

Sustainability and transformation plans in London

An independent analysis of the October 2016 STPs (completed in March 2017)

Authors

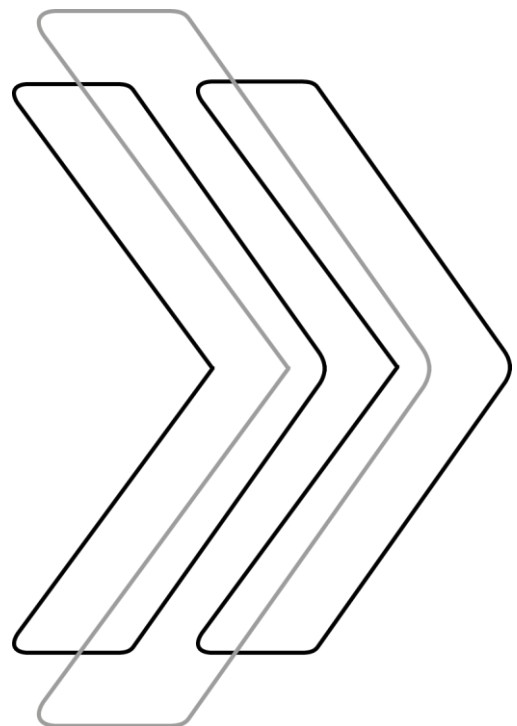
Chris Ham

Hugh Alderwick

Nigel Edwards

Sally Gainsbury

September 2017



This independent report was commissioned by the Mayor of London. The views in the report are those of the authors and all conclusions are the authors' own.

The King's Fund is an independent charity working to improve health and care in England. We help to shape policy and practice through research and analysis; develop individuals, teams and organisations; promote understanding of the health and social care system; and bring people together to learn, share knowledge and debate. Our vision is that the best possible care is available to all.

www.kingsfund.org.uk  **@thekingsfund**

The Nuffield Trust is an independent health charity. We aim to improve the quality of health care in the UK by providing evidence-based research and policy analysis and informing and generating debate.

www.nuffieldtrust.org.uk  **@nuffieldtrust**

Copyright statement

Hospital Episode Statistics data © 2011/12-2015/16, re-used with the permission of NHS Digital. All rights reserved.

Contents

Preface	2
Summary	6
1 Introduction	10
2 STPs in England and London	12
3 What are the main themes in London's STPs?	16
4 What are the main issues to be addressed in the content of the plans?	36
5 An agenda for action across London	78
Appendix A: additional data	83
Appendix B: London's STPs	86
References	87
About the authors	97

Preface

August 2017

The following analysis of London's sustainability and transformation plans (STPs) is based on work completed by The King's Fund and the Nuffield Trust in March 2017. Since then, there have been a number of developments relevant to our analysis. This preface provides an update on the policy context for STPs and any major changes to the five plans in London.

Changes to London's STPs

Our analysis is based on the five London STPs published in October 2016. While the main objectives and proposals in these plans remain the same – with some specific exceptions – these plans have continued to develop throughout 2017. To ensure that we appropriately acknowledged any significant changes in approach, we spoke to the STP leader (or a senior representative) from each of the five STP areas in August 2017. We asked them about changes to their plans for transforming services (for example, if any service changes were no longer going ahead), as well as changes to the assumptions about the expected impact of their plans (for example, on NHS finances). We focused on the content of the plans rather than progress on engagement or implementation. The main changes in each STP area are summarised below.

In South East London, proposals in the STP to centralise elective orthopaedic work (see p 24) have changed. NHS trusts will seek to achieve the same objectives for improving services by delivering elective orthopaedic care on three hospital sites overseen by a managed clinical network rather than reducing to two hospital sites.

The financial context for South East London's STP has also changed since the October 2016 plan. South East London is involved in the new capped expenditure process (see below), which means that organisations in South East London will have to agree financial plans in order to meet their system control total in 2017/18 (a nationally set financial target for the region).

The same is true in North Central London, where NHS organisations will also be expected to demonstrate how they will achieve their control total in 2017/18. In their October 2016 STP, North Central London stated that it did not believe it was possible to completely close its financial gap by 2020/21 (see p 67). There have been no major revisions to the service changes outlined in North Central London's October 2016 STP.

There have also been no major changes to the proposals for transforming services outlined in North West London's STP. Some additional service changes are also being considered – for example, networking arrangements for radiology services to reduce duplication and improve access to services. Like in other STP areas in London, the main changes since the October 2016 STP relate to NHS finances. An ongoing major capital bid of just over £500 million to support the changes to acute and community services outlined in the STP has now been approved by NHS England. This capital bid is now awaiting approval by NHS Improvement, and will then be sent for approval by central government. Less positively, the financial challenge in North West London appears to have increased since the October plan. This will require NHS organisations to make greater efficiency savings than originally planned.

South West London's STP proposed reducing the number of hospital sites providing acute care from five to four (see p 24). The original plan cited quality and staffing issues in particular as the rationale for reducing the number of sites. NHS leaders in South West London have now stated that all hospitals in the STP areas will continue to be needed in future, but that not all these hospitals will need to provide the same services that they do today. An updated strategy document will be produced by the STP in November 2017. Our analysis also uses figures in South West London's STP estimating that inpatient bed days can be reduced by 44 per cent in 2020/21 (see p 20). These estimates were based on a snapshot bed audit carried out in February 2016 with a particular cohort of patients. More detailed work is now being completed at a local level to develop a better understanding of future hospital use and bed numbers in South West London. This includes considering whether some care could be provided in different settings. The new analysis will be included in South West London's STP November update document.

There have been no major changes to North East London's October 2016 STP.

London policy context

The policy context for STPs in London has also continued to evolve. In June 2017, news emerged that three STP areas in London – South East London, North Central London and North West London – had been placed into a new NHS financial planning process, referred to as the 'capped expenditure process', by NHS national bodies (West *et al* 2017). The capped expenditure process is targeted at NHS organisations in 14 parts of the country where existing financial plans exceed available funding, or where financial plans balance on paper but are deemed by national NHS bodies to be unachievable in practice (Anandaciva 2017).

NHS leaders in these areas have been asked to review their current financial plans and 'think the unthinkable' to contain NHS spending, with the aim of creating more affordable financial plans for 2017/18. As we set out in the following analysis, our view is that the financial plans completed as part of London's October 2016 STPs are unlikely to be achievable.

After being announced in the 2017 spring Budget, plans for a deal with central government on the devolution of health and social care services in London have been postponed (Oxford 2017). When our original report was drafted, it was expected that a memorandum of understanding would be signed by the London Councils, the GLA, national NHS bodies, the Department of Health, HM Treasury and the Department for Communities and Local Government, setting out greater powers and flexibilities for health and care services in London. There is currently no agreed date for the deal to be signed.

The structure of NHS commissioning in London has continued to evolve throughout 2017. Formal partnerships, where these did not already exist, are being developed and agreed between clinical commissioning groups (CCGs) in all STP areas in London. In North Central London, for example, a single Accountable Officer has been appointed across the five CCGs. This reflects a trend of growing collaboration between CCGs across the rest of England.

National policy context

There have also been some national policy developments on STPs. In March 2017, NHS England published a document called *Next steps on the NHS five year forward view*, restating NHS England's commitment to STPs as part of its broader aim to 'make the biggest national move to integrated care of any major western country' (NHS England 2017a). STPs were reframed as 'sustainability and transformation partnerships' – not plans. Each partnership was asked to form a board, appoint a leader (where this had not been done), ensure that enough resources and staff are being made available to support the implementation of the plans, and involve local people throughout the process.

The document also announced new 'accountable care systems' (ACSs) – described as 'evolved' versions of STPs that will be given greater support and freedom by national NHS bodies to manage local resources and implement services changes. Eight ACSs have been announced, none of which are in London. However, other areas are also developing plans to develop similar models.

NHS England's *Next steps on the NHS five year forward view* also set out conditions to test proposals for significant bed closures included in STPs. This included the need to show that alternative services will be made available or that

admissions to hospital can be avoided. These tests are important for London's STPs, which – as our report outlines – include plans to reduce hospital use and in some cases the number of acute hospital beds. Our analysis suggests that reductions in hospital use on the scale proposed in London's STPs are not credible. Recent analysis by the Royal College of Emergency Medicine – looking at hospital use right across the UK – also suggests that the NHS is likely to require additional beds this year to achieve safe bed-occupancy levels and hit waiting times targets (Royal College of Emergency Medicine 2017).

In July 2017, NHS England published the first ratings for STP areas (NHS England 2017b). The ratings provide a single summary assessment of 'overall progress' in each STP area (measured against a small selection of indicators chosen by NHS England). Each STP is placed in one of four categories, ranging from 'outstanding' (category 1) to the lowest rating of 'needs most improvement' (category 4). London's STPs ranked in the middle: North East London, North West London and South East London were all ranked as 'advanced' (category 2), while North Central London and South West London were ranked as 'making progress' (as category 3).

Alongside the new ratings NHS England also announced 15 STP areas that would receive a share of the £325 million capital funding promised to the NHS in the spring Budget (Dunhill 2017). This initial investment was given to what NHS England deemed to be the 'strongest' STP areas. A small amount of funding was awarded to support the development of an urgent care centre in North East London.

While there has been significant political change at a national level throughout 2017, the outcome of the general election is unlikely to have a major impact on the NHS, social care and STPs in the short term (Ham 2017). The Conservative party's election manifesto continued to support the ambition of STPs and the broad direction set out in the *NHS five year forward view*. The fragility of a minority government makes any major government intervention on the NHS unlikely. On the flipside, this fragility may lead to greater sensitivity on behalf of the government about any controversial service changes proposed in STPs, particularly those to acute hospitals.

Summary

- Sustainability and transformation plans (STPs) are plans for the future of health and care services in England. Five STPs have been developed in London. We reviewed the content of London's STPs to identify their key themes and analyse the proposals being made.
- STPs are based on the idea that collaboration is needed to improve services and manage resources. This represents a major shift in the approach taken to NHS reform in England, away from the emphasis on competition in the Health and Social Care Act 2012.

What are the key themes in the plans?

- All five STP areas are seeking to give greater priority to prevention and early intervention, while also strengthening and redesigning services delivered in primary care and the community. This includes more closely integrating NHS and social care services.
- Changes to the role of acute hospitals are being proposed, ranging from plans to centralise some acute and specialised services to larger-scale reconfigurations. This includes plans to reduce the number of general and acute hospital beds in absolute or relative terms.
- Each plan focuses on specific services where care needs to be improved – such as mental health and cancer care – and identifies areas where variations in care can be reduced. All STPs set out plans to improve productivity and efficiency of NHS services by 2020/21.
- The plans propose changes to the supporting infrastructure of NHS services – including IT and estates – as well as changes to organisational arrangements and incentives. The plans also describe how the workforce will be supported and developed.

