82%	6.65%	6.26%	6.19%	5.96%	5.71%	5.70%	5.18%

Source: QOF Framework, CF Analysis (2013/14).

Exhibit 7: IMD deprivation score

Case examples (blue)
Benchmarks (dark red)

Tower Hamlets	Salford	Nottingham City	Bottom quartile	Pennine	Leeds	Torbay	National median	Northumberland	Top quartile
40.2	35.5	32.7	32.2	29.6	26.4	21.9	21.5	20.5	13.7

Source: National General Practice Profiles (2014).

There is significant variation in the five indicators, with some areas having higher challenges in an ageing population, while others have an issue with high obesity prevalence. It is worth noting, however, that the case study sites selected cover the whole range of performance indicators. The case studies all have high levels of deprivation, all falling under the top quartile and most under the national median. Every health economy has significant challenges to face, but the key issues may differ and as a result drive different care delivery models.

Methodology

The seven case examples were selected to cover a range of contexts, areas of focus and stages on the journey towards integrated care. Broadly the questions that have been explored with each have pursued the following themes:

- the focus of the integrated care programme – the main interventions and what makes the example unique at a high level

- the areas of greatest impact

- the scope of the integration effort and the addressable population

- the dimensions of the model of care and who is involved in delivering it

- how information management, workforce, governance arrangements and payment models have been used as enablers to the work

- the barriers that have been faced during the integrated care journey

- the main challenges those involved have observed

- the key lessons learnt from the process.

The case study research is based on interviews and a review of documents and reports obtained from interviews or through published sources.

Synthesis of the case study findings is focused on what differentiates local efforts and the progress being made

While the aim of integrated care is shared across England, the specific details of how each one seeks to get there and the results they achieve differ substantially. From reviewing the case examples, nine areas of differentiation can be identified:

1. **Impact**: what is the level of impact and ambition? To what extent does the degree and scale range from process-level changes targeting a small population to large-scale outcomes, cost and activity-based impact?

2. **Place**: how challenging is the context in health needs? How simple/complex a place is the area?

3. **Focus on individuals**: how broad a focus is there (eg 1 per cent versus 20 per cent of the population)? What areas of care are 'in scope' of the effort?

4. **Care model**: what specific models of care are being pursued? To what extent is there a focus on prevention, avoiding emergency admissions to facilitating discharge, and reablement? To what extent are providers across settings of care actively involved?

5. **Information management**: how developed is the flow of information? What specific functions have been enabled (such as care, patient engagement, performance or payment)?

6. **Commissioning and payment model**: to what extent have changes in payment been made to facilitate integrated care?

7. **Workforce**: how has the workforce been developed to support changes in care delivery? What changes in roles and numbers have been made? How have professionals been trained and developed into new roles and ways of working?

8. **Governance**: to what extent have changes in organisational function and form been put in place to support integrated care?

9. **Leadership**: how long is the history of joint efforts to transform care? How much progress has been made in local areas to deliver new ways of working? How engaged and committed are leaders in the work? How much depth is there in system leadership, below the chief executive level?

Using a maturity matrix to understand development against the nine factors

Among the seven case studies the range in the extent to which each of the nine factors is present was assessed. The factors were used in analysing the journey of each area and in understanding the characteristics of integrated care programmes across the country. A maturity matrix was used and suggests how far developed each of the case studies is against these nine factors.

This is a first attempt at mapping the case studies to understand the distance these localities have travelled on their integration journey as well as mapping progress to date.

An overview of the case studies selected is provided in Exhibit 8 to show their focus, the outline of their care model, whether they are a best practice exemplar in information management, payment models or workforce, and the duration of their journey towards integrated care.

Exhibit 8: Case study overview

✓✓✓ Extensive development   ✓✓ Well developed   ✓ Developed

Area	Focus	Model	Information Management	Commissioning & payment model	Workforce	Governance	Journey
Northumberland	Older people chronic diseases; targeted intervention	Community health services and social care team integration in partnership with acute services	✓✓	✓	✓	✓✓✓	15 years
Torbay	Older people chronic diseases; independence and targeted intervention	Health and social care teams with central co-ordinator role		✓✓	✓✓✓	✓✓✓	15 years
Tower Hamlets	Chronic diseases; prevention and targeted intervention	Primary care hubs with acute, community, mental health and social care	✓✓✓	✓✓✓	✓✓✓	✓✓✓	10 years
Salford	Older people chronic diseases; independence and targeted intervention	Multi-disciplinary neighborhood groups with acute, community, mental health and social care. Central co-ordinator role	✓	✓✓	✓✓	✓✓✓	4 – 5 years
Leeds	Older people chronic diseases and vulnerable children; self care and targeted intervention	Neighborhood teams using real time integrated health and social care record	✓✓	✓	✓	✓	3 – 4 years
Pennine Care	Mental health and chronic disease; independence and targeted intervention	Psychiatric liaison team with police service (Rapid Assessment Interface and Discharge)			✓✓✓	✓	3 – 4 years
Nottingham City	Older people chronic diseases; independence and targeted intervention	Multi-disciplinary neighborhood groups with acute, community, mental health and social care. Central co-ordinator role	✓✓		✓✓	✓	2 – 3 years

Source: Interviews, case studies, Carnall Farrar analysis

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1. Impact

Key lessons and conclusions

- Significant impact is demonstrated across several case studies and is considered to be driven by a combination of factors of differentiation.

- All areas have implemented measures (experience, outcomes, activity and cost) to demonstrate impact. The overall focus is on improving health outcomes and optimising the patient experience.

- Tower Hamlets used a phased roll-out approach tightly focused on making measureable change in a few key areas. Setting challenging performance-focused targets for care packages pushed their GP practices to perform.

- A clear way of testing impact and commitment was crucial for Salford's programme. A two-neighbourhood pilot, with collaborative learning along the way, was used to test and refine the model from the early stages, with impact from the pilot used to drive roll-out of the plan.

- Leeds recommends clearly articulating the benefits of the programme. Both integration and informatics need to have their benefits made clear for people to engage with them successfully and for impact to be achieved.

Variation in impact

The level of impact and ambition varies significantly across health economies. This includes different domains of actual and planned impact (experience, outcomes, activity and cost) and different levels of impact. Impact can be thought of in the following domains:

- process changes

- patient and staff experience

- activity rates (eg emergency admission reductions)

- cost (eg cost savings)

- outcomes.

Exhibit 9 below shows a spectrum of impact to scale. As can be seen, domains, degree and scale range from process-level changes targeting a small population to large-scale outcomes, cost and activity-based impact. This is not to mark certain case studies as better than others, but to enable a baseline for comparison.

Exhibit 9: Variation in impact

	Starting point	Implementing	Well developed	Embedded
Domains of impact	Process changes	Patient experience Staff opinion	Activity changes visible but not yet outcomes and cost	Outcomes and cost as well as activity and process
Degree of impact	0%	1-5%	5-9%	10%+

Source: Interviews, case studies, Carnall Farrar analysis

Significant impact is demonstrated in some sites and a range in aspirations to impact is observed. It is interesting to note the variation in ambition from believing little material change is likely in activity and cost through to people expecting to fundamentally 'bend the trend', delivering 20 to 30 per cent reductions. It is all too common a phenomenon that the level of impact identified in plans is back calculated from the size of the financial gap, resulting in both overly ambitious and insufficiently ambitious plans relative to what might realistically be achieved. To realise the dramatic impact aspired to and seen in the case study sites, a high level of ambition for improved health outcomes and system sustainability will need to be part of the vision from the outset.

The places which have had the greatest impact have been pursuing their visions of integration for the better part of a decade or more. That is not to denigrate any of the places that have not yet managed to have measurable input on cost and quality, but to reflect that this is a journey.

Highlights from the case studies

- Northumberland has had significant reductions in emergency admissions

- Tower Hamlets has achieved significant success in terms of prevention for various chronic diseases across the entire borough

- Torbay has shown significant impact in terms of reducing cost growth and several outcomes related to discharge facilitation

- Pennine Care's Rapid Assessment Interface and Discharge (RAID) model has displayed impact in terms of cost and activity

- Leeds' programme, while still in review, is showing good signs of progress driven by the development and roll-out of an integrated digitised health and care record

- Salford and Nottingham City have high aspirations of impact and have shown significant potential.

The Northumberland Frail Elderly Pathway achieved significant impact in terms of emergency admissions reductions between April 2011 and July 2013, as shown in Exhibit 10. Indeed, these figures show an expected 36 per cent decrease in emergency admissions as compared to a business-as-usual scenario.

Exhibit 10: Northumberland emergency admission reduction between April 2011 and July 2013
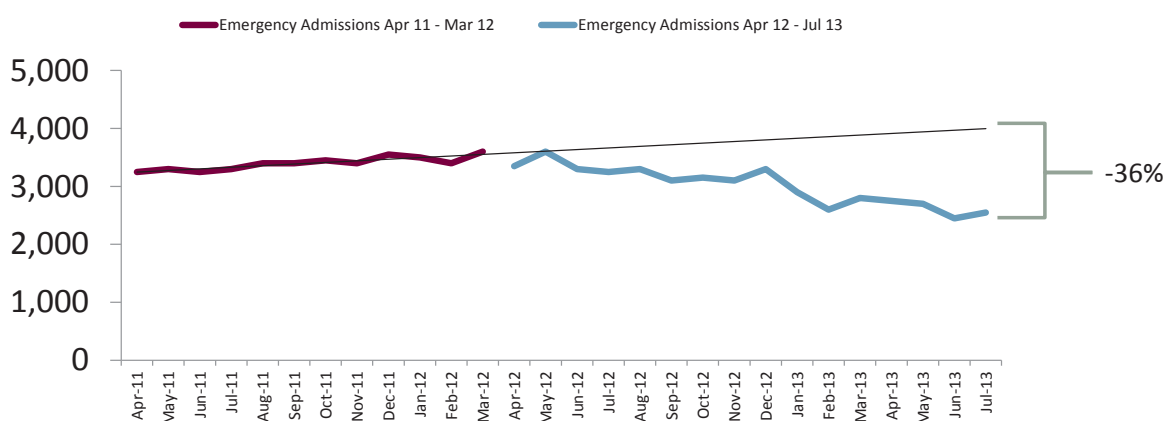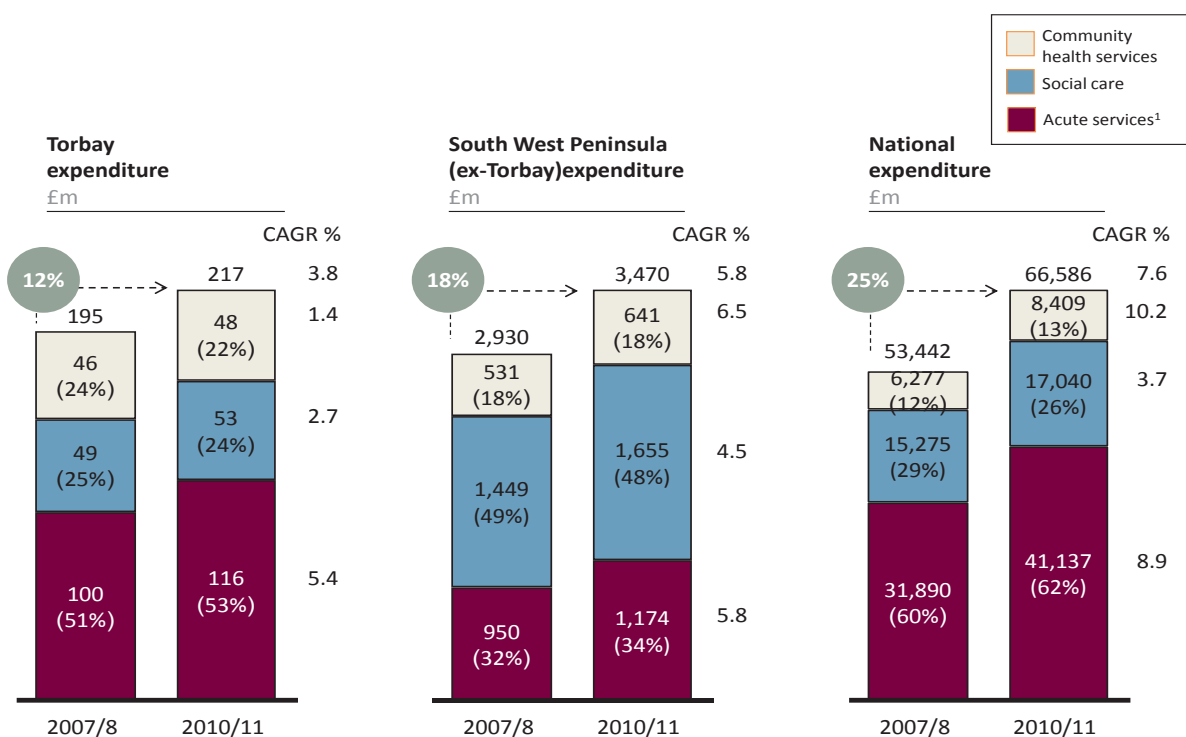

Source: Northumberland CCG, Frail Elderly Pathway.