Delivering more co-ordinated care in the community

- Delivering more co-ordinated care in the community is the right thing to do. But STPs must be realistic about what can be achieved within the timescales and resources available. Significant investment is needed to support these care models to develop and it is not clear where this investment will come from.

-
- The expected impact of new care models on hospital use and costs of care should not be overstated. Services in the community, including social care, are under growing pressure and this will have an impact on the ability of STPs to provide more care outside of hospitals and moderate growing demand for care in hospitals.

Moderating demand for hospital services and cutting beds

- If the current rate of hospital use continues, the impact of demographic changes alone may require the equivalent of 1,600 to 1,700 extra acute hospital beds in London by 2020/21 to meet the population's health needs. This is unlikely to be affordable and there would be difficulties in recruiting the extra staff needed.
- STPs outline plans to reduce hospital use and in some cases to cut the number of beds. Even if additional investment is made in services in the community, reductions in hospital use on the scale proposed are not credible. Heroic efforts will be needed simply to manage rising demand with existing hospital capacity.

Reconfiguring acute and specialised services

- Changes to hospital services are being proposed in the face of quality, workforce and cost pressures. The evidence base for concentrating some services in fewer hospitals to improve outcomes is mixed and each case should be considered on its merits.
- Some reconfigurations may be needed to improve the quality and safety of patient care within current financial and workforce constraints, and these should be supported where the clinical case for change has been made.

Prioritising prevention and early intervention

- Ambitions to prioritise prevention and reduce inequalities need to be backed up by more detailed proposals on how this will be done. The role of the NHS in addressing people's non-medical needs and reducing inequalities should be more clearly defined.
- Recent cuts in funding for public health and other local authority services will make these ambitions harder to achieve. Public health spending by local authorities in London is projected to fall in cash terms over the years to 2020/21, adding to the challenges facing the NHS and local government.

Closing gaps in NHS finances

- London faces a potential gap of £4.1 billion in NHS finances by 2020/21. STPs lack detail on how these gaps will be closed and assume that NHS providers will be able to make greater levels of efficiency savings (averaging approximately 3-4 per cent a year) than they have done in the past. This is unlikely to be achievable.
- There are differences in the way that STPs calculate potential financial savings and in some cases the plans may overstate the savings that might be achieved. The financial assumptions in plans need to be heavily stress-tested.

Securing capital investment

- All STPs require capital investment to be delivered, amounting to £5.7 billion across London by 2020/21. It is unlikely that these resources will be available from national budgets. London's proposed devolution deal may offer alternative ways of finding resources by realising value from underused and unused NHS land and buildings.

Implementing the plans

- Health and social care professionals, patients and the public, local government and other partners must be meaningfully involved in developing the content of the plans and their implementation.
- More attention must be given to the practical skills and resources needed to support staff to make improvements in care. STP leaders and their teams have an important role in co-ordinating service changes and creating an environment for learning and improvement.

The role of the Mayor

- STPs have the potential to improve health and care in London through collaboration between NHS organisations, local authorities and other stakeholders. Realising this potential will require co-ordinated action at different levels: in neighbourhoods, boroughs, the areas covered by STPs, and across London as a whole.
- The main ways in which the Mayor can contribute to improving health and care are as follows.
 - *Providing leadership on the prevention of ill health and on tackling health inequalities*, building on the work of the London Health Commission and working through the London Health Board, with Public Health England and local authorities. Priorities include giving every

child the best start in life, tackling obesity, improving air quality, and addressing the social determinants of health.

- *Supporting changes in the delivery of NHS services* to improve the use of resources and deliver better outcomes for Londoners, including supporting changes to the role of hospitals where the clinical case for change has been made.
- *Making better use of the NHS estate* by working with the London Estates Board and using the flexibilities in the proposed London devolution deal. Priorities include realising value from underused and unused NHS land and buildings to fund new investments and to help meet London's severe housing need – including for NHS staff and other key workers.
- *Working with the NHS to tackle workforce shortages and concerns about the impact of Brexit* on EU staff working in the NHS. Priorities include working with the London Workforce Board to co-ordinate action being taken by the NHS and other employers, making use of the apprenticeship levy, and increasing the supply of affordable housing for key workers.
- *Developing London as a global leader in life sciences* by building on the recommendations of the London Health Commission. Priorities include working with universities, local authorities and the NHS, including the three academic health sciences centres, to realise the economic benefits of research and innovation for the capital.
- *Providing system leadership and oversight of the work being done by STPs* to improve health and care by working with partners in the NHS and local government. Priorities include ensuring that London has its fair share of the NHS budget in relation to the needs and growth of the population.

1 Introduction

The Mayor of London commissioned The King's Fund and the Nuffield Trust to analyse the content of London's STPs. We carried out the analysis in February and March 2017.

We were asked to:

- review the plans to identify common themes and key differences between them
- offer our assessment of the main issues and risks in the content of the plans, focusing on the most important issues across the five STPs
- make practical suggestions for how the plans can be taken forward across London.

This work builds on our previous research and analysis on STPs in England. We carried out research into the STP planning process in four STP areas throughout 2016 (Alderwick *et al* 2016a). We tracked the early content of the plans and identified some initial trends and issues to be resolved (Edwards 2016). And, once the final drafts were published in October, we analysed the content of all 44 STPs in England (Alderwick and Ham 2017; Ham *et al* 2017). This work identified a range of challenges experienced in the process of developing STPs and issues with some of the proposals made in the plans. Despite this, we have argued that STPs offer the best hope for NHS organisations and local government to work together to improve local services.

This report summarises the findings of our analysis of the content of London's STPs. It comprises four parts. The first part (pp 12–15) describes the background on STPs and the context for their development in London. The second (pp 16–35) provides a descriptive overview of London's STPs, focusing on the main themes in the plans and the service changes proposed. The third (pp 36–77) provides our assessment of the main issues and risks to be addressed across the five plans. The final part of the report (pp 78–82) makes a small number of recommendations for the future of the STP process in London, focusing specifically on the role of London-wide action in taking forward the plans.

Methods and approach

We used a range of data sources and methods in our analysis. We used the publicly available versions of the STPs submitted to NHS England in October 2016 to analyse the key themes in the plans. We reviewed each plan individually and then compared the proposals to identify similarities and differences between the plans. We were also given access to some background documents setting out more detailed financial and activity assumptions underpinning the London STPs (as of October 2016).

After carrying out this initial review, we drew on relevant evidence, experience and routinely available data to assess the key issues and risks in the five plans. We carried out more detailed quantitative analysis to assess proposals about hospital activity and demand. We carried out a small number (n=12) of semi-structured interviews to help provide background and context for our work. We also held a roundtable with a small number of NHS and local government leaders to test the early findings of our work.

2 STPs in England and London

Background

STPs were announced in NHS planning guidance published in December 2015 (NHS England *et al* 2015). NHS organisations were asked to work together with local authorities and other partners to develop plans for improving health and care services in their area. Forty-four areas of England were identified as the geographical ‘footprints’ on which the plans would be based, each covering an average population of 1.2 million people (ranging from 300,000 to 2.8 million people). Put simply, STPs are intended to be local plans for delivering the *NHS five year forward view* (Forward View) – the national strategy, published by NHS England and other national bodies in 2014, setting out a vision of how NHS services need to change to meet the needs of the population (NHS England *et al* 2014).

Draft STPs were submitted to NHS England in October 2016. The plans cover a wide range of issues – from prevention and primary care through to specialised services in hospitals. They also focus on how NHS services could be more closely integrated with adult social care and other services in the community. The plans outline priorities for improvement in three broad areas: improving quality of services and developing new models of care; improving health and wellbeing for the local population; and improving the efficiency of services. Local leaders were also asked to show how their plans would deliver financial balance in their area. STPs are intended to be long-term plans, covering the period from 2015/16 to 2020/21.

STPs bring together all NHS organisations in each area with local authorities and other partners, with an expectation that they will collaborate in developing their plans. A named individual has been identified to lead the development of each STP. Most of these leaders come from clinical commissioning groups (CCGs) and NHS trusts or foundation trusts, but a small number come from local government. The timetable for developing STPs was tight in relation to their scope and ambition. This meant that there was limited opportunity in most areas to engage stakeholders meaningfully in developing the plans (Alderwick *et al* 2016a).

The emphasis on collaboration that lies behind STPs marks an important shift from the belief that competition should be used to improve health and care services (Alderwick and Ham 2016). It mirrors the focus in the Forward View on the need to develop new care models centred on the integration of services. STPs have faced the challenge of fostering collaboration and integration in a system, based on the Health and Social Care Act 2012, that was not designed with this purpose in mind.

NHS England and NHS Improvement have made it clear that STPs will play an increasingly important part in NHS planning in the future. The two-year contracts agreed between commissioners and providers at the end of 2016 were expected to reflect the priorities identified in STPs (NHS England and NHS Improvement 2016). NHS England published a document in March 2017 called *Next steps on the NHS five year forward view* (NHS England 2017a) setting out how STPs will evolve, including by identifying a small number of areas with strong plans and partnerships that will be supported to make faster progress and evolve into 'accountable care systems'.

If this is to happen, STPs will need to strengthen their leadership and governance and bolster their staffing arrangements to be able to translate the ambitious proposals set out in the drafts submitted in October 2016 into credible plans (Ham *et al* 2017). They will also have to work hard to involve a range of stakeholders – including health and care professionals, the public and local politicians – in the plans, and consult on any proposals for major service changes. In doing this, STP leaders will need to address concerns in some quarters that STPs are focused on cutting services to meet financial pressures rather than improving care.

STP footprints

There are five STPs in London: North Central London, North East London, North West London, South East London and South West London. These are based on areas that have been used for NHS planning purposes in the past. Each STP in London covers an average population of 1.7 million people – ranging from 1.4 million (in North Central London) to 2 million (in North West London) (NHS England 2016b).

Each STP footprint covers multiple clinical commissioning groups (CCGs), local authorities, and health and care providers – from large acute hospitals to individual general practices. The smallest STP footprint in London covers five CCG areas and the largest covers eight CCG areas. All five named STP leaders in London are from NHS organisations. Work on STPs in London is overseen by the London-based teams from NHS England and NHS Improvement, working in collaboration with other national NHS bodies.

Context

Previous reports by The King's Fund have described the history of hospital and health services planning in London extending back to the late 19th century (Appleby *et al* 2011). The Healthcare for London programme, led by Lord Darzi at the request of the then London strategic health authority (SHA), began in 2007 and developed a comprehensive set of proposals for improving health and care services, following extensive engagement. The programme led to a number of changes in health service delivery, most notably improvements in stroke care across the capital (Morris *et al* 2014; Hunter *et al* 2013).

Following the election of the coalition government in 2010, the new Health Secretary, Andrew Lansley, asked the SHA to call a halt to Healthcare for London. His rationale was that service changes should be led locally by clinicians with full public engagement rather than by the SHA in a top-down planning process. The abolition of the SHA in 2013, following the Health and Social Care Act 2012, left a gap in the ability of the NHS across London as a whole to plan how services should be delivered in future (Ham *et al* 2013). It also led to the departure of some of London's most experienced NHS leaders.

This gap has been filled, in part, by the work of NHS England (London) and by London-wide forums such as the London Clinical Senate and strategic clinical networks. The work of these bodies has been supplemented in some parts of London by CCGs coming together to build on the work of their predecessor primary care trusts (PCTs) and the legacy of Healthcare for London. Notable examples of organisations working together on joint plans are Shaping a Healthier Future in North West London, and Our Healthier South East London, a five-year commissioning strategy developed by CCGs.

STPs build on this pre-existing work and require NHS organisations in all parts of London to plan together for the future. These organisations must also work with local government and others in their local communities. As in the rest of England, the challenge is how to do so in the context of organisational arrangements that are both complex and fragmented and in the absence of a designated system leader (Ham and Alderwick 2015). A further challenge arises from the immediate and growing financial and operational pressures facing NHS organisations, and how to address these pressures while also collaborating with others in developing plans for the future.

The complexity of existing organisational arrangements in London derives not only from the number of NHS commissioners and providers but also from the contribution of other public service agencies. These include academic health science centres and networks, Public Health England (London), London local education and training boards, the London Clinical Commissioning Council, and

commissioning support units (CSUs). The organisation of the NHS in London is also changing as a result of mergers between NHS trusts, the establishment of a hospital group model in north-central London, joint working between CCGs, and the pooling of budgets and staff between CCGs and local authorities in some areas.

Alongside the NHS, local authorities and the Mayor of London both have a leadership role for public health in London. The report of the London Health Commission, chaired by Lord Darzi and commissioned by the then Mayor in 2013, is a tangible example of this (London Health Commission 2014). The London Health Board brings together key stakeholders – including leaders of local authorities, representatives from the NHS and Public Health England, and leaders from the London Clinical Commissioning Council – on public health and other issues to provide oversight of developments in the capital, under the leadership of the Mayor.

In navigating this organisational complexity, STPs can only function by securing agreement between the many NHS organisations involved in commissioning and providing care each area – each of which has its own established duties and responsibilities set out in law – as well as by working with their partners in local government. Local government has altogether separate accountability arrangements to the NHS, including through the democratic accountability of elected councillors. STPs themselves have no legal status. They are a conscious ‘workaround’ by national NHS leaders to avoid a potentially distracting and destabilising reorganisation of the structure of the NHS. Our analysis of progress on STPs across England has drawn attention to the costs and complexity of this workaround, and has suggested that the current legal framework may need to be reviewed to align the organisation of the NHS and social care with the direction set by the Forward View (Ham *et al* 2017).

3 What are the main themes in London's STPs?

We analysed the five London STPs to identify their key themes and the service changes proposed in each area. We used the publicly available versions of plans submitted to NHS England in October 2016. This part of the report describes the main themes identified across the five plans, uses examples of service changes being proposed under each theme, and sets out some of the differences and commonalities between the plans.

We have focused primarily on what STPs mean for how health and care services in London will change if the plans are implemented. The following themes emerged from our review:

- prioritising prevention and early intervention
- strengthening and redesigning primary care and community services
- improving care in priority service areas, such as mental health and cancer
- reconfiguring acute and specialised services
- reducing unwarranted variations in care
- improving productivity and efficiency
- supporting and developing the health and care workforce
- developing the supporting infrastructure
- changes to incentives and organisational arrangements.

This section of the report is intended to be a summary of the key themes rather than a complete list of initiatives in each area of London. We consider each theme in turn. It is also worth recognising that the five plans may have changed or developed since they were submitted to NHS England in October. That said, our understanding is that the broad themes and key service changes proposed remain unchanged.

London's STPs respond to a unique set of population health challenges (London Health Commission 2014). London is a global city where the population is growing rapidly and is younger when compared to the rest of the country. London's population is highly diverse and mobile. This has a direct impact on

how people in London use health services – for example, GPs experience a relatively high turnover of patients compared to the rest of the country. There are significant and persistent inequalities in health outcomes in London, both within and between London’s boroughs. While London does better on some health outcomes than other parts of the country, its population fares worse on others, such as rates of childhood obesity and life expectancy for people with severe and enduring mental illness.

Prioritising prevention and early intervention

All STPs in London emphasise the importance of prevention and early intervention to keep people healthy and support them to manage their own health. The plans describe the scale of the health challenges facing their local populations, including:

- significant inequalities in health outcomes (for example, there is a 16-year gap in life expectancy between the least and most deprived men living in one borough in north-west London)
- large numbers of people living in poverty (for example, 26 per cent of children in south-east London live in poverty)
- high levels of childhood obesity and other issues facing children and young people (for example, north-east London has higher rates of obesity among children starting primary school than other parts of the country)
- widespread unhealthy behaviours within the population (for example, around half of the population in north-west London are physically inactive)
- challenges in providing care for people with long-term conditions, including mental health issues and their relationship with physical health (for example, 75 per cent of people aged over 55 in south-east London have at least one long-term condition).

The STPs propose a number of common approaches to address these challenges. The plans set out proposals to encourage healthy behaviours within the population, including through smoking cessation services, exercise interventions, and alcohol screening, liaison and outreach. Targeted prevention programmes are proposed for people with long-term conditions, including better identification and early intervention for common conditions like diabetes. Earlier access to mental health services is also identified as a priority.

The plans describe how people will be supported to manage their own health and wellbeing, including through better information and advice, and structured

support and education for people with long-term conditions. Some plans focus specifically on improving the health and wellbeing of children and young people – for example, by working with schools to encourage exercise, and by improving early access to mental health support in a range of care settings. In North Central London, there is an ambition to work with schools to support the adoption of the ‘walk a daily mile’ initiative and other lifestyle interventions.

The plans also focus on addressing wider social, economic and environmental determinants of health within the population. Social prescribing models – where people are connected with non-medical services in their communities, such as housing support or gym classes – are being proposed in all STP areas, building on work already under way in different parts of London. Programmes are also being proposed to provide targeted employment and housing support for people living with mental health problems and learning disabilities. In North East London, for example, ‘wellbeing hubs’ will co-locate health and employment services. Partnerships between the NHS and London Fire Brigade are also explored in the STPs to test whether health-related advice could be delivered alongside fire safety information.

Some of these approaches can be delivered by organisations and teams within the NHS. Many others rely on partnerships with local government, wider public services, the voluntary sector and local communities. The level of detail about how these approaches will be funded and delivered varies between the plans – as well as between the initiatives in individual plans.

Some of the plans include specific, measurable goals for particular initiatives. North East London, for example, aims to reduce the number of people smoking by 5 per cent by 2021. North Central London aims to reduce the gap in life expectancy between adults with severe and enduring mental illness and the rest of the population by 5 per cent. In other cases, the intended impact on people’s health is far less specific.

Some plans also include detail on the expected financial impact of their prevention programmes. In North West London, for example, supporting people to lead healthy lifestyles is expected to deliver a gross saving of £9 million by 2020/21 for a £3.5 million investment. Reducing social isolation and improving people’s mental wellbeing is expected to deliver a gross saving of £6.6 million for a £500,000 investment.

Strengthening and redesigning primary care and community services

All five London STPs set out plans to redesign how primary care and community services are delivered. The aim is to deliver more proactive care in the

community and people's homes, co-ordinate services around people's health and social needs, and reduce reliance on acute hospital services. This will be achieved by developing more integrated ways of working within the NHS and between the NHS and social care, while strengthening care and support available outside hospitals. There is a high degree of commonality between the proposed ways of doing this. Common ambitions include:

- GPs working together at scale in networks and groups of practices
- strengthening and supporting GP services (for example, by improving access to GP appointments and online services)
- creating multidisciplinary teams to co-ordinate and manage care in the community. This typically involves bringing together staff from primary, community, mental health and social care services, and sometimes staff currently based in hospitals. These teams will be 'wrapped round' or 'aligned with' groups of GP practices
- introducing new roles (such as care co-ordinators and physician associates) and new ways of working (such as supported early discharge from hospital) to co-ordinate services and allow more care to be delivered in the community
- working more closely between the NHS and the voluntary and community sector (for example, through social prescribing programmes)
- using risk-stratification and population segmentation to identify the population groups (such as frail older people) that would most benefit from co-ordinated services and proactive care, and designing targeted models of support
- improving access to specialist support in primary care (for example, through delivering consultant-led assessments and clinics in the community)
- improving intermediate care and rapid response services to improve transfers of care and provide alternatives to hospital
- strengthening the focus on prevention and early intervention in primary and community care (including by connecting patients with non-medical services and community support)
- developing new incentives and organisational models to support these new ways of working (such as 'accountable care partnerships', see pp 23 and 34).

The plans describe how these new ways of working will be based around geographically defined populations (often referred to as 'localities'). In South East London, 'local care networks' covering populations of between 50,000 and 100,000 people will be developed. In South West London, 'locality teams' will be established to provide care for populations of 'at least 50,000' people. In North

Central London, 'closer to home integrated networks' will cover populations of 50,000 people. And in North East London, localities and networks covering populations of 50,000 people 'will be the centre of integrated working'.

There are some differences, however, in the approaches proposed in each area. In North West London, for example, there is a stronger focus on population segmentation to define how care will be delivered in the community. The plan defines distinct but overlapping approaches to delivering primary care for 'mostly healthy people' and 'people with long-term conditions'. A specific model of care is being developed for older people (over the age of 65), which will be supported by new approaches to commissioning and contracting.

These plans draw on approaches already in place. In South West London, for example, the aim is to spread the work of the Sutton Care Home Vanguard, which aims to improve the quality of services provided to residents in care homes and co-ordination of services with other parts of the health and care system. In North East London, the intention is to 'scale up' existing social prescribing initiatives developed in Tower Hamlets.

In all STP areas, it is expected these new models of community care will help moderate demand for acute hospital services. In South West London, for example, a 44 per cent reduction in inpatient bed days is expected as a result of new models of community care (compared to a 'do-nothing' baseline of expected bed days by 2020/21).

The assumptions made in the plans about reducing hospital capacity are not always clear. In at least three parts of the London – North West London, North Central London and South West London – the expectation is that acute hospital capacity can be reduced in absolute terms as a result of the combination of changes proposed in their plans. In all areas, the ambition is also to avoid building additional hospital capacity otherwise expected to be needed as a result of increasing demand for care and demographic changes.