Torbay is one of the best known integrated care examples in the UK. The focus on the use of the Mrs Smith model in placing the patient at the centre of a model of care is well known and documented. Torbay, however, has also achieved significant levels of impact in terms of outcomes, activity and cost. Between 1998 and 2008, Torbay demonstrated a 33 per cent reduction in daily average number of occupied beds while increasing the amount of care packages in place within 28 days of assessment by 45 per cent. In 2009/10, Torbay showed 19 per cent

lower average length of stay and 29 per cent lower emergency bed use for the population over 65 versus South West Strategic Health Authority (SHA) peers.

More recent analysis shows that Torbay halved the growth rate of health and social care costs compared to national average between 2007/8 and 2010/11. So, at the same time as achieving significant improvements in terms of experience, activity and outcomes, Torbay managed to deliver substantial cost impact as shown in Exhibit 11.

**Exhibit 11: Torbay cost associated growth**

Legend:
- Community health services
- Social care
- Acute services[1]

Torbay expenditure £m

	2007/8	2010/11	CAGR %
Total	195 → 12%	217	3.8
Community health services	46 (24%)	48 (22%)	1.4
Social care	49 (25%)	53 (24%)	2.7
Acute services	100 (51%)	116 (53%)	5.4

South West Peninsula (ex-Torbay) expenditure £m

	2007/8	2010/11	CAGR %
Total	2,930 → 18%	3,470	5.8
Community health services	531 (18%)	641 (18%)	6.5
Social care	1,449 (49%)	1,655 (48%)	4.5
Acute services	950 (32%)	1,174 (34%)	5.8

National expenditure £m

	2007/8	2010/11	CAGR %
Total	53,442 → 25%	66,586	7.6
Community health services	6,277 (12%)	8,409 (13%)	10.2
Social care	15,275 (29%)	17,040 (26%)	3.7
Acute services	31,890 (60%)	41,137 (62%)	8.9

1 General & acute spend and A&E (excludes maternity and mental health)

Source: NASCIS 2010/11; FIMS 2010/11; L&B 2010/11; Carnall Farrar analysis.

Tower Hamlets achieved substantial improvements in outcomes. Care plans, screening and immunisations have all increased substantially as Exhibit 12 shows below.

Exhibit 12: Tower Hamlets outcomes
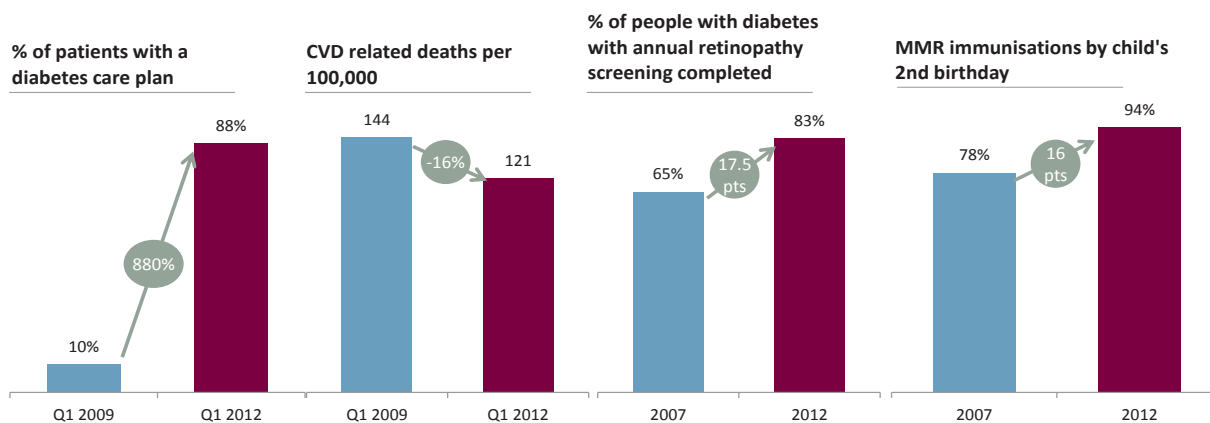
Source: NHS Outcomes Framework Indicators; Carnall Farrar analysis.

These significant levels of impact show what is possible for other localities seeking to implement programmes of integrated care, and help provide a benchmark level for ambition.

2. Place and context

Key lessons and conclusions

- The seven case studies in this report are intended to be representative of the potential experience of integration in England and should resonate with all local systems, regardless of where they are on their integration journey.

- All the nine areas of differentiation are used in the approaches for integrated care by the sites but they are applied in different ways and vary in extent of application. The different case study 'place and contexts' in terms of complexity of place and the population challenges faced are likely to have influenced the differences in integration approach taken.

- The locations of all the case studies have high levels of deprivation, falling under the top quartile and most under the national median.

Complexity of place

The starting point for looking at integration is to understand the question of 'place'. It is obvious in travelling around the country that some places are inherently more challenging than others. Exhibit 13 below illustrates key dimensions of the local clinical commissioning group (CCG) or local authority structure, the provider structure, and level of provider performance.

Exhibit 13: Complexity of place

Place and context	Simple	Low complexity	Significant complexity and challenge	High complexity and challenge
Population	Mostly healthy	Healthy population relative to the national average with good outcomes	Multiple areas of poor health and some poor outcomes	Highly challenging population with poor population health and poor outcomes
CCG/LA structure	1:1 CCG and Local Authority	Small number of CCGs and Local Authorities	Small group of CCGs and Local Authorities	Multiple CCGs and/or Local Authorities with competing visions and footprints
Provider structure	Acute and community provider with direct alignment of commissioning and provision footprints; Well-organised primary care	Acute and community provider that cuts across a footprint of multiple localities/CCGs	Multiple providers within a given locality	Multiple providers and multiple commissioners across complex footprint; fragmented primary care
Provider performance	Strong provider performance	Relatively well performing provider with some quality and financial challenges	Provider with significant challenge (quality/ financial)	Numerous providers across sectors with significant financial challenge

Source: Interviews, case studies, Carnall Farrar analysis

Highlights from the case studies

The case examples cover a range of care settings and geographies:

- Tower Hamlets has a population with high levels of deprivation and historically poor outcomes, a simple commissioning footprint for care outside the hospital but a complicated acute landscape with a huge provider facing very large financial pressure and multiple CCGs that need to be involved to address it. Primary care had, for many years, struggled to meet local population needs. Its integrated care programme focused on integration driven through primary care transformation.

- As a care trust, Torbay had a simple commissioning structure that allowed working across health and care. Its elderly population made a focus on supporting patients to live independently and facilitate the transitions of care when hospital was required.

- Pennine Care is a provider that works with multiple CCGs and local authorities in an area with significant quality challenges. Pennine Care NHS Foundation Trust (FT) provides care to people across six main CCGs. These CCGs have high levels of deprivation and disease prevalence and cover a population with significant health inequalities. The approach taken, centred on joined-up physical and mental health, seeks to address these local health inequalities.

- Salford has high levels of deprivation and is a unitary CCG/local authority structure with a strong performing provider in Salford Royal FT. Compared to the England average, Salford has a higher prevalence of many chronic conditions.
The relatively simple local system may have supported the implementation of the alliance agreement and commitment to integration.

- Leeds involves three CCGs that have a history of working together with three service providers, the council and academic institutions. Key challenges for the local health economy include high levels of deprivation, significant prevalence of chronic conditions and poor mental health outcomes. Leeds has health care pressures at both ends of the age spectrum driven by the high student population and ageing population and this has steered the broad focus for the integrated care programme.

- Northumberland has an older population with poor heath, but clear CCG/local authority alignment and a strong provider in Northumbria Healthcare FT System. System reform with the separation of commissioning and provider function has supported integration and Northumberland is currently developing a Primary and Acute Care System under the New Care Models Vanguard Programme.

- Nottingham City CCG and Nottingham City Council have entered a five-year programme of work to integrate adult health and social care services. The city has a very challenging and complex health and deprivation profile, the alignment of the CCG and city council boundary allows a 1:1 relationship, enabling the programme to take a challenging approach to integration to address the wider system.

3. Focus

Key lessons and conclusions

- Although there is a disproportionate level of spend on the top 1 to 2 per cent, it is important to broaden horizons and target wider sections of the population in order to achieve significant impact.

- Understanding which specific patients are in what segment is important to allow clinicians and care givers to make the most effective use of the data. At a system level, this can be done only with pseudonymised data matched at patient level. For care delivery, it is essential that this information is provided directly to clinicians on a named basis.

- The creation of a patient-level dataset requires significant effort but is a critical foundation in the establishment of integrated care programmes, enabling the creation of detailed insights into the population and also facilitating the better flow of information and new payment models.

Variation in focus and scope

The size of the population within the scope of each programme varies significantly. Many places have initially focused on a scope of 1 to 2 per cent on the basis that this is an area of acute need, while others have broadened their focus. This represents around just 12 to 15 per cent of the total healthcare spend (£4,700 to £8,000 per head) and requirements of these complex patients are very different from others. Others have targeted about 20 per cent of the population and 60 per cent of spend in total (£3,500 to £4,000 per head).

Exhibit 14: Focus and scope

	Focused	Narrow	Broad	Holistic
Population addressed	Top 1-2% (e.g. exclusively frail elderly and very high risk)	Top 10% incorporating multi-morbdity	Segmented approach to top 1-2%, 10%, 20% and rest of population	Segmented approach for 1-2%, 10% and severe and complex populations (e.g. LD, SMI, etc)
Spend included	Single setting (e.g. community, primary care, acute)	Several settings (e.g. primary & community care or community & acute)	Multiple settings but short of all settings	All settings

Source: Interviews, case studies, Carnall Farrar analysis

Highlights from the case studies

The case studies in this report vary in focus and scope:

- Tower Hamlets had an initial focus on 11,000 diabetic patients (4 per cent of the population), then expanded quickly to cover 20 per cent of the population with chronic conditions. Their programme had an initial focus on primary care transformation and this has extended to public health and now community health and mental health.

- Torbay largely focused on the older population (top 10 per cent 'at risk') and chronic diseases with community health and social care as the main providers, although this was expanded to incorporate primary and acute providers.

- Pennine Care's RAID model addressed people with mental health issues, working with secondary and community care.

- Salford, Leeds and Nottingham City address a wide spectrum of need, including older people and those with chronic diseases. All three focus on primary, community and social care.