The plans also assume that new models of community care will save money (compared to a 'do-nothing' counterfactual of NHS spending by 2020/21). Estimated savings vary between the plans. North Central London's plan, for example, estimates that 'care closer to home' will deliver savings of £114 million by 2020/21 for an investment of £64 million. These estimates come with some caveats. In North Central London, for instance, the plan acknowledges that 'realising such savings can be difficult in practice and are contingent upon removing or re-purposing capacity within acute hospitals'. We examine these assumptions on p 18.

The plans have implications for estates and IT. The plans call for capital investment to improve primary care facilities and develop new hubs for integrated community teams. Investment is also needed in IT services to support the delivery of new care models. In North Central London, for example, £111 million additional capital investment is required to support their 'care closer to home networks' and primary care facilities. In South East London, £99 million of capital investment is needed for primary care estates transformation, £23 million is needed for primary care IT transformation, and a further £62 million is needed for investment in 'community-based care'. The capital assumptions included in the plans are set out in Table 21 on p 75.

Improving care in specific service areas, such as mental health and cancer

The plans describe ambitions to improve care in a variety of service areas, based on local priorities and national requirements and reviews. Every plan, for example, includes proposals to address challenges in urgent and emergency care services. Getting back on track with access to A&E services and ambulance waits was one of NHS England's 'must dos' included in original planning guidance for STP leaders. The nine national 'must dos' are set out in the box below. The level of focus on these and other priorities differs between the five London plans.

National 'must dos' for STPs in 2016/17 to 2020/21 planning guidance

1. Use the STP to define the most critical milestones for local progress towards achieving the ambitions of the Forward View.
2. Return the NHS to financial balance.
3. Address the sustainability and quality of general practice.
4. Get back on track with access standards for A&E and ambulance waits, including by implementing the urgent and emergency care review and other related pilots.
5. Improve referral-to-treatment times for non-emergency care.
6. Improve cancer care, including by delivering waiting times standards and improving one-year survival rates.
7. Achieve two new mental health care access standards (for the Improved Access to Psychological Therapies (IAPT) programme and for people experiencing a first episode of psychosis) and meet dementia diagnosis rates of at least two-thirds the estimated number of people with dementia.
8. Transform care for people with learning disabilities, including by delivering national policy reviews and increasing community-based support.
9. Make improvements to care quality, particularly for organisations in special measures.

Improving mental health services and their integration with other services is one example of a priority area in all London STPs. North Central London, for example, describes how a 'stepped' model of care – ranging from community-based support to specialised services – will be delivered for people with mental health needs. Initiatives are outlined for the whole population, including increasing access to primary care mental health services and integrating mental health support within their 'care closer to home integrated networks'. Services will also be developed for targeted population groups. A female psychiatric intensive care unit will be developed to ensure local provision of inpatient services for women. A range of improvements will be made to mental health services for children and young people. Connections will also be made with other community support and wider public services.

Improving cancer care is another priority area. In South East London, for example, a range of approaches is outlined to improve the quality and consistency of cancer services. GPs, nurses and allied health professionals will receive training in detecting cancer early and providing support for people in the

community after cancer treatment. All patients undergoing cancer diagnosis and treatment will receive a 'holistic' assessment of their needs, be given a care plan, and have access to clinical nurse specialists or other advice and support. A pilot programme will be run at Guy's Hospital to test new approaches to diagnosing patients with non-specific symptoms. And a single phone line – linked to an electronic prescribing system – will be established for acute oncology services to triage patients, share relevant information and ensure consistency between different sites. The three trusts that provide cancer services are establishing 'an accountable cancer network' in an attempt to provide more co-ordinated services across south London.

Other priority service areas described in the plans include:

- orthopaedics and other outpatient services (for example, plans to improve orthopaedic services in North Central London and South East London, and plans to redesign outpatient services across a range of specialities in South West London)
- maternity services (for example, all STPs commit to implementing the *Better births* maternity review (National Maternity Review 2016); South West London's plan focuses particularly on personalisation and choice in maternity services)
- paediatrics (for example, plans to improve the quality and safety of paediatric care in North West London)
- children and young people (for example, plans in North East London to develop structured care plans for children and families, introduce personal health budgets, and use care co-ordinators to arrange and navigate services)
- care for older people (for example, plans in North West London to develop 'accountable care partnerships' to manage health and social care services for older people)
- end-of-life care (for example, plans in South West London to improve end-of-life care through better identification of needs, improved information sharing and implementing new care models).

Social care services

All STPs acknowledge the significant pressures facing social care and other local authority services in their areas. The closer integration of NHS and social care services is described as a core part of new models of primary and community care (see p 36). This includes involving social care staff in multidisciplinary teams; closer co-ordination between NHS and social care providers and commissioners; and new service models to tackle delayed transfers of care and

deliver more support in the community and people's homes. But specific proposals to address the growing pressures in adult social care services are typically lacking, instead the focus is primarily on the interface of social care and NHS services.

This gap is recognised in the plans themselves. In North Central London, the STP states that more work is needed to create a practical plan for addressing provider failure in social care. In South West London, the STP states that more work is needed to understand the impact of cuts to social care and local authority budgets on the ambitions in the STP. The plan goes on to say that 'the local authority financial gap and likely reductions in services it implies is recognised as potentially having a significant impact on the ability of south-west London health services to deliver the proposed changes to services and address its own financial gap'. In North West London, the plan commits to carrying out a 'comprehensive market analysis' of care for older people and create a 'market development strategy'.

Reconfiguring acute and specialised services

Every STP in London includes proposals to reconfigure acute or specialised services. These proposals vary significantly in scope, ranging from ambitions to review opportunities to consolidate some specialised services to major plans to reconfigure acute hospital services.

South East London's original plan includes proposals to:

- consolidate orthopaedic services by developing two elective orthopaedic centres, which will 'bring together routine and complex care onto single sites'. The centres will work as part of a networked model with other hospitals and community support.

South West London's original plan includes proposals to:

- reduce the number of acute hospital sites from five to four. The main drivers cited for the reconfiguration are quality and staffing issues. NHS leaders considered the potential benefits of a three or four site model against a range of clinical and non-clinical criteria. The proposed solution in the plan was to move to four sites.

Since the October 2016 version of the STP was published, NHS leaders have now stated that all hospitals in South West London will continue to be needed in the future, but that not all these hospitals will need to provide the same services that they do today. An updated strategy document will be produced by the South West London STP in November 2017.

North East London's plan includes proposals to:

- remain committed to the previously agreed downgrade of King George Hospital's A&E. This is dependent on a range of improvements in different parts of the system
- review whether some specialised services should be reconfigured to address quality issues, including:
 - specialist cardiac care
 - specialist renal care
 - cancer care
 - specialist paediatric care
 - neuro-rehabilitation services.

North West London's plan includes proposals to:

- reduce the number of major hospital sites from nine to five (after consultation in 2012). 'The major hospitals will be networked with a specialist hospital, an elective centre and two local hospitals.'
- reconfigure paediatric services by introducing paediatric assessment units in four of the five paediatric units and closing the paediatric unit at Ealing Hospital. Existing staff will be allocated to the remaining units and additional paediatric nurses will be recruited. These changes took place in June 2016 and further improvements are being considered.

North Central London's plan includes proposals to:

- consolidate a range of specialised and acute services. The services potentially 'in scope' for consolidation over the STP period are:
 - emergency surgery (out of hours)
 - maternity services
 - elective orthopaedics
 - mental health crisis care and place of safety
 - mental health acute inpatient services
 - histopathology

-
- general dermatology services.

Quality issues and workforce constraints are commonly cited as drivers for hospital reconfiguration. In South West London, for example, the STP states that it will struggle to deliver high-quality acute hospital services as a result of staff shortages in some clinical areas. The financial sustainability of services is also identified as a factor for acute reconfigurations. The proposals for these changes are rarely new, building on previous reviews of acute and specialised services in London (such as the Shaping a Healthier Future programme in North West London, which led to a major consultation on proposed changes in 2012).

Some local authorities in London have expressed concerns about these proposals for acute hospital reconfiguration. In North West London, for example, the plan states 'Ealing and Hammersmith and Fulham Councils do not support the STP due to proposals to reconfigure acute services in the two respective boroughs.' The councils are still working with NHS organisations on other aspects of the STP, including prevention and care for older people.

These plans have implications for the size of acute hospitals in London. All five of the London STPs aim to reduce the number of patients in hospital beds either in absolute terms – against the number today – or in relative terms – if activity continued to increase at the current rate of around 3 per cent a year. In two of the STPs, explicit statements are made about this: North East London's STP says its plans will mitigate the need to build one entire extra hospital by 2020/21; while North West London's plan says its scheme to shift care into the community will eliminate the need to create 865 new beds over a similar timescale. We assess the proposals in STPs to reduce hospital activity and bed use in more detail on p 43.

In some cases, the STPs set out the capital requirements related to their reconfiguration plans. In South East London, for example, the proposals to consolidate elective orthopaedic services will require an estimated £12 million capital investment. Other plans are less specific on the capital investment needed. In South West London, for example, no capital requirements were included in the plan for the acute hospital changes proposed. Overall capital requirements for the South West London STP are currently under review. The capital assumptions included in each plan are set out in Table 21 on p 75.

Other changes to specialised services

Improving the commissioning and delivery of specialised services is an important theme in all five London STPs. This includes London-wide priority areas for improvement, such as child and adolescent mental health services (CAMHS), as well as specific priorities within or between STP areas. Proposals to improve

specialised services are more extensive in South East London and South West London's STPs than in North Central London, North East London and North West London.

South East London and South West London articulate the same case for change in specialised services, including:

- growing demand and rising costs
- fragmented services and patients not always being treated in the right place
- inefficiencies and duplication
- variations in quality and failure to meet standards.

In response to these issues, both STPs identify opportunities to:

- align services across south London and reduce overlap and duplication
- improve care by redesigning service pathways (including paediatrics, cardiovascular, specialist cancer, renal, neuro-rehabilitation, HIV, adult mental health, CAMHS and Transforming Care Partnerships)
- improve the value that the NHS gets from high-cost drugs and devices
- improve the value that the NHS gets from specialised services more broadly, including by reducing variations in care and tackling 'non-compliant' services.

A review of specialised services in south London is being carried out with NHS England's London regional team. The London STPs intend to work together to plan specialised services where appropriate through a newly established London specialised commissioning board.

Across all STPs in London, significant financial savings are required in specialised commissioning to bridge the counterfactual 'do-nothing' financial gap in NHS budgets by 2020/21. The plans often include little detail on how this will be delivered. In North West London, for example, it is assumed that a gap of £189 million in the specialised commissioning budget will be closed by 2020/21 – but the plan states that a 'solution' for closing the gap has not yet been identified by NHS England's specialised commissioning team.

Reducing unwarranted variations in care

The plans focus on improving the quality and efficiency of services by reducing unwarranted variations in care. Data on variations in processes, quality and cost of NHS care has been used to identify priority areas for action in each STP area. In North West London, for example, diabetes, atrial fibrillation and hypertension

services have been identified as STP-wide priorities for reducing unwarranted variation. Further priorities will be identified at a local level in different parts of the STP footprint. In Hammersmith and Fulham – one of the eight CCG areas making up the North West London STP footprint – neurology, respiratory and atrial fibrillation have been identified as areas for local action.

The level of detail about how these variations will be addressed in practice varies, perhaps unsurprisingly, between the five plans. One of the more granular plans can be found in North Central London, where a set of high-level interventions has been defined to provide a framework for delivering elective orthopaedic care across providers. The interventions include:

- better use of non-medical support and education (such as gyms and online information)
- expert first point of contact for patients (for example, a GP with a special interest or physiotherapist who knows the full range of treatment options)
- use of a structured referral template (so all the right information is available in one place)
- improved diagnostic protocols (for example, to reduce duplication of tests)
- North Central London-wide clinical protocols (to ensure consistency across providers and teams)
- ensuring patients are only referred when ready for treatment (to avoid second GP appointments and re-referrals)
- better monitoring and transparency of practices (for example, peer review of practices to allow improvement and dialogue between clinicians)
- one-stop outpatient clinics (to co-locate assessment and diagnostics and avoid unnecessary follow-ups)
- multidisciplinary team clinics (including consultants, physios and GPs)
- pre-operative assessments conducted at the first outpatient appointment (to help plan rehab and post-operative packages prior to referral)
- re-check prior to surgery by contacting patients 48–72 hours before treatment (to reduce risk of late cancellations)
- short-notice reserve list (to fill gaps in late cancellations with people ready for treatment)
- consultant-level feedback (to allow peer challenge of utilisation and case volumes per list)

- more effective planning for discharge (for example, by planning earlier in the process to give greater access to community support and reduce delayed transfers of care)
- enhanced recovery pathways (to give patients more understanding of their expected length of stay in hospital and details around how to avoid staying for longer)
- ring-fenced elective beds (to reduce wasted theatre time and risk of infection)
- optimised theatre utilisation (for example, through better scheduling).

North Central London's plan also describes other specialties that have been identified for similar pathway redesign. As well as improving care for patients, the plan assumes that these changes will improve productivity and efficiency. The plan estimates that 'optimising the elective care pathway' will deliver savings of £55 million, with the assumption that £4 million will need to be invested in elective care to achieve this. Other STPs in London also assume that financial savings can be achieved by reducing variations in clinical care. In North West London, reducing variations in a range of clinical areas (including those outlined above) is expected to deliver a gross saving of £12.4 million for an initial investment of £2 million.

Improving productivity and efficiency

The need to improve productivity and efficiency runs through all five STPs. The plans calculate projected gaps in NHS and social care finances by 2020/21 if organisations 'do nothing' to transform how care is delivered. Table 1 sets out the NHS 'do-nothing' gaps by 2020/21 in each STP footprint (based on data from the finance and activity templates submitted to NHS England in October). Table 19 on p 66 sets out these figures in more detail.

Table 1 NHS 'do-nothing' gaps in NHS finances by STP, 2020/21

STP	NHS 'do-nothing' gap 2020/21 (£m)
North Central London	797
North East London	590
North West London	1,113
South East London	934
South West London	659

Source: STP finance and efficiency templates, submitted to NHS England, October 2016 (see Table 19)

The various service changes proposed in the plans – including the first five themes described above – are expected to contribute to closing the gaps in NHS finances. But these changes alone are not enough to bring the NHS back into financial balance. In all five STPs, organisational efficiency improvements (often described as business as usual (BAU) efficiencies and cost improvement programmes (CIPs)) are forecast to make the single largest contribution to closing the gaps in NHS finances by 2020/21. There is little detail in the plans on how these savings will be made, with the expectation that these opportunities will be identified and delivered by individual organisations. Other significant opportunities to improve productivity are identified through providers working together, as well as productivity improvements made by commissioners. Savings are also expected in the specialised commissioning budget.

We analyse the assumptions made in the plans about improving NHS productivity and efficiency in more detail on p 29.

Supporting and developing the health and care workforce

The plans identify ‘enablers’ for implementing their proposals. The most important of these is the need to support and develop the NHS and social care workforce.

STPs emphasise the significant workforce pressures facing health and social care services in London. In North West London, for example, the lack of enough skilled staff to deliver seven-day services is described in the STP as ‘the biggest, most intractable problem’ facing the system. This is one of the factors behind plans to reconfigure acute hospital services. Similar issues are identified in South West London, where organisations do not believe that they can recruit or pay enough clinical staff to operate safe services across their existing acute sites. Major pressures also exist outside hospitals. North East London’s plan, for example, describes a ‘retirement bubble’ in general practice, where 25 per cent of GPs in one borough are currently over retirement age. In North East London, 17.5 per cent of registered roles in social care services are vacant.

Some plans also highlight the issues facing NHS and social care staff working in London. South West London’s plan, for example, states that house prices in London are now around 11 times the average London NHS salary, compared to 8.4 times in 2010. North East London also highlights the lack of affordable housing as an important workforce issue.

As well as the need to address current workforce pressures, the plans also describe the new skills and roles that need to be developed to support improvements in services. Delivering more co-ordinated care in the community,

for example, will require NHS and social care staff to work together in teams. New roles, such as health coaches, may also be needed.

Common proposals to address these challenges include:

- developing STP-wide approaches to recruitment, retention and workforce planning (for example, by introducing shared staff banks, developing 'career pathways' across the health and care system, sharing HR functions, and developing local apprenticeships)
- promoting London as an attractive place to work (for example, by actively marketing the benefits of living and working in London)
- improving the health of the NHS and social care workforce (for example, by introducing healthy workplace charters and, as is proposed in South West London and North East London, by working with the London Mayor to address high housing and transport costs for NHS staff)
- changing the way that existing staff work together (for example, by introducing multidisciplinary teams, training staff in working across organisational boundaries, and encouraging hospital specialists to work more closely with community staff)
- developing new skills within the existing workforce (for example, training staff in health coaching, ensuring that staff are trained to 'make every contact count', and introducing greater flexibility to work across care settings)
- developing new roles to support the delivery of new care models (for example, physician associates, care navigators and health coaches)
- drawing on the wider public sector workforce and community assets (for example, through working with the voluntary sector, introducing social prescribing programmes, and developing partnerships with housing associations and the London Fire Brigade).

STPs in North Central London and North West London also mention the skills needed for implementing improvements to services. North Central London's STP describes an ambition for all health and care staff to be trained in a single approach to quality improvement. In North West London, programmes will be put in place to support leaders to implement change across systems and support the development of emerging GP leaders and practice managers. A programme is also being created to help teams work together between organisations.

Closer working between NHS and social care staff is a central theme running throughout all five plans. But the impact of workforce pressures in social care

receives less attention than the need to address pressures within the NHS. In North Central London, the plan describes the need to quantify the investment that might be needed in the social care workforce over the coming years, for example, to increase the number of domiciliary care workers.

These workforce plans have financial implications. Additional training, recruitment and new roles across the health and care system will require investment by STPs and the organisations within them. But the plans also assume that financial savings can be made through more collective approaches to workforce management. In South East London, for example, the plan estimates that 'optimising the workforce' (including a joint approach to managing temporary staff and improvements in workforce productivity) will deliver a recurrent saving of £61 million by 2020/21, with a required non-recurrent investment of £7.8 million. In North East London, the plan estimates that 'workforce management' will deliver savings of £22 million by 2020/21. And in South West London, savings of £4 million are estimated in 2020/21 from implementing a shared staff bank model (for all staff groups including nursing, medical and administrative staff).

Developing the supporting infrastructure

The two other key enablers described in the plans are IT and estates. Proposals for improvements in IT and digital services vary in detail between the London STPs, and draw on London's existing 'local digital roadmaps' (LDRs). Common ambitions across the five STPs include:

- using apps and digital technology to enable people to manage their own health
- introducing e-consultations and other methods of virtual communication
- better information sharing between health and social care, as well as with patients
- using joined-up population-level data to plan services and interventions
- using individual-level data and algorithmic tools to support clinical decision-making.

These IT plans have capital implications. The capital assumptions included in the five plans are set out in Table 21 on p 75. In North Central London, for example, delivering the digital strategy will require investment of £159 million, with a further £21 million to be invested in 2021/22. In South East London, the LDR will require capital investment of £35 million.

The plans also outline a range of measures to improve and develop the NHS estate, including proposals to:

- improve and maintain existing buildings (for example, North East London's plan describes how Whipps Cross University Hospital requires critical maintenance work)
- develop new sites and buildings in the community (for example, North Central London's plan involves developing new community hubs and primary care facilities)
- develop new sites and buildings to support new models of hospital care (for example, as part of acute reconfiguration plans in North West London)
- make better use of existing assets (for example, South East London's plan involves reducing the amount of under-utilised and non-clinical estate)
- develop more co-ordinated approaches to using the public sector estate (for example, through 'one public estate' approaches proposed in South West London).

Like IT and digital services, these estate plans have significant capital implications. In North East London's plan, for example, an estimated net capital investment of £500–600 million is required for NHS estates. Maintenance work on Whipps Cross University Hospital alone will require around £80 million. In North Central London, plans to develop new community hubs and primary care facilities will require an estimated investment of £111 million.

The estate plans in STPs are closely related to plans for a London-wide devolution deal. North Central London's plan, for example, describes the complexity of the existing estate system and capital funding processes in the NHS and makes the case, as part of the London Devolution programme, for a range of London-specific capital powers. This includes:

- local retention of capital receipts
- a London-specific capital business case approval process
- new value-for-money definitions (to include social benefit)
- new flexibilities over primary and community estate
- powers to pay off PFI (private finance initiative) debt using capital sales.

A London Estates Board has been established to provide a single forum for estate discussions in London. A major proposal being considered as part of

London's devolution deal is to increase the powers of the London Estates Board over key estate planning decisions in the capital.

Changes to incentives and organisational arrangements

Changes to NHS structures and incentives are also proposed to support the service changes described in the plans. This includes plans for more integrated approaches to commissioning – both within the NHS and between the NHS and local government – new contracting models and payment systems focused on local population care outcomes, and collaboration between NHS and social care providers. The plans also set out basic principles and approaches to STP governance.

In North Central London, for example, the five CCGs have agreed to come together to work more closely to commission NHS services across their STP footprint. The CCGs will develop a common commissioning and financial strategy. They will appoint a shared Accountable Officer, Chief Finance Officer, Director of Strategy, and Director of Performance. This single management team will work in partnership with the individual CCGs to commission services. The five CCGs will continue to work closely with local authorities to commission services at a local level. The commissioning system will become more 'strategic', holding providers to account for outcomes of care and developing population-based budgets for services.