- Northumberland has focused on the frail elderly at high risk of admission via primary care and the community through locality integrated networks (3 per cent of population).
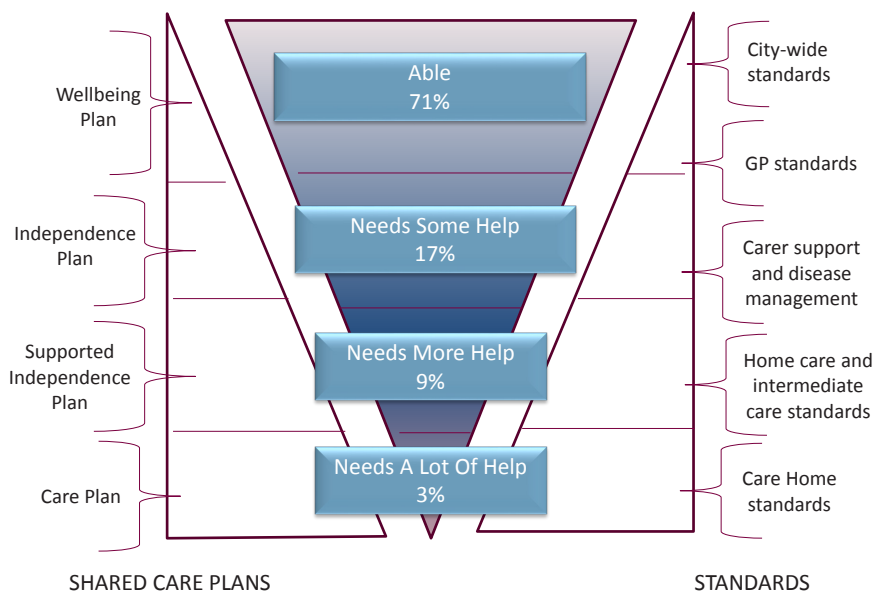
Use population segmentation to identify the initial focus

A critical issue is how each area chooses to focus their joint efforts. The most common approach to date used by the case study sites has been to use risk stratification tools to segment the population. These have traditionally produced a 'pyramid' based on risk of admissions. Typically, these models are used to identify specific individuals to consider as part of integrated care programmes. Most commonly these have addressed the top 1 to 2 per cent of the population.

Sites are using more sophisticated segmentation approaches to broaden their focus and understand population health and care needs. Most are incorporating additional intelligence such as community activity and also have broadened their focus to consider both the most intense needs and also how best to support others in avoiding deteriorating conditions and prevention.

For example, Exhibit 15 below illustrates Salford's segmentation model that includes intelligence beyond simply risk of admission such as whether people are in care homes, or have significant packages of care assigned to them. Jack Sharp, Director of Strategy at Salford Royal NHS FT, expanded that they sought to broaden horizons past the top 1 to 2 per cent to provide a "focus upstream on individuals who may become dependent on resources later".

Exhibit 15: Salford's population segmentation model

Wellbeing Plan

Independence Plan

Supported Independence Plan

Care Plan

Able 71%

Needs Some Help 17%

Needs More Help 9%

Needs A Lot Of Help 3%

City-wide standards

GP standards

Carer support and disease management

Home care and intermediate care standards

Care Home standards

SHARED CARE PLANS

STANDARDS

Source: Salford

The most sophisticated approaches consider segmentations of the population based on a robust understanding of health and care activity costs as well as demographics and health conditions. Several places have taken this approach and this has been described in work by Monitor on patient-level data sets. Taking this approach allows understanding of the population in different segments and addressing each differently. John Wardell from Tower Hamlets noted: "Segmentation provides a holistic view of the whole population and can cover various needs and conditions across health and social care. It can be used to create a patient level view of activity and spend across all settings of health and social care."

Exhibit 16: Example of detailed population segmentation

Population, k   Total spend, £m   Spend per head

	Mostly Healthy	Chronic conditions	SEMI	Dementia	Cancer	High needs	
Children 0-16	Mostly healthy children 1,085	Children with chronic conditions 1,278	Children with SEMI 6,553		Children with cancer 15,714	Children with PD/LD[1] 1,272	Vulnerable children 12,145
	570.8 | 619.1	37.7 | 48.2	1.3 | 8.5	- | -	0.3 | 4.7	12.7 | 16.1	17.7 | 214.5
Adults 16-69	Mostly healthy adults 550	Adults with chronic conditions 1,724	Adults with SEMI 7,605	Adults with dementia 8,424	Adults with cancer 3,646	Adults with phys. disability 10,994	Adults with learn. disability 21,292
	1,183.3 | 650.7	414.8 | 715.3	18.4 | 139.7	0.9 | 7.2	26.8 | 97.8	7.6 | 83.5	6.5 | 138.1
Elderly 70+	Mostly healthy elderly 2,118	Elderly with chronic conditions 3,473	Elderly with SEMI 13,181	Elderly with dementia 12,102	Elderly with cancer 5,059	Elderly with phys. disability 15,717	Elderly with learn. disability 25,220
	12.2 | 25.8	301.4 | 1,046.7	4.2 | 55.3	22.3 | 269.8	61.0 | 308.6	48.6 | 764.3	0.5 | 12.8

Source: HES, QOF, CCG accounts, LA accounts, ONS, Carnall Farrar analysis
1.   Children with LD/PD figure does not include spend on education

**Source**: Monitor Ready Reckoner Tool, Carnall Farrar analysis.

Exhibit 16 above displays detailed insight into populations and spend in health and care based on an example of a segmentation model:

Mostly healthy people here account for 64 per cent of the population (1,754,000) and 24 per cent of the total spend at £724 spend per head (see the green boxes).

Older patients with chronic conditions account for 11 per cent of the population (301,400) and 20 per cent of the total spend costing £3,473 per head.

Severe and complex conditions account for 8 per cent of the population (228,800) and 41 per cent of the total spend at £9,270 per head.

Exhibit 17: The segmentation analysis shows that 35 per cent of the population account for 75 per cent of total health and social care spend
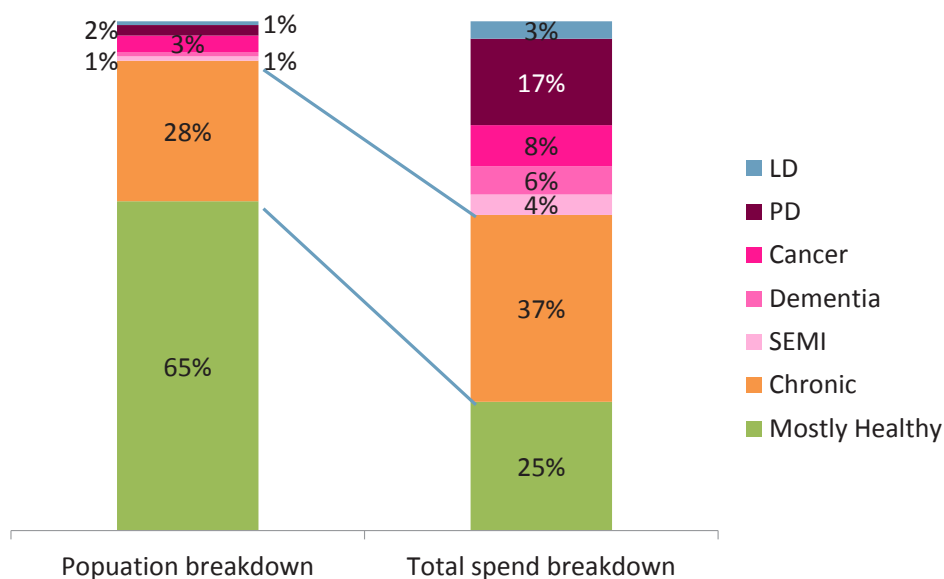
Source: HES, QOF, CCG accounts, LA accounts, ONS, Carnall Farrar analysis
1. Children with LD/PD figure does not include spend on education

Source: Monitor care spend tool, client example, Carnall Farrar analysis.

This illustrates the importance of the question of how broad a focus is appropriate for integrated care programmes. Many programmes have pursued an approach to the top 1 per cent or 2 per cent of health spend based on acute activity identified from risk stratification tools because these patients are very expensive and consume a disproportionate level of resources. Despite this high cost per person, however, the total amount of resources consumed by this group is typically about 10 per cent. This means it is an important group to address but not one that will be anywhere near sufficient to address the bulk of spending and improve the care experience for wider segments of the population.

In addition, pursuing a broader range of patients than the top 1 or 2 per cent allows local communities to implement an integrated care model which shifts the focus to prevention and maintaining wellbeing and independence. In the context of the current financial environment commissioners cannot afford to continue business as usual.

Whether to use risk stratification (attributing a risk score to patients and targeting the high risk) or segmentation (separating different groups of the population into identifiable segments to then target) is still a contested topic in health and social care. Segmentation is pursued because it is simple and intuitive, it is based on people's age and conditions and

as a result is more durable because these do not change frequently – especially within a year. Risk scores, for example, can fluctuate significantly. Conversely, while segmentation is more intuitive and identifiable, there are greater requirements for the information governance to cover all care settings and the data analysis required. There is also still a necessity of prioritisation that needs to be layered in due to the different levels of need and acuity within segments themselves. A segmentation approach is more attractive than risk stratification in pursuing integration because it allows bringing together a total picture of health and care spend, engaging frontline staff in understanding the needs of specific segments and designing care to meet their needs, and ultimately provides an obvious link to new payment models, such as capitation.

All case study sites have segmented their population to determine focus and inform programme planning. Northumberland, Torbay, and Nottingham specify the use of risk stratification as a core element of their programme to focus on people at high risk of admission within their care model.

4. Care model

Key lessons and conclusions

The types of interventions that can be employed in a specific care model in a given locality are dependent on a range of factors: the types of providers involved in the programme; the specific health and care challenges in the local economy; and the resulting main area of focus for the care model. This is a key reason behind the different shapes care models take.

Models have evolved and grown often from the way organisations already work together. As a result, in reflecting on the opportunities suggested in the Five Year Forward View there is a tendency for the Primary and Acute Care System new care model to grow out of models where acute and community have started working well together due to acute and community healthcare integration. Conversely, where integration of acute and community healthcare is not in place providers in many areas are pursuing Multispecialty Community Provider models which develops integration excluding acute providers.

Successful delivery requires being able to understand the following questions:

- Who is being addressed? (What segment(s) of the population)

- What are their needs?

- What specific changes in how care is delivered need to be made?

- What changes does that require in who does what?

- How are core processes changed to embed this?

To address the risk that integration purely evolves from current functional form and ways of working, the following lessons should be applied to ensure the care model is robustly developed:

- starting with the individual is crucial – whether that be from an older person's point of view, chronic, mostly healthy, special needs and so on

- draw on evidence from elsewhere and use this as a basis to undertake impact modelling and planning

- start with a narrow focus but plan for rapidly broadening the programme to achieve impact

- engage stakeholders to understand the case for change, develop the vision and co-design the model so it is locally owned and meets local population needs and local context

- identify a small number of things providers need to consistently do differently

- ensure that you build on teams and relationships, enabling people to work together in spite of organisational boundaries

- develop and agree a set of enablers and use them to support the programme

- scale up things which work

- build on strengths and leadership to drive change.

Care and delivery models

The design of the care model and the role local providers play in delivering it also varies significantly. While some areas have put in place a holistic model that covers a range of different interventions, others have a more focused approach. Similarly, while some have collaborative provider involvement and cover multiple settings, others have a dominant provider and/or cover a small number of care settings. Exhibit 18 outlines these differences in care models and the provider involvement.

Exhibit 18: Care and delivery model

	Specific	Focused	Broad	Holistic
Care model	Specific care model that focuses on a narrow set of interventions	Care model that focuses on a number of interventions	Broad care model that covers a number of interventions across several areas	Holistic care model that covers a range of interventions across prevention, emergency admission avoidance, discharge and rehabilitation
Providers involved	Primarily a single setting of care	Dominant leadership from one provider type with limited involvement of other providers	Multiple providers involved substantially	All providers substantially involved

Source: Interviews, case studies, Carnall Farrar analysis

Highlights from the case studies

Highlights from four of the case study examples progressing from a specific to broad focus:

- Tower Hamlets focused on primary care and diabetes, and from there moved to a wider range of interventions covering community health, social care and mental health across chronic and complex conditions.

- Torbay started with a focus on community and social care interfaces then developed tighter relationships with secondary care and met the needs of primary care organisations with the development of zones.

- Pennine Care placed a focus on mental health and in particular putting a psychiatric liaison team in A&E.

- Northumberland started with community and acute integration under locality integrated networks and then later brought in nursing homes and primary care.