In North West London, the plan describes how 'accountable care partnerships' will be developed to support the delivery of integrated services for older people. Budgets for older people's health and care services will be pooled – building on work already under way between the NHS and local government through the Better Care Fund – and commissioners will develop population-based contracts covering all older people's services in defined geographical areas. These contracts will define outcomes of care to be delivered within the budget. Relevant providers – being called 'accountable care partnerships' – will work together to deliver these services.

A variety of forms of collaboration between health and social care providers are described in STPs – and in most cases these build on existing work and national initiatives. South East London's plan, for example, describes how Dartford and Gravesham NHS Trust and Guy's and St Thomas' NHS Foundation Trust are working together to deliver acute services as an 'acute care collaboration vanguard' – one of the models being supported by NHS England's new care models programme. The plan also describes how 15 GP federations have already been established across South East London. In North Central London, The Royal Free NHS Foundation Trust is working with other acute hospitals as part of a 'provider chain'.

In North East London, a provider partnership called Tower Hamlets Together has been developed, bringing together local GPs, Barts Health NHS Trust, East London NHS Foundation Trust, and the London Borough of Tower Hamlets. The aim is for the partnership to deliver integrated community services. The STP describes how three 'accountable care systems' will be developed across North East London, bringing together health and social care providers to deliver care for geographically defined populations.

4 What are the main issues to be addressed in the content of the plans?

In this section of the report, we set out some of the main issues and risks to be addressed in the content of the plans, drawing on our review of the plans and relevant evidence and experience. This analysis is not intended to be exhaustive. We focus on the main issues that emerge when looking across all five plans, rather than offering a detailed assessment of the proposals in individual STPs. We focus primarily on the service changes proposed – although we also comment on some the assumptions made about NHS finances.

We focus on the following areas:

- A: providing more care in the community and developing new models of care
- B: moderating demand for acute hospital services and reducing hospital capacity
- C: prioritising prevention and early intervention
- D: reconfiguring acute and specialised services
- E: closing gaps in NHS finances
- F: securing capital investment
- G: implementing the plans.

A. Providing more care in the community and developing new models of care

Every London STP aims to deliver more co-ordinated health and social care services in the community. This involves a variety of different elements (see p 18), including health and social care staff working together in multidisciplinary teams, improving access to GP and other community services, and developing new ways to co-ordinate services and manage care in the community. The plans

assume that these new models of care will help to moderate demand for hospital services and deliver financial savings for the NHS (see p 43).

Our view is that new models of integrated care are needed for the NHS and local government to meet the health needs of the population (Goodwin *et al* 2012; Ham *et al* 2012; Curry and Ham 2010). This is particularly important for people with long-term conditions and other complex health needs. These people often need care and support that spans traditional service boundaries, including those within the NHS – for example, between GPs and hospital care, between NHS and social care, and with other services like employment and housing.

These ambitions are not new. NHS and local government organisations in London have been working together to develop more co-ordinated health and care services for several years. This includes work through the integrated care ‘pilot’ and ‘pioneer’ programmes (Erens *et al* 2016; RAND Europe and Ernst & Young 2012), as well as the current ‘vanguard’ programme designed to test and develop the new care models described in the Forward View. Similar initiatives are also developing outside these national initiatives – for example, through the Southwark and Lambeth Integrated Care programme in South East London.

How long will new care models take to implement and deliver results?

The challenge is that these new models of care are not a quick fix. Previous experience in the NHS suggests that new models of community-based care can take several years to develop and deliver results (Bardsley *et al* 2013; Goodwin *et al* 2013; Steventon *et al* 2011). This is echoed by the experience of the ‘whole-systems integrated care programme’ currently under way in North West London. An evaluation of the programme’s early stages (February 2014 to April 2015) found that the process of delivering change was complex, faced a range of internal and external barriers, and had taken longer than expected (particularly as the programme moved from design to implementation) (Wistow *et al* 2015). Despite being a well-resourced programme (with an investment of £24.9 million over three years), committed to involving as many local people as possible in its design, in its early stages it did not deliver significant frontline service changes.

Will investment be made available?

The process of implementing new care models also requires investment. This includes resources to cover the costs of staff time (for example, spending time learning and developing new ways of working), programme infrastructure (for example, putting people and processes in place to manage the transformation programme), physical infrastructure (for example, improving the use of digital technology), and double-running costs (to allow new services to be set up while

still providing existing services) (The Health Foundation and The King's Fund 2015).

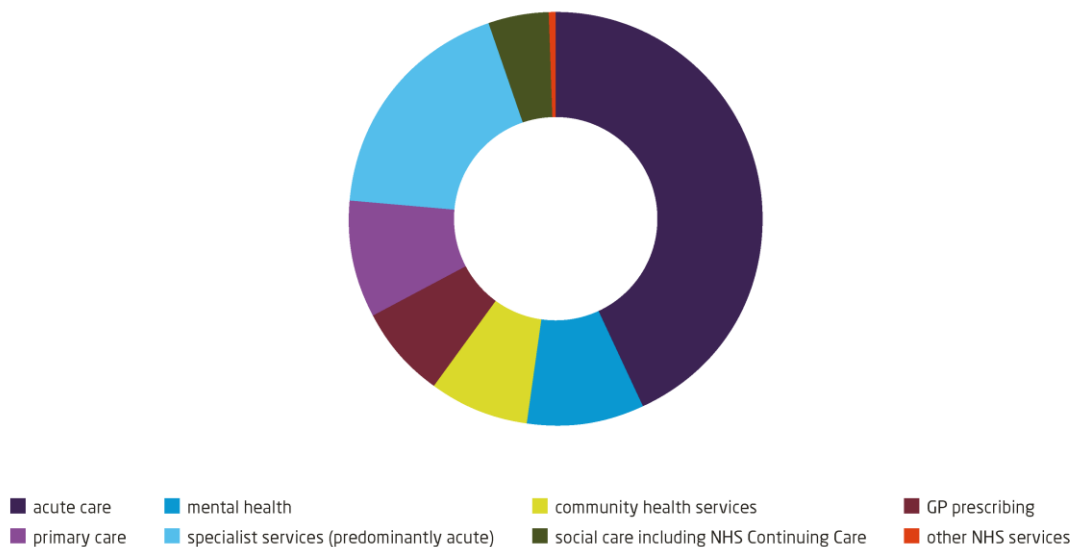
Even without the task of redesigning how care is delivered, primary and community services are likely to require additional investment just to cope with growing demand for services. Our work has identified growing pressures across the range of community-based health services, including in general practice (Baird *et al* 2016), district nursing (Maybin *et al* 2016), mental health (Gilbert 2015) and adult social care (Humphries *et al* 2016). These pressures include gaps in staffing in a range of services, including GPs and district nurses.

Where will this investment be found? Additional resources for the NHS made available through the Sustainability and Transformation Fund have been used primarily to reduce NHS deficits rather than to invest in new care models in the community. NHS capital funding is also extremely limited. This is explored in more detail below (see p 74).

We looked at the commissioning intentions of London's CCGs and NHS England to see if a major shift in resources was being planned from acute hospitals into the community. Figure 1 illustrates the current distribution of NHS spending in London between different services. Figure 2 shows how the distribution of NHS spending is planned to change by 2020/21.

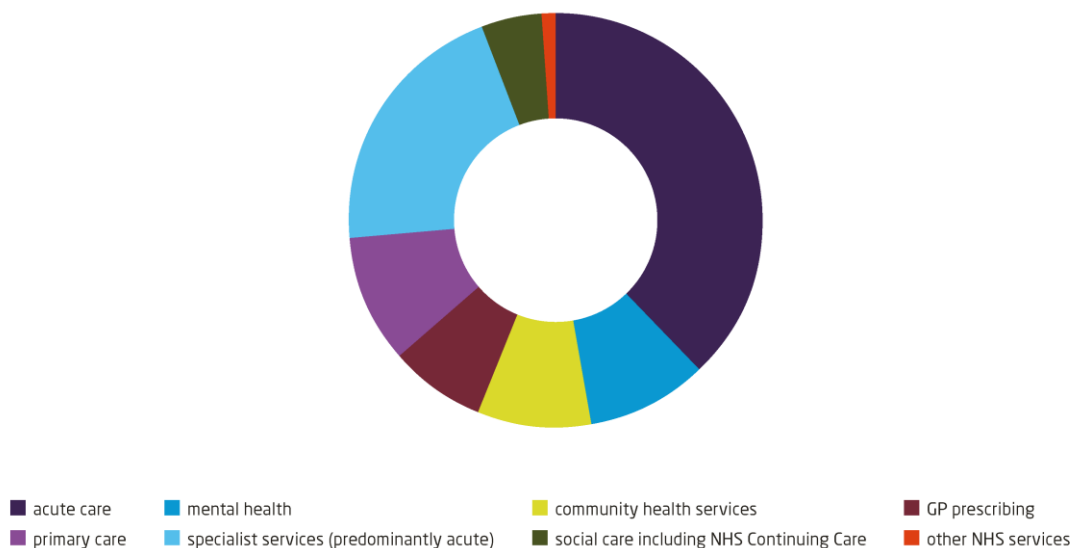
This data suggests that the share of spending by London CCGs and NHS England on acute and specialised services will fall by 3 percentage points between 2015/16 and 2020/21. The share of spending on primary care, GP prescribing, community health services and mental health services combined is planned to increase by 2.5 percentage points by 2020/21.