Torbay started with the development of a Mrs Smith narrative, which identified the needs of an older person in the health and care system and illustrated the fragmented care pathway, the lack of clarity over who she would need to contact and the delays she would likely experience in discharge and treatment. To respond to this, a model of health and social care integrated teams was developed, supported by non-medical health and social care coordinators to answer phones, connect different professionals and reduce handoffs and discharge time. This reduced the decision-making process from up to six weeks down to two hours, in part through devolved decision-making across health and care.

Mandy Seymour, Chief Executive at Torbay and Southern Devon Health Care Trust, commented that "health and social care coordinators were pivotal in the new system. Staff felt that they were a very positive addition to the multi-disciplinary team", reflecting how important this role was in the success of the programme. Additionally, she noted that after the initial changes in the programme, "frontline staff realised that there were areas of respective caseloads that they had in common and…people started to work

together as a team…discussions that usually would have taken hours or days could be done in minutes."

In addition to changing the nature of the team, Torbay put in place integrated health and social care hubs to facilitate multidisciplinary working.

Exhibit 19 below illustrates a physical working area (without patients) with care coordinators at the centre surrounded by distinct areas for each team in an open plan layout.
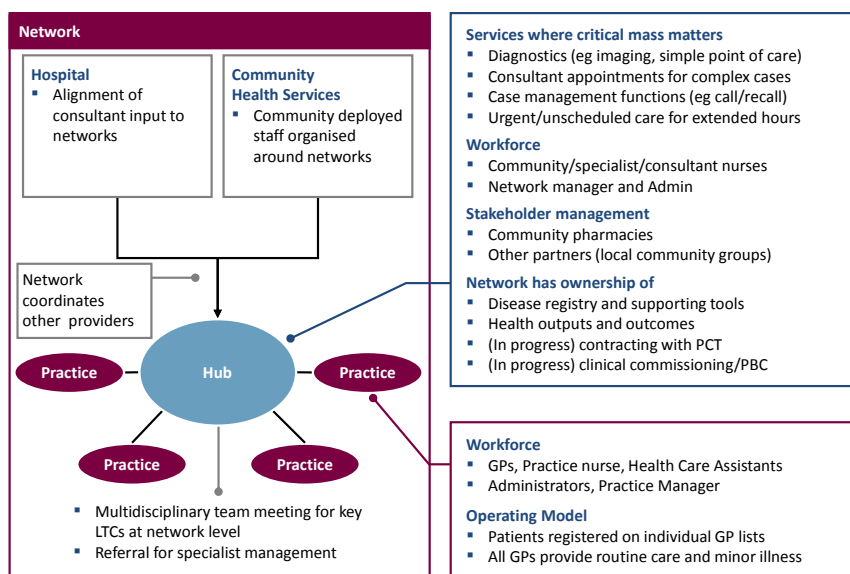
Exhibit 19: Integrated health and social care zones

Source: Torbay

Tower Hamlets has a young and mixed ethnic population, with over 30 per cent of the population Bangladeshi, a high burden of chronic disease and a complicated provider environment with poor primary care provision and access. Primary care had made significant improvements driven by a culture and ambition to do more. Tower Hamlets focused primarily on health and care coordination via primary care to improve prevention and early intervention. To do this it designed specific packages of care for a range of chronic conditions.

These care packages set out the key interactions that each patient required during a year of care. This is illustrated in Exhibit 20 below. They set out the type, number and duration of appointments and the workforce needed to provide them. To offer these specific interventions Tower Hamlets designed a model with enhanced levels of care being delivered by new staff who connected practice staff with community and hospital staff.

Exhibit 20: Tower Hamlets care packages and network model

Activity	Month	Description
First contact	1	10 minutes with the GP (or nurse) on confirmation of diagnosis
Diabetic induction	2–4	15 minutes with nurse for basic information at diagnosis
Diabetic tests	3–5	20 minutes with HCA
Care planning consultation	3–6	Minimum 40 minutes with nurse for care planning
Structured Education	4–12	Initial 2 hour session, followed by four 3-hour sessions
Interim reviews		
— 1st interim review (6 months)	6–8	All new cases have a 6 monthly review including clinical tests
— 2nd interim review (9 months)	8–10	Approximately half of new cases who need further review/support
Retinal screening	3–6	All new cases referred for annual retinal screening
Call/Recall / coordination	1–12	Ongoing follow up from practice and elsewhere to ensure appointments are attended
Medicines Management	9–11	Medicines management with community Pharmacist

Source: Tower Hamlets

Network

Hospital
- Alignment of consultant input to networks

Community Health Services
- Community deployed staff organised around networks

Network coordinates other providers

Practice — Hub — Practice — Practice — Practice

- Multidisciplinary team meeting for key LTCs at network level
- Referral for specialist management

Services where critical mass matters
- Diagnostics (eg imaging, simple point of care)
- Consultant appointments for complex cases
- Case management functions (eg call/recall)
- Urgent/unscheduled care for extended hours

Workforce
- Community/specialist/consultant nurses
- Network manager and Admin

Stakeholder management
- Community pharmacies
- Other partners (local community groups)

Network has ownership of
- Disease registry and supporting tools
- Health outputs and outcomes
- (In progress) contracting with PCT
- (In progress) clinical commissioning/PBC

Workforce
- GPs, Practice nurse, Health Care Assistants
- Administrators, Practice Manager

Operating Model
- Patients registered on individual GP lists
- All GPs provide routine care and minor illness

Source: Tower Hamlets

The RAID model implemented by Pennine Care is an innovative psychiatry liaison service that is composed of three teams: older people's liaison, A&E liaison and alcohol liaison. Consultant psychiatrists, psychiatric nurses, social workers and occupational therapists form a psychiatric liaison team which support the diagnosis, assessment and management of people with mental health conditions in the acute setting. The RAID model enables people to be assessed and discharged with psychiatric input and support and is available 24/7 to all adults over age 16.

Northumberland CCG put in place a Frail Elderly Pathway to improve care for the very high-risk frail elderly and reduce the emergency admissions attributed to them.

Patients are identified in primary, secondary and community care services and referred to the pathway while subsequently being added to a high-risk register. Patients on the register are targeted for assessment by nurses and GPs, reviewed by a multi-disciplinary team (MDT) and have care packages identified and put in place. This provides a coordinated care pathway structured around the needs of the high-risk patients, seeking to identify people before an A&E attendance or an admission and providing packages of care outside of hospital. The register keeps these patients on the radar of primary care, social care and psychiatric care and ensures they are provided daily social care.

Exhibit 21: Northumberland CCG Frail Elderly Pathway
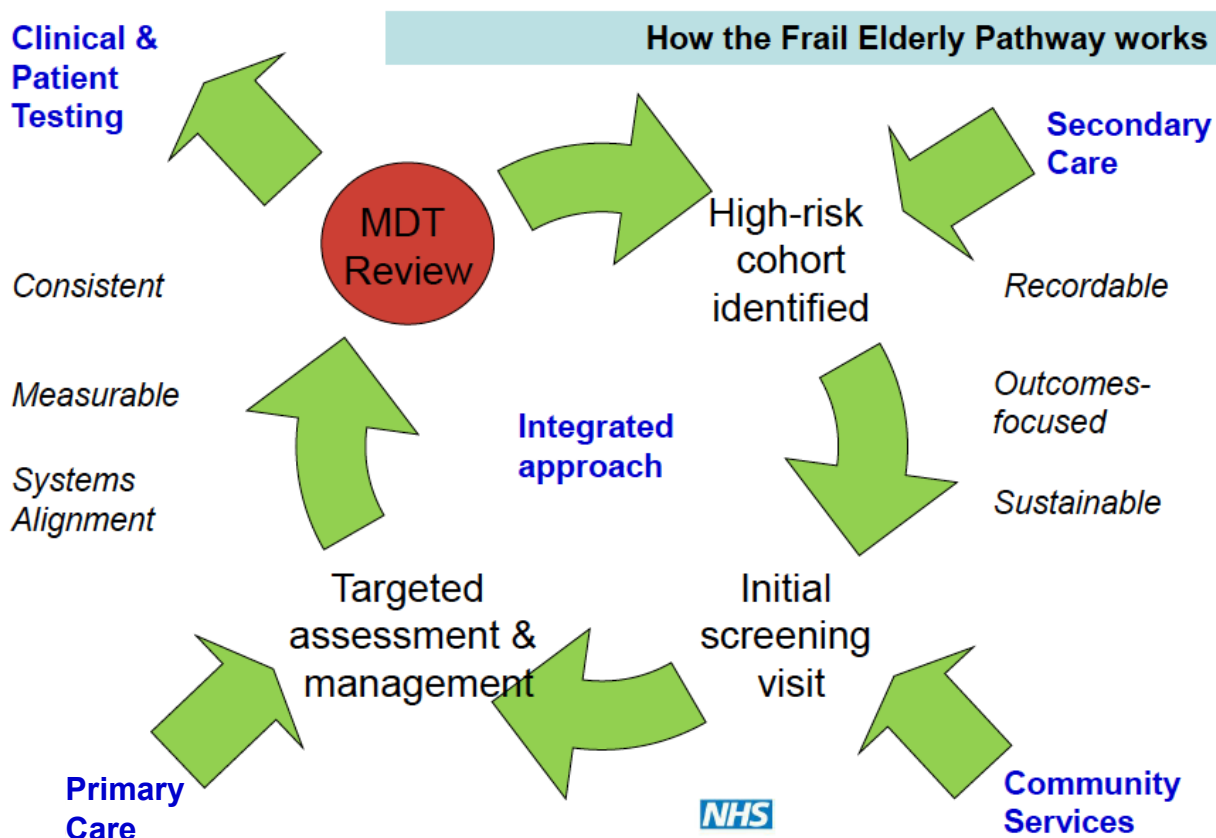
In looking across these models, it is possible to detect some common patterns.

Key themes in delivery models:

- the segments are largely defined with specific focuses on the frail elderly, chronic diseases or a specific group of complex conditions (such as mental health)

- the development of an illustrative patient narrative, or structuring the pathway around the needs of the patient, is of critical importance

- there is a relatively common list of services used by care models

- the choice of interventions is relevant to the segments they are trying to target

- flowing from this, a pattern of providers most involved can be seen.

Exhibit 22: Intervention focuses

	Starting point	Implementing	Well developed	Embedded
New staff	No recruitment	Small scale recruitment	Recruitment to support shortfalls in existing roles	Significant recruitment drive both to fill new posts and support shortfalls in existing
New roles	No significant changes	Slight changes to existing roles, new tasks and jobs for current workforce	Large changes in existing roles with significant differences in focus	Creation of new roles entirely, large changes in existing roles
New skills	No skill development	Small scale up-skilling of small group of workforce	Significant training and up-skilling of workforce	Large scale up-skilling, reorientation and refocusing of the workforce
Development	No training	Small scale organisational development	Significant organisational development of existing workforce and development of leadership capability	Large platform of organisational development used to support programme with leadership and frontline staff development

Source: interviews, case examples, Carnall Farrar analysis

Interventions in integrated care broadly fit into three main areas of focus: prevention; care coordination and emergency admission avoidance; and discharge and reablement. All support a person-centred approach to care, and are described in more detail in the list below:

1. **Prevention and health improvement** to prevent or delay the onset of serious conditions in the population, the development of community assets, immunisation and vaccination and the targeting of public health risk factors such as smoking, diet and lack of exercise.

2. **Identification/targeting** (with risk stratification etc) and enrolment in programmes of high-risk individuals (eg 20 per cent of population).

3. **Care planning and care coordination** to help people manage their health day to day across the range of health and care settings often used for those with chronic or complex conditions.

4. **Case management** is a collaborative process of assessment, planning, facilitation, coordination, evaluation and advocacy for options and services to meet the comprehensive needs of individuals and families; it is most often for those with intense needs (eg top 2 per cent).

5. **Intermediate care beds** (step up/step down beds) are alternatives to hospital bed-based care to prevent unnecessary hospital admission and provide rehabilitation and therapy to discharge patients back to their homes.

6. **Rapid response teams** provide a short-term service that enables people to stay home during a time of crisis with an aim of avoiding unnecessary admission to hospital. The team provides care and treatment in an individual's home following a multidisciplinary assessment.