Figure 1 Current distribution of NHS London spending, 2015/16



Source: STP finance and efficiency templates, submitted to NHS England, October 2016

Figure 2 Planned distribution of NHS London spending, 2020/21



Source: STP finance and efficiency templates, submitted to NHS England, October 2016

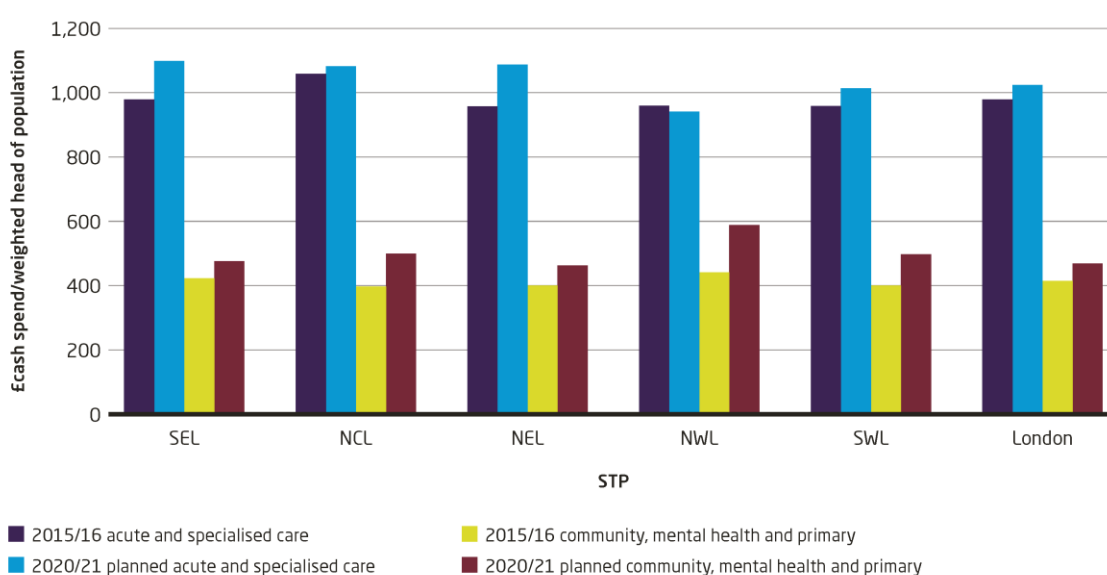
At an aggregate level, therefore, the shift of resources from acute to community-based health services appears to be modest. Breaking this data down to an STP level reveals variation in planned spending between different areas (see Figure 3), especially when expressed as spending per head of the population (our figures here use NHS England's 'weighted population' projections, which adjust for demographic factors linked to the use of NHS resources, such as age and deprivation).

Looking at the spending plans in cash terms, the largest increase in spending per head on community-based services is being planned in North West London, the only one of the five STPs that plans to reduce the cash amount spent per head on acute and specialised services between 2015/16 and 2020/21.

It is worth recognising that this data simply reflects how NHS commissioners plan to allocate resources. This does not necessarily reflect how these resources will be spent in practice. The data in Figure 3 reflects only how much commissioners plan to pay hospital, community and other service providers in cash terms, not how much it will cost those providers to run their services. Providers are expected to face cost-inflation pressures of around 2.6 per cent a year over the five years to 2015/16, affecting costs such as pay, fuel and drugs.

When commissioner spending plans are adjusted to account for that level of provider cost inflation, planned spend per head on acute and specialised services will fall in each of the five STP areas (see Figure 4). Providers will be asked to absorb some of this reduction through efficiency savings, which we discuss further on p 68. Again, it is worth recognising that these figures represent aspirations rather than the reality of how resources will be spent. Recent evidence suggests that acute hospitals tend to absorb additional NHS resources leaving little for investment in other areas of care.

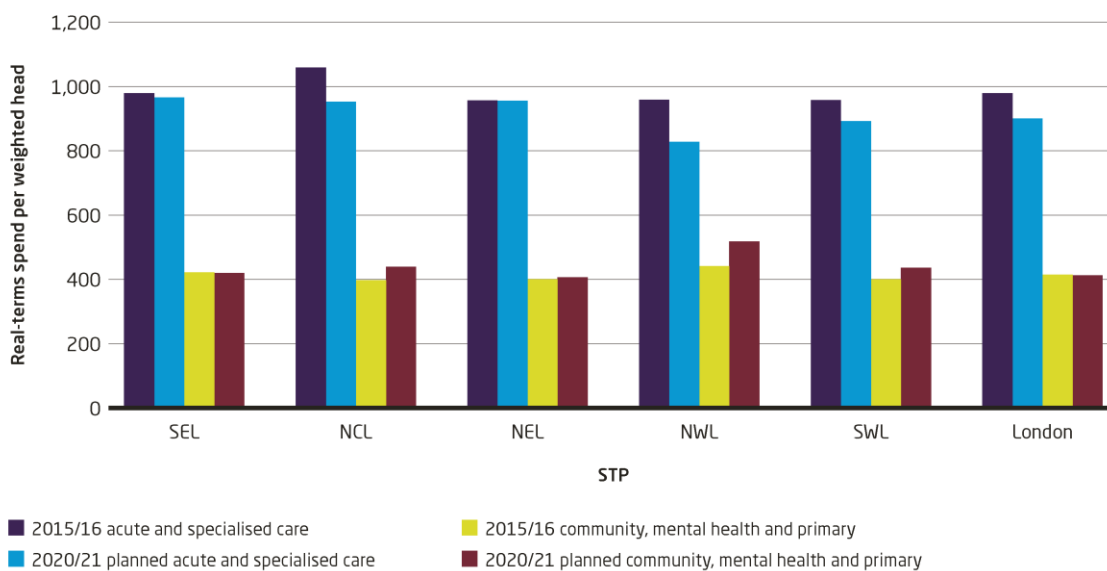
Figure 3 Planned changes in cash spending per head on acute and specialised care, and community-based services by STP area, 2015/16 to 2020/21



Note: Community, mental health and primary care spending excludes planned expenditure on primary care prescribing.

Source: STP finance and efficiency templates submitted to NHS England, October 2016; NHS England weighted CCG populations 2016/17 to 2020/21.

Figure 4 Planned changes in real-terms spending per head on acute and specialised care, and community-based services by STP area, 2015/16 to 2020/21



Note: NHS Improvement's economic assumptions for provider cost inflation to 2020/21 do not currently recognise measures announced at the March 2016 Budget. These measures included a change in the public sector pension discount rate which we estimate will increase NHS provider costs by a further 0.7 per cent in 2019/20. The average level inflation cited here (2.6 per cent a year) reflects this. Without the change in the discount rate, provider cost inflation 2015/16 to 2020/21 would average at 2.5 per cent a year.

Community, mental health and primary care spending excludes planned expenditure on primary care prescribing.

Source: STP finance and efficiency template submissions to NHS England, October 2016; NHS England weighted CCG populations 2016/17 to 2020/21; NHS Improvement economic assumptions 2016/17 to 2020/21.

What impact will new care models have on hospital use and costs of care?

The potential impact of more integrated models of care is also often overstated, particularly in relation to expected reductions in hospital demand and activity. By providing more co-ordinated and proactive care in the community, STPs aim to reduce reliance on acute hospital services by preventing avoidable hospital admissions and by supporting people to leave hospital more quickly. This is expected to reduce costs of care for the NHS.

There are opportunities to provide alternatives to hospital care in the community. Around one in five emergency admissions to hospital are thought to be avoidable with better and more co-ordinated care management in the community (Blunt 2013). Once people are admitted to hospital, they often stay there longer than is medically necessary. Our analysis of HES (hospital episode statistics) data in London suggests that a very small proportion of hospital

patients (around 5 per cent) spend more than 14 days in hospital at a time, occupying a large proportion (around 50 per cent) of total hospital bed days. Audit data from hospitals in London suggests that some of these patients could be discharged home, and others could be cared for in the community (see p 54).

The challenge is being able to turn these opportunities into actual reductions in hospital activity. A recent review (Imison *et al* 2017) looked at evidence of the impact of 27 initiatives to move care out of hospital, covering five broad areas:

- changes in the elective care pathway
- changes in the urgent and emergency care pathway
- time-limited initiatives to avoid admission or facilitate hospital discharge
- managing 'at risk' patients (such as people in nursing homes)
- support for patients to manage their own health or access community resources.

The review assessed the impact of each initiative on quality and costs of care. It found that many of the initiatives had the potential to improve patient outcomes and experience of care. But there was limited evidence to suggest that these initiatives had significantly reduced hospital activity. Other reviews have also found limited evidence that particular interventions can significantly reduce unplanned hospital admissions (Purdy *et al* 2012).

International experience, in places like Canterbury in New Zealand and Southcentral Foundation in Alaska, offers greater hope that hospital demand can be moderated through more systemic models of community-based care (Schluter *et al* 2016; Collins 2015; Timmins and Ham 2013). The transformation of the Veteran's Health Administration in the United States in the 1990s led to a significant reduction in hospital use while quality of care improved (Curry and Ham 2010). These health systems have sought to fundamentally redesign how care is delivered in the community. Doing this in the NHS will require both time and investment (as above).

Even if a shift in care from hospitals to the community can be achieved, making financial savings as a result – as is projected in STPs – is much more difficult than often assumed. The ability to make financial savings from these changes depends on a range of factors, including the ability to remove fixed costs (Monitor 2015). There is little evidence to suggest that efforts to date to shift care into the community have significantly reduced costs of care – and in some cases the evidence suggests that community-based care can increase costs (Imison *et al* 2017; Nolte and Pitchforth 2014). We assess the assumptions in

London's STPs about reducing hospital demand and capacity in more detail below. We also assess the assumptions made in STPs about their ability to reduce fixed and other costs on p 71.

Summary

Delivering more co-ordinated services in the community is the right thing to do. But NHS and local government leaders must be realistic about what can be achieved by 2020/21. Designing and implementing new care models will require both time and investment, including for double-running costs while new services are being established. The expected benefits to hospital demand and activity, as well as costs of care, should not be overstated. Current pressures on services in the community, including adult social care, will have a direct impact on the ability of STPs to deliver ambitions to provide more care in the community. Even if additional investment can be found for services in the community, current workforce pressures suggest that it may not be possible to recruit staff needed to deliver them.

B. Moderating demand for acute hospital services and reducing hospital capacity

London's STPs make assumptions about the ability of the NHS to moderate growth in demand for acute hospital services by putting in place new ways of delivering care. This includes changes to the way that primary and community services are delivered (see p 18), as well as concentrating some clinical services on fewer sites (see p 24). Some plans assume that they will be able to reduce the number of beds needed in their area by 2020/21 as a result.

But how realistic are these assumptions? We analysed broad trends in hospital activity and population growth to test the assumptions made in STPs about hospital activity and bed use.

What are the key trends and statistics in London?

Numbers of general and acute hospital beds in London have been falling by around 2.3 per cent a year since 2005/06¹, and 2.4 per cent a year in England as a whole (see Table 2). This average rate of decrease disguises significant fluctuations in the year-on-year rate. More importantly, the longer-term fall in beds has slowed significantly in recent years, with the average annual rate of reduction falling to just 0.3 per cent for London, and 0.7 per cent for England.

¹ The data shows that both nationally and in London there was a large drop in the number of beds in 2010/11. This is probably explained by a change in the data collection and recording methods rather than an actual significant fall in the number of beds.

Beds in maternity services show similar levels of year-on-year fluctuations, and have increased slightly in London since 2005/6 (see Table A1 in Appendix A).