7. **Reablement services** enable and maintain a person's ability to remain at home independently, sometimes through appropriate interventions delivered in community settings.

8. **Joint assessment and discharge facilitation** provides efficient and effective communication between secondary and community health and social care services to overcome communication challenges experienced when people with complex care needs are transferred from one care setting to another.

9. **RAID** provides mental health specialist input and support liaisons to provide joint assessments, support and advice to prevent or reduce the risk of hospital admissions.

10. **Integrated health and care teams** by developing multidisciplinary teams across health and social care boundaries. By working together to provide support to targeted groups of people they seek to avoid siloed working, reduce duplication of tasks and deliver better patient care and experience.

11. **Access to specialist opinion** helps guide multi-disciplinary services treating people with specific, complex needs by using the expertise of relevant professionals to ensure appropriate treatment is arranged.

12. **Care at home and virtual wards** involve schemes specifically designed to ensure patients can be supported at home with regular monitoring instead of being admitted to hospital or a care home.

13. **Falls prevention** involves working with people to build their stability, confidence, and reduce falls and may involve home modification.

These interventions reflect the specific health and care challenges the local health economy face. The list is not exhaustive but is common across most health and care systems. Exhibit 23 below shows the broad population segments each type of intervention often spans. For example, an area with a significant frail elderly population may drive substantial investment into care at home and virtual wards.

Exhibit 23: Interventions and population segments
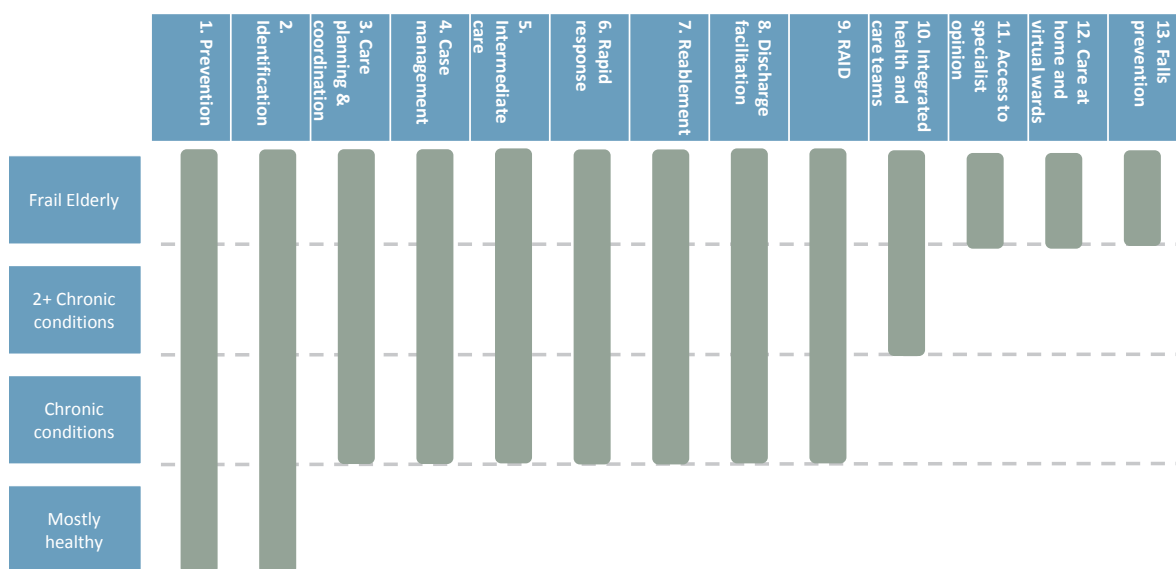
Note that the list of interventions is not prescribed and is purely for illustration as is the mapping of them to different segments. The point is simply that interventions can be identified and these can be mapped to different segments

The nature of the interventions will tend to relate to the providers involved, as shown by Exhibit 24 below.

Exhibit 24: Interventions and care settings

some interaction
High interaction

	1. Prevention	2. Identification/targeting	3. Care planning and coordination	4. Case management	5. Intermediate care beds	6. Rapid response teams	7. Reablement	8. Discharge facilitation	9. RAID	10. Integrated health and care teams	11. Access to specialist opinion	12. Care at home and virtual wards	13. Falls prevention
Public health	High												
Primary care		High	High	High	some	some	some	some		some	High	some	some
Community health				High	High	High	High	High		High	some	High	High
Social care				High	some	High	High	High		High	some	High	High
Acute care					some		some	High	some		High		
Mental Health						High			some	some			

Source: interviews, case examples, Carnall Farrar analysis

5. The flow of information

The degree to which information is used as an enabler differs significantly between localities. It has been critical in the success for the case study examples but in many cases has not been progressed sufficiently. This is particularly disappointing given the unique starting point of England in having wide availability of electronic data (especially in primary and acute care) and the benefit of a shared NHS number.

Key lessons and conclusions

- Creating the flow of information is a critical enabler in integrated care, especially integrated care records, and localities need to get on and investigate how they can use IT to their advantage.

- Agreeing information governance arrangements is key in facilitating both the use of information and technology but also integrated care more broadly. There is no circumventing the need to have robust information governance underpinned by a contract that is signed by every provider.

- Matched patient-level datasets are essential. Many areas have linked primary care data and acute data as this is used for the combined predictive model. This, however, does not go far enough. Only through linking in community care, social care and mental health data can a full picture be created.

- The flow of information is needed at every step in the delivery of care, from the identification of specific individuals to target for interventions through care planning to ongoing delivery of care.

- It should be obvious from this, but for the avoidance of doubt it is impossible to pursue capitated payment models without having matched patient-level data sets in place. Unless greater progress is made in this regard, it will block the ambitions of providers to adopt new care models that rely on capitation.

- To harness greatest value from using new technologies in telehealth, telecare and software applications, the solutions need to be considered and developed as part of the care model development process. Ways of working change and the care model may change as new technology is used.

- To mobilise the investment and effort needed to put information solutions in place the benefits of IT need to be clearly articulated for both patients and the local health and care system.

- There are no policy barriers or constraints preventing the basics from being put in place.

- Whilst it may be seen as a somewhat esoteric or technical area, chief executives must be involved in the drive to solve the information problem because of the need to work across all providers and commissioners in an area and invest substantial time and energy in this.

Information flow is a key enabler

Well-developed programmes will have robust information governance arrangements, shared care records, near real-time patient data and will use information to support

payment mechanisms and performance tracking. Clinicans, staff and patients through appropriate control processes will have access to shared care records and diagnostic results, with patients able to input their information for goal-setting and monitoring purposes. Telemonitoring, telemedicine and new technologies are used to support new ways of working and joined-up care.

As Exhibit 25 below illustrates, areas may use one or all of the informatics tools such as a shared care record, patient-level data sets or telemonitoring. Many programmes have expressed a goal of interoperability to allow 'seeing' the patient in different care settings but few have implemented this. Fewer still have made use of telemonitoring or telemedicine and very few have used information yet for payment and performance.

Exhibit 25: Information flow

	Starting point	Implementing	Well developed	Embedded
Information governance	No IG agreements in place	Data sharing agreement in place to cover single setting of care	Data sharing agreement in place to cover multiple settings of care	Robust IG in place with datasharing agreements across all providers
Care delivery	No information share	Care records and plans shared through continuity of care record on top of existing systems	Shared care record and ability to view care data in other settings of care live	Shared care record integated into clinical system with full interoperability (read/write)
Performance	Not use	Performance information shared periodically only with provider	Transparent use of performance information shared periodically	Transparent use of performance information shared in real time
Payment	Not used	Payment linked to measurable changes on an annual basis	Payment linked directly to provider performance on a quarterly basis	Payment directly linked to measurable changes in performance monthly/quarterly
Patients	None	Basic patient input of information	Patient input of information, access to telemonitoring equipment and ability to participate in goal setting	Patient control of care record used for goal setting and telemonitoring

Source: interviews, case examples, Carnall Farrar analysis
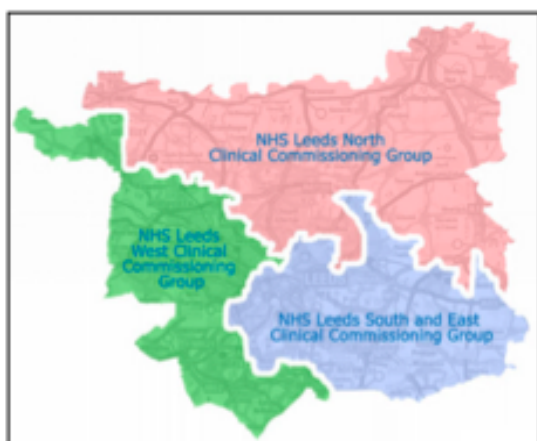
Highlights from the case studies

- Leeds has developed an integrated care record that has been rolled out across a majority of GP practices in the city, designed to support care delivery with full interoperability

- Tower Hamlets has created a detailed information system that allows robust performance tracking that has been directly linked to payment on a quarterly basis

- Torbay put in place an information sharing system that enabled information from all providers to be accessible across the five zones

- Salford has developed a shared care record and a robust performance tracking procedure

- Northumberland's integrated care programme also uses a risk register that tracks the status and care planning information of high-risk patients

- Pennine Care's My Health My Community has created a web platform and mobile application to help patients learn how to care for themselves as well as providing support for carers. This online virtual resource centre provides educational courses, interactive forums, appropriate and relevant local information and signposting to other resources

- Nottingham City is using telehealth and assistive technologies to promote independence and self-care. The new telehealth service supports patients with a wide range of conditions and complexities. The devices support patient education and enable patients to send readings they have taken themselves or answer condition-specific questions to monitor their condition.

Leeds developed an integrated care record that allows organisations and professionals to continue to use their system of choice as their primary electronic patient record. It integrates information from multiple systems and places it into a web-based application view.

The record is built on and powered by a platform already established in Leeds Teaching Hospitals NHS Trust. The focus of the record was around sharing commonly required information from various care settings such as medications, allergies, test results, diagnosis and clinical documents. The record has been developed into a live system that allows GPs to not only see the above information, but also a patient's status in terms of whether they have been admitted to a hospital or what ward they are on, for example.

This system has been rolled out to individual GP practices and mental health providers. Alastair Cartwright, Director of Informatics at Leeds CCG, commented: "The Leeds Care Record is rolled out to every part of the health and care system, with close to a 100 per cent take up by GP surgeries in Leeds, with joint neighbourhood teams being next to benefit from it. This has already improved the efficacy of consultations across the system." A snapshot of the rollout from 2014 is shown in Exhibit 26 below, which illustrates the phased roll out.

Exhibit 26: Leeds care record

- 89 / 109 GP practices
- 1300+ users outside of the Hospital
- 44 patient opt outs

Leeds has also used information and technology to develop an approach to citizen-driven health to provide an effective and IT-driven service with which patients themselves can interact. In initial pilots, the programme has issued service users with tablet devices that allows them to:

- record professional input – so that a support worker could record their visit

- remote access – so that a relative can see if a district nurse has attended them

- access condition-related information including reminders to take medication

- access a 'circle of care', which is

a Facebook-style function allowing individuals to communicate with a wider support network.

The approach aims to enable individuals and carers to take care of themselves and help develop technologies that can help them define and work towards their own goals and improve their own lives.

Tower Hamlets developed an information environment whereby the key data of all addressable patients with care packages was linked between all the main providers and the user groups which needed the data to deliver care packages, for example the MDT. Exhibit 27 below shows how the system was conceived.

## Exhibit 27: Tower Hamlets information system
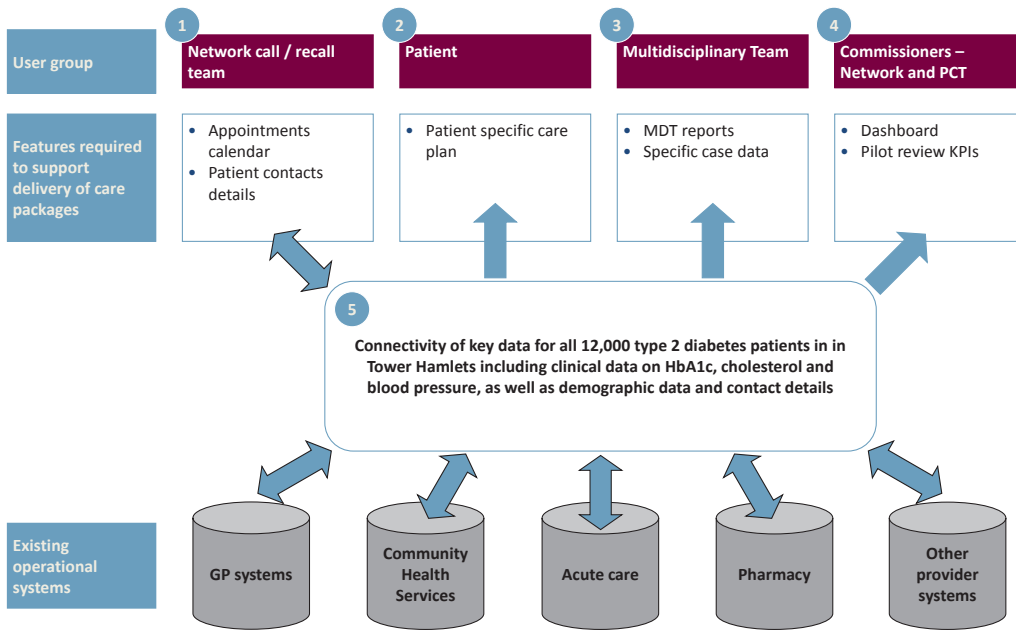
SOURCE: Tower Hamlets

Tower Hamlets also used information to build a robust performance tracking system, with data on care package delivery from all GPs fed into a monthly dashboard of key performance indicators (KPIs). Exhibit 28 below illustrates the design of this tool as initially conceived. It was designed to make it possible to track performance directly against what GPs were being incentivised on and to enable comparison at practice level. This performance tracking was also used to drive payment mechanisms, with a proportion of the budget allocation reserved for achieving care package targets.

Exhibit 28: Tower Hamlets performance tracking
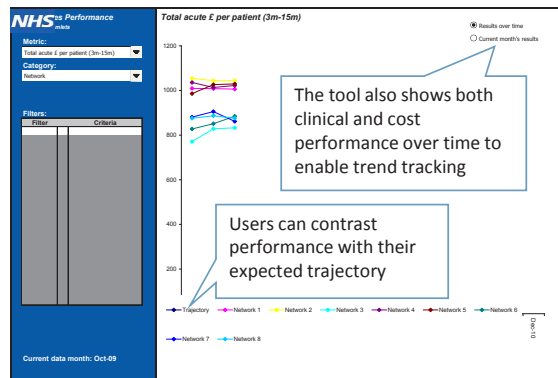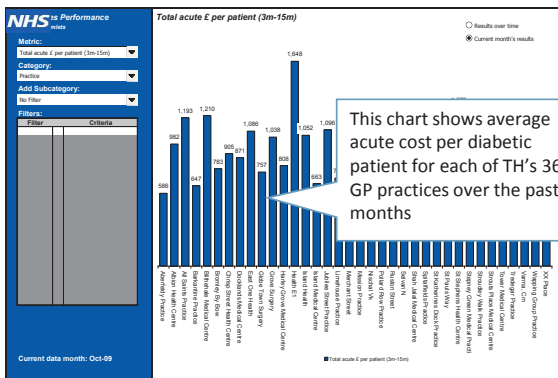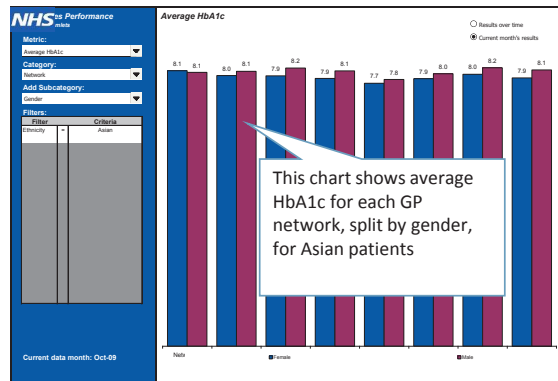
6. Commissioning and payment model

Key lessons and conclusions

- It is unrealistic to expect changes without providing the resources required. In particular, in primary care (which is central to care models) this needs to be recognised and the additional resources required funded.

- Payment model changes need to follow a vision and and desire for specific changes in care – not precede it. They have been widely socialised and implemented over multiple years where successful.

- The key changes that require payment reform to support transforming care are the need to fund upfront activity to support prevention/proactive care (such as care planning, care coordination or rapid response), the need to facilitate the flow across different care settings (such as primary, acute or social care) and the need to incentivise individual clinicians and providers as a whole to work in a different way that delivers value to the system.

- There are no legal or policy barriers to putting new payment models in place. There are, however, gaps in coordination, leadership and technical knowledge. Spanning primary and acute care requires the integration of NHS England and CCG budgets which at present remains complicated – and is even more challenging when considering social care spending.

- In addition, very few places have put in place the information governance or flow required to make payment innovation possible. This is because it is impossible to create a capitated budget without matched patient-level data sets and most places have not put these in place. Capitation without patient-level data is just a block contract.

- Finally, the skills and capabilities required to change payment models are substantial. Combined, this suggests that much more resource, attention and leadership should be focused in this area.

Differences in commissioning and payment models

The arrangement of payment mechanisms around a programme of integrated care can also differ between localities. For instance, some of the more successful programmes have significantly reshaped payment arrangements to facilitate integrated care and have formed a large pooled budget from across health and social care to support this. Conversely, other programmes areas may have had small levels of investment and not made significant changes to existing payment mechanisms. The use of commissioning and payment as an enabler can be critical for integrated care. The range varies from no real changes, aligning existing methods such as Commissioning for Quality and Innovation (CQUINs), to changing commissioning contracts or adopting new contractual forms entirely.

Exhibit 29: Commissioning and payment arrangements

	Starting point	Implementing	Well developed	Embedded
Contract	No significant changes in contracting mechanisms or budgeting arrangements	Changes in budgeting arrangements and contracting to ensure some support to integrated care programmes	Significant changes to payment model to ensure integrated care is supported	Advanced contractual and payment mechanisms or new contract mechanisms entirely (e.g. capitation, alliance contracts, new contract primary care) that facilitate integrated care
Scale of pooling	Minimal polling of budget per BCF	Small pooling of budgets	Medium to large scale budget pooling	Large pooled budget put together from across health and social care
Performance	No use of performance measures	Light use of performance measures within payment systems	Medium use of performance measures within payment systems	Performance linked to measurable and transparent indicators

Source: interviews, case examples, Carnall Farrar analysis

Highlights from the case studies

- Tower Hamlets developed a system whereby payment was partially dependent on performance and networks could use the budget provided to them to meet KPIs in whatever way they decided.

- Torbay operated as a care trust with a pooled health and social care budget and this was a key enabler to integration. This payment model was dismantled as a result of the 2012 reforms with the separation of payment and provision elements and also of social care and healthcare budgets. This challenge and blocker to integrated care has been overcome with the creation of an integrated care organisation.

- Salford, Pennine Care and Nottingham City created business cases to fund specific elements of their integrated care programmes. In Salford this resulted in a pooled budget of £100 million.

- Northumberland's Locality Integrated Networks (LINs) were built on risk-sharing mechanisms between the CCG, local authorities and providers, while the Frail Elderly Pathway drew on a diverse range of funding streams.

A pooled fund was created in Salford to cover almost all of health and social care, totalling around £98 million. This equates to a budget of between £2,000 and £3,250 per service user. A £4.5 million investment was also provided upfront to develop the model of care over 18 months, amounting to around £19 per head of total population. The integrated care programme is expected to produce a saving of £2 million for each of the next four to five years.

Northumberland's Frail Elderly Pathway drew funding from primary care through Primary Care Information Systems (PCIS), secondary care through CQUINs and community care from the Locality Integrated Networks.

Tower Hamlets developed a new payment model that was fundamental to the success of the wider programme. The funding for care packages was provided at a GP network level, with networks able to decide how and where to spend their funding. Seventy per cent of the budget was provided upfront, with 30 per cent provided in return for reaching care package targets. Networks were allowed to use these funds autonomously to achieve the KPI targets, and as a result could decide to apply them to particular areas of need if they wished. This allowed the networks to innovate and handle resources from a frontline perspective, as well as incentivising outcomes. Since the creation of the Tower Hamlets CCG, the performance element of the contract has come under renegotiation. Some care packages have been rearranged from a 70/30 split to a 60/40 split, with a heavier weighting on the target-based funding. Local authority providers have also asked for a 30/70 split, meaning most of the money would be based on outcomes. As well as renegotiating the contract, the CCG is looking for further means to align incentives, payment and providers, offering to share Quality, Innovation, Productivity and

Prevention (QIPP) money if providers and the CCG can reduce non-elective (NEL) activity.

It has been consistently noted that changing the flow of money is essential to provide for changes in the patterns of resources and care delivered – and yet the progress made in general has been poor. The recent Better Care Fund (BCF) has caused pooling on the commissioner side of 4 per cent of budgets on average.

Learning from abroad

Given the minimal track record in looking at payment models being implemented in this country it is valuable to look abroad. There are a number of places around the world which have pursued payment innovation. The United States is probably the place that has done so most aggressively, although it must be recognised that there are serious differences with the US healthcare system. Over the past five years, however, there has emerged widespread recognition of the flaws of a fee-for-service payment model and as a consequence many innovations are moving away from this and towards new models of value-based payment. Perhaps one of the most significant models for England is the Accountable Care Organisation (ACO) payment model developed by the Center for Medicare and Medicaid Services (CMMS). This model applies to publicly funded healthcare for over 65s and has been the basis of rapid movement towards ACOs.

The ACO payment model makes it possible for providers to take on what approaches full capitation for a population. It enables this to happen by phasing in the payment model over time. Throughout the whole period it continues to require the existing payment mechanism (comparable to healthcare resource groups in England) to continue to operate and retrospectively pays out any payments. It determines if payment is due based on detailed benchmarking of the panel of patients in comparison to benchmark cost trends. The focus, then, of the payment model is on "bending the trend" in reducing the cost growth relative to what might be seen elsewhere in country for a similar panel of patients.

The model is deliberately designed for a range of provider organisations, including those comprised solely of groups/networks of primary care practices, joint ventures between primary care, and hospitals employing primary care physicians – but it does require primary care physicians to be part of one of these types of organisations if they wish to participate in this payment model. It also stipulates some core elements of the delivery model, such as the ability to provide coordinated care and care planning. It is also worth noting that this payment model is being designed at the national level, covering about 75 million people. The outlines of this model are shown in the exhibit below.

Exhibit 30: The ACO payment mechanism

Requirements	Payment model
▪ 75k+ population ▪ Providers are required one of ACO structure – ACO professionals in group practices or network – Partnerships / JV between hospitals and ACO professionals; – Hospitals employing ACO professionals ▪ Clear & defined care coordination processes across all providers ▪ Implement sustainable patient engagement/ feedback processes ▪ Outline plans for shared patient decision-making ▪ Care plans for high risk and multi-morbid chronic patients	▪ Allocated based on segmentation based payment model driven by age and condition ▪ At least 3yrs ▪ Upside and downside risk sharing (up to 70% of savings/losses) ▪ Potential for partial prospective payment in year 3 (50% fee-for-service, 50% PBPM) ▪ National, risk-adjusted benchmark of expenditures of 3 prior years ▪ Benchmark determined on comparable population ▪ Updated with projected absolute growth in national per capita FFS, measured by enrollment type)

SOURCE: Centre for Medicaid & Medicare Services 2012

There are several noteworthy things this model does not do. It does not:

- hand over the budget for a population to a provider and eliminate the commissioner

- delegate the design of the payment model to local areas

- leave it up to the provider to determine how it wants to deliver services provided that they deliver outcomes.

There are several obvious implications for England from this:

- It should go without saying that it is impossible to have a capitated payment system without having in place matched patient-level datasets in order to understand the relevant cost base and benchmark trend.

- The design of new payment models ought to be anticipated as requiring sophisticated analytical capabilities; further it should be presumed this would be required across a significant area.

- It should be anticipated that any movement toward capitation needs to be phased in over a multi-year period.

7. Workforce

Key lessons and conclusions

• Workforce development is a key change area for all sites. In many areas the workforce has been trained to work across organisational care boundaries – including mental health, ambulance services, NHS 111 and out of hours GP services. Refocusing has been vital in workforce adaptation to integrated health and care, with social and community workers moving into acute hospitals for example, and through the construction of MDTs and locality networks.

• The most powerful way to develop the workforce to function in new ways is to engage workers in developing plans for transforming care, through engagement and co-production. The workforce needs to understand the person-centred narrative and the reason to change and be empowered to lead and deliver the vision for integrated care. It is critical to have all the right people in the room so they agree who is doing what, avoid duplication of effort and focus on working together to achieve a better outcome with the patient. This level of engagement of staff and development of system leadership across the numerous organisations takes effort but is essential for success. Alongside this, involving the frontline staff in the evaluation and improvement of the new care model helps staff understand, own and lead the change.

• The development of a fully integrated workforce plan to identify gaps and propose how they will meet future workforce requirements is a key enabler, particularly where there are recruitment challenges across the area.

• Several sites have indicated how critical to success it is to identify a small number of pivotal roles and invest in making these happen. Care coordinator roles within MDTs are cited by many sites, with many making use of non-clinical backgrounds to deliver this role. Some of the other key roles that have been developed are clinical leads, care planners, and management support roles. Community matrons and nurse practitioners have been discussed and experimented with in some areas, including taking on a wider role than GPs. The placing of geriatricians in the community setting has also been discussed: significant innovation is clearly possible.

• Across the sites, recruitment to new roles is evident in parallel with emphasis on reorienting and refocusing the existing workforce. The case for a new workforce needs to be driven by the overall economic case of potential savings achievable and the amount of workforce needed to deliver it.

• Extensive training and team development programmes are evident across all case study sites. The workforce (new and existing) will need to be specifically trained on working within an MDT, understanding and owning the team's purpose, vision and developing areas of cross-discipline working. Beyond the MDT, wider training programmes are outlined by the sites such as community nursing, delivering a care home's training programme specifically to improve care planning, care coordination and record keeping. Training staff in new ways of working with shared care records, using technology to target care, and empowering patients to manage, self-monitor and care for themselves is key to

the delivery of integrated care models. This will support the shift from expert model to truly person or family centred care, putting patients in control of their own care.

- Culture change – bringing together different organisational cultures requires organisational development to sustain and embed new ways of working. Time and space are required for staff from different organisations to understand one another's roles, align goals and work together. Different cultures and behaviours between workforce groups and organisations can in some sometimes be a barrier. These barriers can be overcome through training, coaching in understanding and valuing different perspectives. The development of common, shared values and behaviours and ways of working need to be agreed to address these differences.

Significant changes in the ways of working across health and social care

Investment in new roles that offer practical support and free up time for professionals who deliver care provides a benefit in terms of patient-facing time and as a result higher-quality service provision.

Integrated care involves significant changes in the ways of working across health and social care, often requiring new skills, new roles and a new focus for existing employees. Some of the most successful examples have developed new roles entirely to facilitate integrated care. Some of the key roles that have been developed are clinical leads, care planners, health and social care coordinators and management support roles.

Exhibit 30: Workforce changes

	Starting point	Implementing	Well developed	Embedded
New staff	No recruitment	Small scale recruitment	Recruitment to support shortfalls in existing roles	Significant recruitment drive both to fill new posts and support shortfalls in existing
New roles	No significant changes	Slight changes to existing roles, new tasks and jobs for current workforce	Large changes in existing roles with significant differences in focus	Creation of new roles entirely, large changes in existing roles
New skills	No skill development	Small scale up-skilling of small group of workforce	Significant training and up-skilling of workforce	Large scale up-skilling, reorientation and refocusing of the workforce
Development	No training	Small scale organisational development	Significant organisational development of existing workforce and development of leadership capability	Large platform of organisational development used to support programme with leadership and frontline staff development

Source: interviews, case examples, Carnall Farrar analysis

Highlights from the case studies

- Tower Hamlets made a significant organisational development effort at the outset of the programme and invested substantial resources in recruiting and training the workforce.

- Torbay created a new role in health and social care coordinators and recruited across its zones while setting up its own accredited training qualification to support them. Additionally, significant training and development took place to ensure MDT working was successful.

- Pennine Care delivered a major training programme to enable psychiatric nurses and professionals to work in acute systems.

- Salford created a care coordinator role and recruited district nursing administrative support to provide practical support to neighbourhood multidisciplinary groups.

- Northumberland developed locality integrated networks, alongside an emphasis on reorienting the workforce to structure them around the MDT focus.

- Nottingham City also created a new care coordinator role which was designed to provide practical support to ease the workload of professionals providing care.

The mixture of health and social care roles in care coordination appears to be a critical workforce enabler, facilitating operational capability and capacity across the system and helping to overcome barriers that would usually be a significant hindrance to fragmented systems with organisational boundaries between different settings of care. Indeed, Torbay, Salford and Nottingham City have set up and developed this role and have built up admin and practical support roles to free the time of those providing care.

Exhibit 31 illustrates the recruitment in Tower Hamlets, Torbay, Salford and Nottingham City. What is notable is the significant recruitment across the four case studies in the care coordinator role mentioned above. A key difference, however, is that Tower Hamlets invested in clinical leads, managers, care coordinators and admin support. Additionally, the use of locality zones is common across the four, with three having zones of around 30,000 people.

Exhibit 31: Recruitment to new roles

Area	Tower Hamlets	Torbay	Salford	Nottingham City
Population	254,000	140,000	230,000	342,000
Localities	8	5	8	8
Locality populations	30,000	30-35,000	30-50,000	40,000
Care coordinators	1	5 initially, 25 in total	3	19
Admin support	1		21 district nurses 8 social workers	
Clinical leads	0.5			
Managers	1			

Source: interviews, case examples, Carnall Farrar analysis

Torbay created a health and social care coordinator role to streamline and control the referral process. These employees had no professional training but during recruitment practical skills, confidence and capabilities with IT were sought. Their role was largely to get things done, and connect patients or professionals with equipment, information or care. Some care coordinators already existed in Torbay with a similar role, but some initial recruitment took place. The care trust also developed its own training qualification for this role which became accredited, as well as offering to move coordinators up a band if they achieved an NVQ Level 4. In total, there were 24 coordinators across the five zones in the initial programme. Staff feedback about the coordinators was overwhelmingly positive, with staff feeling confident that their patients would get the care and equipment they

needed because they could depend on the coordinators to ensure it happened.

Some areas have taken on large training and organisational development projects to upskill their workforce and develop its capability and capacity for change, ensuring teams of multiple disciplines can work together across or in spite of organisational boundaries. Tower Hamlets invested significantly in organisational development at the start of the integrated journey. From the beginning, primary care networks teams were brought together to identify the skillset of the workforce, where leadership was going to come from and how they were going to work together, and the benefits that this would bring. This was vital in the success of the programme and in the alignment of the networks behind the vision.

For the most part the changes envisioned in integrated care can be delivered only as a result of the changes in the workforce. This includes shifting the patterns of where work is done, increasing the number of people working in some roles, changing how people interact and building new skills and capabilities. A common mistake is to say that the answer is in training, but given two-thirds of the workforce in 10 years are already in the workforce today, this is insufficient.

Tower Hamlets designed GP networks with a clinical lead, network manager and administrator. Each of the networks received funding to support workforce development, including the recruitment of clinical leads, managers, coordinators and admin support, resulting in significant growth in staff. Over 30 people in the primary care trust (PCT) and networks were trained in the diabetes dashboard and performance tools in the first month. Ongoing training was carried out in the provider networks. Specific functions were developed in greater depth, such as teaching network managers to use the diabetes performance tool or showing the PCT long term conditions team the patient stratification/care package development tools. This training ensured the workforce could effectively implement and use the numerous tools that had been developed for the programme and ensured care packages were delivered successfully.

8. Governance

Key lessons and conclusions

- Governance is the general term for the overall framework through which organisations are accountable for continuously improving clinical, corporate, staff and financial performance. In the context of integrated care involving commissioning and provider organisations in an area working together to design and deliver integrated care, all governance arrangements need to be reviewed, understood and developed to ensure clinical, corporate, staff and financial performance is delivered.

- Robust and clear governance arrangements are cited by the case study sites as an essential enabler. Although areas such as information governance arrangements can be seen as a barrier, working together to develop a system-wide information sharing agreement can build relationships and trust.

- A critical step in pursuing integrated care is making sure there are robust governance arrangements for undertaking joint work across organisations, typically as a programme board that includes the most senior executive from each organisation. Every case study site describes their integrated care programme governance arrangements. This is the framework through which the programme is held to account, commonly reporting to the local health and wellbeing board.

- Further developments in governance should be driven by the functional requirements of the care model. This can include the requirements to make joint decisions and secure the needed integration of staff in delivering services and/or in managing the risk associated with new payment models.

Governance arrangements

Governance structures that either exist or are created around integrated care also vary across the country. Although some locations have made little to no change, often having a history of joint work behind them, others have made significant alterations in how governance arrangements and decision-making works. Indeed, some areas have developed new organisational forms entirely to facilitate integrated care.

In general, all places seriously pursuing integrated care have established some way of making commitments to joint action. At a minimum, this reflects the establishment of a programme board that binds together the decision-makers of the organisations. This is a critical step and one that is possible to get wrong when there is not the right level of representation, consistent participation, or a commitment to use to align organisations behind the joint decisions made.

A programme board, however, is often just the first step in moves toward establishing effective governance arrangements. There is now, following the publication of the Five Year Forward View and the vanguard process, a surge in enthusiasm for new forms of organising delivery whether as a Primary and Acute Care System or Multi-specialty Community Provider or other forms. Despite this enthusiasm, there are few well-developed

examples of changes in governance that have delivered the promise of integrated care. There are many examples of community care being integrated with acute care or mental health care providers, but a common refrain is that many have not achieved significant changes in care as a result.

Exhibit 32: Governance arrangements

	Starting point	Implementing	Well developed	Embedded
Governance	No or some small changes in governance arrangements	Some changes in organisational arrangements	Large changes in organisational arrangements	New organisational forms put in place or significant changes in existing structure
Operations	Separate operations and processes between organisations	Some shared operations across organisations	Significant operational collaboration between organisations	Fully integrated operations across organisations
Decision making	Separate decision making processes between organisations	Some shared decision making processes on specific issues	Collaborative decision making processes across organisations	Fully integrated decision making across organisations

Source: interviews, case examples, Carnall Farrar analysis

Highlights from the case studies

Some of the case studies demonstrate the mantra of 'form should follow function' with changes in the governance model following changes in care delivery and payment model:

- Tower Hamlets has set up a network of GP practices aligned with other providers facilitating the coming together of GP practices to form networks that became organisational, rather than simply meetings

- Torbay created changes in governance to cut decision-making time from six weeks to two hours

- Salford has put in place an alliance agreement and prime provider model

- Northumberland integrated community health into the trust, setting up a community care business unit within which social care was linked to community and secondary care.

Tower Hamlets' networks of GP practices aimed to foster collaboration and encourage system-level decision-making. Each network could align with hospitals, community health services and practices, and bring the range of multidisciplinary staff and services into one area's provision. The networks were given funding which they could spend as they wished, and this encouraged peer scrutiny, and collective management and consensus on financial resources. Network boards were created to review practice performance against targets. Initially the networks were informal arrangements but over time they established themselves as organisations. In part the reason for doing so was the need to bear risk.

Salford has put in place an alliance agreement that joins providers under a lead commissioner arrangement. This varies the traditional model of an alliance contract, in that Salford Royal NHS FT has been made the prime provider. This gives the trust sole responsibility for the delivery of the care model, whereas usually multiple providers would work under a lead commissioner arrangement. This agreement ensures a coherent and aligned service is delivered, with the prime provider able to direct resources to the right places and subcontracting other providers such as primary care.

Northumbria Healthcare has integrated community health, social care and mental health into the functions of the acute trust. This allows for rapid responsiveness to patients presenting to the hospital. For example, Derek Thomson, Medical Director at Northumbria Healthcare, commented: "I can ring at 2pm on a Friday afternoon for someone who needs support over the weekend to avoid an admission, care will be

provide at the patient's home by 4pm, and that's 50 miles away from where these people are based." The arrangement allows for secondary, community health and social care to communicate seamlessly and discharge people or divert people away from hospital back home where an appropriate package of care can be arranged for them in a timely manner.

In Nottingham City, a commissioning executive group oversees the Integrated Care Programme Board, in which the CCG, public health and the local authority are key members. The board also has representatives from the CCG, Nottingham City Council, CityCare, Nottingham University Hospitals, Nottinghamshire Healthcare Trust and the third sector. This governance structure has evolved over the past two years, and enables clear and structured decision-making across the local health and social care system.

9. Leadership

Key lessons and conclusions

- There is a clear message from the case study sites that strong, consistent leadership is an essential feature and many cite that with the length of time and journey taken consistent leadership has been vital. Other sites, however, demonstrate that a change in leadership was central to creating momentum to develop a vision for integrated care. A lesson is that the development and ownership of the vision is critical across the area, and strong leadership across the area's organisations is essential to maintain focus and mitigate against the risk of change in leadership and loss of momentum.

- All case study sites articulate their collaborative approaches to leadership (system leadership) and stress the importance of leaders at many levels in that system. Frontline teams need to work together to overcome organisational and professional barriers so care can be delivered in a joined-up way. At the same time senior leaders need to work together to remove organisational obstacles or address political changes which are affecting the delivery of change. Across the case studies, there are examples of how the areas have faced the reality of fragmented and changing organisational structures and accountabilities, system complexity and reform. In some cases, the pace of change has been slowed and most case study areas describe this as a challenge but there are examples where reform leading to organisational change has driven integration forwards.

- Senior clinical leadership is essential and is often more constant across the system than organisational leaders. These leaders, once they are signed up to the approach, create significant drive and momentum and are central to delivery of the change.

- Bottom-up development of a strong vision, a person-centred narrative and a compelling reason to change with widespread engagement across the system is essential to deliver and embed the change.

- The case study sites report that using pilots, applying improvement methods and using small tests of change to observe, reflect and explore what works best for a particular context builds trust and commitment to investing in wider roll-out of the change.

- Cultural and behaviour change has been challenging for some areas. A set of values, behaviours and place-based thinking needs to be developed as part of the programme. The bringing together of people from different organisations to work together, with senior leaders advocating staff having time and space to understand one another's roles, align goals and work together, is evidenced by many areas as a successful way to address this challenge.

Leadership arrangements

The commitment and continuity of leadership, the level of resources and the stage of implementation also differ between areas. Some areas have made significant progress on their journey of integrated care, securing commitment from across the system, developing a strong leadership, and committing resources.

Exhibit 33: Leadership

Leadership	Small start	Implementing	Well developed	Embedded
Implementation status	Concluded discussion and planning phase for interventions and begun rolling out programmes	In the process of implementing interventions and rolling out model with some evidence of positive change	New model of care in place or mostly in place with evidence for potential or aspired success and positive outcomes	Detailed evaluation of new care model taken place with significant evidence of impact
Commitment	Agreement or commitment from one or a small number of commissioners and providers to engage with intervention	Several commissioners and providers signed up to endeavor	Multiple/main commissioners and providers committed	All major commissioners and providers committed
Leadership	New/changed leaders and no history of joint working	New leaders with some ambition to make changes	Leadership with ambition to change and some history of joint working	Continuity of leadership and strong history of working together
Place-based system leadership and thinking	Leaders and staff aware of need for change but focus on separate organizational requirements	Clinicians, service users and leaders understand and are involved in the process	Across the area common approach with clinicians and service users showing place based thinking/leadership	Leaders at all levels across the area who motivate and are motivated to work differently, across service and organisational boundaries
Culture and Behaviour change	Professional groups and organisations have clear differences in culture and behavior	Vision, Values and behaviours across professions and organisations are aligned	Vision, Values and behaviours across professions and organisations are aligned and articulated by staff	Vision, Values and behaviours are demonstrated by all in the system and recognized by service users
Resources	No additional resources	Low levels of resource provision	Medium level of resource investment	Substantial dedicated resources
Duration	Less than 2 years	2-5 years duration	5-10 years of development	10-15 years of consistent development

Highlights from the case studies

Continuity of strong leadership and commitment to work together

In looking at the case examples, it is striking that all have been pursuing change for a significant time. Northumberland, Tower Hamlets and Torbay have long histories of integration and joint working spanning over a decade. They have been built on a platform of commitment and engagement from commissioners, providers and leaders and have enjoyed a continuity of strong leadership:

• Tower Hamlets has been pursuing integration for around 10 years, with the original primary care programme being driven by strong clinical and executive leadership – a new leader arriving was a key catalyst.

• Torbay has been integrating health and social care for almost 15 years, with the original PCT combining adult and social services to form a care trust with a single budget and aligned leadership. A challenge of the separation of commissioning and provider functions in

2012 has been overcome through further organisational changes.

• Salford developed an alliance contract to engage stakeholders and leaders across the system, and secure commitment to the plan.

• Leeds has been implementing its integration programme for three to four years, with broad support and commitment from leading providers and commissioners. These senior leaders have joined together and committed to the programme through the Integrated Care Executive.

• Northumberland has been pursuing integration since the late 1990s with many of the local system leaders involved for a significant part of the journey. Northumbria Healthcare NHS FT has been able to encourage integration of secondary, community and social care after absorbing both community and social services from Northumberland and community services from North Tyneside driven by system reform. One unusual aspect of the leadership at the trust is a GP sitting as medical director on the board; this

displays the integration of different settings of care that is central to the system in Northumberland. Local leaders have secured system-wide commitment and investment (£8.3 million) to deliver an integrated Primary and Acute Care System – joining up GP, hospital, community and mental health services, cutting across organisational barriers, delivering shared information management systems and bringing together commissioning responsibility for the whole health and care economy.

• Pennine indicates that trying to integrate services too quickly can be met with resistance. Challenges arose when merging the mental health workforce with other clinicians which required significant negotiation between teams and individuals. Strong leadership and commitment to work together facilitated this process, and was central in the implementation of each of the facets of integrated care.

Clinical leadership

• Tower Hamlets' leaders and management team helped embed the vision for change and improvement to create a cultural shift throughout the system, especially with clinical and GP leadership. This mobilisation of clinical leaders was crucial in delivering an effective programme of integrated care. Collaborative problem-solving and provision of practical management support to facilitate change was especially important to achieve agreement with the local medical committee and senior GPs. Personal leadership by the Caldicott Guardian in Tower Hamlets helped all GP practices understand the critical nature of data sharing and agree to use patient-identifiable information to enable clinicians to target patients and provide better care.

• As part of developing its vision, Leeds has found that engaging in a significant and wide-ranging piece of work involves taking the people involved with you along the way. GPs and other primary care practitioners have been a key mechanism to leading and enabling successful integration. Leeds has worked hard to articulate the benefits

of the programme, as the foundation on which to build, setting out the benefits from integration and the shared care record. They have found that both integration and informatics need to have their benefits made clear in order for people to engage with them successfully.

Creating the vision and compelling person-centred narrative

Most of the case examples have invested significant effort in understanding the issues and problems with the current system and through widespread engagement they have developed a person-centred narrative and strong vision for integrated care:

• Torbay's clear vision constructed around the 'Mrs Smith' narrative allowed service users, carers and staff to connect with a narrative they were familiar with, and as a result recognise the problems faced by older people in the current system. The messages from the leadership team flowed down to staff and patients and the narrative helped create an aligned vision for health and social care which was structured around the needs of the patient.

• Leeds' overarching vision is to improve quality of care and outcomes for people with complex needs by overcoming the fragmentation associated with multiple providers. The vision is articulated through a person-centred vision statement and a common narrative to create a shared purpose and outcomes for integration in health and care. They have developed 'I statements' and design principles for integration, keeping the voice of the people of Leeds at the heart of everything they do. A fundamental part of their approach is to involve people at every stage, to the extent that they have developed a Leeds charter for involvement in integration. This engagement approach with organisations and users is supporting the creation of a culture of cooperation, co-production and coordination between health, social care, public health, other local services and the third sector.

• Nottingham's programme approach has been to deliver the integrated care

model through joint leadership, clinical engagement and patient and carer involvement. A six-month period of scoping and engagement with citizens was used to capture the issues and problems with the current system. This led to a strong drive to move towards whole-person care and away from disease-led pathways, and underpins their person-centred and compelling narrative for change.

Advocating use of improvement approaches to deliver integration and continual improvement

Many of the case study sites report that leaders' commitment to using pilots, applying improvement methods and using small tests of change to observe, reflect and explore what works best for a particular context is key to successful delivery:

- Torbay's model has evolved in various ways. There are now fewer zones with larger geographic catchments, with the original five zones reduced to two. There has been an increased focus on personalisation – primary care has nominated clinical leads and business leaders for each locality who develop locality plans to meet the specific needs of their population. Care-of-the-elderly consultants have been brought into locality planning, with GPs pooling their patients and deciding whether consultant input is needed to target certain patients.

- Tower Hamlets cites that continuity in leadership and development of the programme has created a stable foundation for a roll-out of the interventions. This began with diabetes and immunisation and is being gradually rolled out to cover all chronic conditions.

- From April 2011 the partners in Salford started a phased approach to the development of their integrated care model; first debating the issue of integrated care itself, followed by designing and refining the model based on the evidence base and best practice examples. Finally, the model was piloted in two neighbourhoods over the space of 10 months, where it was refined and developed further. From April 2014, the programme was scaled up and rolled out across the rest of Salford.

10. Conclusions from case studies

There are a series of lessons that can be taken for the investigation of this set of case studies:

- While it may seem relatively obvious, to fully embed integrated care across an area takes time. The highest levels of achieved impact are in areas that have been pursuing integration for 10 to 15 years. Alongside this, the development and ownership of the vision is critical across the area, with strong system leadership across local organisations.

- All case study sites articulate their collaborative approaches to leadership and stress the importance of leaders at many levels in the system. Frontline teams need to work together to overcome organisational and professional barriers so care can be delivered in a joined-up way. At the same time senior leaders need to work together to remove organisational obstacles or address political changes which are affecting the delivery of the change. Across the case studies there are examples of how the areas have faced the reality of fragmented and changing organisational structures and accountabilities, system complexity and reform.

- Workforce cultural and behaviour change has been challenging for some areas. A set of values, behaviours and place-based thinking need to be developed as part of the programme. The bringing together of people from different organisations to work together, with senior leaders advocating staff having time and space to understand one another's roles, align goals and work together, is evidenced by many areas as a key way to address this challenge. This needs to be coupled with a significant workforce planning process and training programme.

- Places that have been integrating care for a long time have also given themselves time to test things out and figure out what works and what does not. Designing and testing models is essential in fine-tuning and creating bespoke and effective systems. Again the most successful case studies have started with a small pilot, tested and refined and then rolled out to a larger area.

- Information is a key enabler in integrated care, to model need and impact, support clinical delivery through integrated care records, and to understand system performance. To harness greatest value from using new technologies in telehealth, telecare and software applications, the solutions need to be considered and developed as part of the care model development process.

- A critical step is making sure there are robust governance arrangements for undertaking joint work across organisations, typically as a programme board that includes the most senior executive from each organisation. Further developments in governance should be driven by the functional requirements of the care model. This can include the requirements to make joint decisions and secure the needed integration of staff in delivering services and/ or in managing the risk associated with new payment models.

- There is no single silver bullet to drive integration. Successful areas have invested in a wide range of interventions, focused on different population segments and involved different types of providers as a result. To bring high levels of impact all these things need to be brought together to form a complex system with a large number of parts.

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