Table 2 General and acute beds in London and England, 2005/6 to 2016/17

Financial year	England, bed count	England, year-on-year change (%)	London, bed count	London, year-on-year change (%)
2005/6	132,826		20,305	
2006/7	126,976	-4.4	19,003	-6.4
2007/8	122,374	-3.6	18,159	-4.4
2008/9	122,538	0.1	18,185	0.1
2009/10	121,756	-0.6	17,926	-1.4
2010/11	108,958	-10.5	16,352	-8.8
2011/12	105,703	-3.0	15,974	-2.3
2012/13	104,737	-0.9	15,920	-0.3
2013/14	104,581	-0.1	15,953	0.2
2014/15	104,653	0.1	16,212	1.6
2015/16	102,986	-1.6	15,888	-2.0
2016/17	102,195	-0.8	15,769	-0.7
Total change in beds 2005/6 to 2016/17	-30,631		-4,536	
Total change in beds 2011/12 to 2016/17	-3,508		-205	
Average annual change 2005/6 to 2016/17 (per cent)		-2.4		-2.3
Average annual change from 2011/12 (per cent)		-0.7		-0.3

Source: Authors' analysis of NHS Digital data

Recent reductions in beds appear to have been made at the expense of increases in bed-occupancy levels (the proportion of hospital beds filled) both nationally and in London (see Table A2 in Appendix A). Bed-occupancy levels in London have been at 87 per cent or above since 2005/6. The current level of bed occupancy in London – at around 90 per cent – is unlikely to be sustainable and leaves the health system vulnerable to fluctuations in demand, with a knock-on effect on its ability to handle emergency admissions and discharge patients (Department of Health 2000). Patients face increasing risks once bed-

occupancy rates exceed 85 per cent, including risk of acquiring health care-acquired infections (Kaier *et al* 2012; Bagust *et al* 1999).

A crucial factor in assumptions about bed use is length of stay and there has been a slow downward trend in the length of time people stay in hospital in London since 2008/9 (see Table 3). London's acute hospitals have slightly higher lengths of stay compared with England more generally.

Table 3 Average length of stay in acute hospitals in London and England, 2008/9 to 2014/15, number of days

Financial year	England	London
2008/9	3.1	3.5
2009/10	3.0	3.4
2010/11	2.9	3.2
2011/12	2.7	3.0
2012/13	2.7	2.9
2013/14	2.6	2.9
2014/15	2.5	2.8

Source: Authors' analysis of NHS Digital data

Overall acute hospital activity in London has been increasing over recent years (see Table 4), as it has been elsewhere in England. (The components of this growth (both elective and non-elective activity) are shown in Appendix A, Tables A3 and A4). These activity levels – as in the rest of England – are significantly above the levels of increase that would have been predicted purely by population growth and other changes in demography.

Table 4 Acute hospital activity growth in London, total number of spells (elective and non-elective)

STP	2013/14 to 2014/15 (% change)	2014/15 to 2015/16 (% change)
North Central London	7.2	2.3
North East London	0.2	3.6
North West London	2.1	2.9
South East London	2.7	3.3
South West London	2.4	3.3
London	2.9	3.4
England	2.7	3.3

Source: Authors' analysis of NHS Digital data

London has tended to be seen as 'over-bedded' compared with other parts of England. Table 5 shows hospital spells (the continuous period that a patient spends in hospital) and bed days per 1,000 weighted CCG population in 2015/16, mapped to the five STP areas. This suggests that Londoners are actually using fewer hospital beds and have fewer admissions than might have been expected, although there are some limitations to this data² which mean the results should be treated with some caution.

Table 5 Number of hospital spells and bed days in London 2015/16 per 1,000 weighted population

STP	Spells	Bed days
North Central London	300	516
North East London	238	552
North West London	240	570
South East London	263	555
South West London	256	583
London	257	556
England	270	623

Source: Authors' analysis of NHS Digital data

² The weighted populations used for CCG allocations may not fully reflect important differences that might influence bed use.

London has a higher rate of A&E utilisation when compared with England as a whole. Table 6 sets out A&E attendance rates by STP in London. This is likely to reflect some of the characteristics of the population in London – mobile, younger and often commuting to central London.

Only 24 per cent of patients attending major A&E departments in London are admitted to hospitals, compared with 28 per cent nationally. For all types of A&E department, the figures are 15 per cent for London and 19 per cent nationally. This suggests that there is a higher proportion of less serious cases attending London A&E departments than in other parts of the country.

Table 6 Rate of accident and emergency (A&E) attendances per 1,000 population by STP area, 2012/13

STP	A&E attendances /1,000
North Central London	397
North East London	409
North West London	459
South East London	400
South West London	460
London	426
England average rate	340
Median England	315

Source: NHS atlas of variation

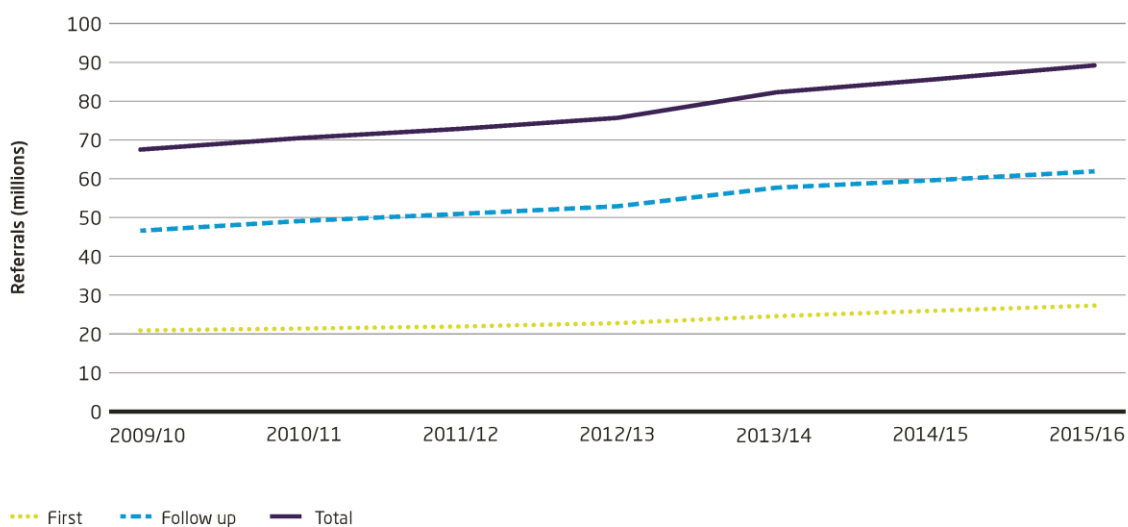
London has a similar rate of use of outpatient care as England as a whole (see Table 7). Rates of outpatient referral and activity over the past five years have risen by 4–5 per cent nationally (see Figure 5). London showed a steeper rise in GP referrals and first appointments between 2014/15 and 2015/6 compared with the previous five-year period.

Table 7 Rate of outpatient utilisation per 1,000 by STP weighted population, 2015/16

STP	GP referrals made	Other referrals made	First attendance seen	Follow up
North Central London	252	173	364	753
North East London	277	149	366	773
North West London	264	133	335	734
South East London	235	182	326	622
South West London	297	119	331	742
London	264	151	344	724
England	269	158	363	750

Source: Authors' analysis of NHS Digital data

Figure 5 Outpatient referral and activity in England, 2009/10 to 2015/16



Source: Authors' analysis of NHS Digital data

As we detail earlier (see p 18), a key ambition in London's STPs is to support and develop primary care and other community services. These changes are expected to help moderate demand for hospital care.

London currently has more GPs per 1,000 population than the rest of England (see Table 8). Part of the reason for this is that London has a higher number of GP registrars than other parts of the country. There is also a sense that with London's high rate of population turnover and mobility, there is a greater GP

workload per head of population than elsewhere. There is limited data on activity and staffing in other community-based services.

Table 8 GPs in London (whole-time equivalents) per 1,000 weighted population, September 2016

STP	GPs (wte)/1,000
North Central London	0.61
North East London	0.58
North West London	0.58
South East London	0.52
South West London	0.61
London	0.58
England	0.53
London excluding GP registrars	0.53
England excluding GP registrars	0.45

Source: Authors' analysis of NHS Digital data

What impact will demographic change have on hospital activity?

To help assess the proposals made in STPs about moderating acute activity, we need to understand how hospital demand and activity might change between now and 2020/21.

A key factor influencing this will be the impact of demographic changes in London. Other factors – such as the expansion of available treatments, new technology, and the specialisation of clinical staff – will be important too. NHS England estimates that these non-demographic factors will increase the growth in demand for general and acute hospital care from an average of 1.5 per cent growth a year due to demographic-only change to 2.5 per cent a year from 2016/17 onwards. For specialised care, the impact of these non-demographic factors is even greater, increasing growth in demand from around 1.5 per cent a year due to demographic change to 4.3 per cent overall (NHS England 2016a).

For the purposes of this analysis, however, we have simply looked at the potential impact of demographic changes on hospital use in London. This means that we will almost certainly be understating the potential growth in hospital activity.

We have used 2016 as the base year for looking at the impact of demographic changes on hospital activity, as this is the year for which we have the most up to

date activity data.³ London will experience rapid population growth from 2016 to 2021 (see Table 9). The older population in London is growing at a slower rate when compared with the rest of England and the number of young people is growing rapidly. Unsurprisingly, this translates into an increase in number of births equivalent to the workload of a large maternity unit (see Table 10).

Table 9 Rate of population growth in London, 2016 to 2021, by age group

STP	All ages (% change)	age 75 (% change)	age 0-14 (% change)
North Central London	7.0	14.3	8.4
North East London	8.1	7.7	9.6
North West London	5.3	13.1	6.9
South East London	6.4	8.1	9.8
South West London	6.0	12.1	10.8
London	6.5	11.1	9.0
England	3.7	15.0	5.2

Source: ONS, 2014-based subnational population projections for clinical commissioning groups in England, May 2016

Table 10 Additional births in London by STP area, 2016 to 2021

STP	Extra births/year	2016 to 2021 (% change)
North Central London	1,920	7
North East London	1,029	5
North West London	362	1
South East London	1,066	5
South West London	2,565	8
London	6,942	5

Source: ONS, 2014-based subnational population projections for clinical commissioning groups in England, May 2016

³ STPs work in financial years – April to March. Where possible we have also used financial year data. However, ONS population figures are based on calendar years, and so we have used 2016 as the comparable calendar year for financial year 2015/16, and 2021 for financial year 2020/21.

The impact of population and demographic changes on health services in London will be significant. Every STP area can expect growth in acute activity across all specialties over the five years to 2021 if the current rate of hospitalisation continues – ranging from 8.1 per cent in North West London to 9.9 per cent growth in North Central London, and averaging 8.8 per cent across London (see Table 11). As we set out above, this minimal projection does not include the range of other factors (such as expanding treatments and new technologies) that have historically increased activity over and above the impact of demographic changes.

As the second and third columns of Table 9 show, the rate of growth in the very young and the very old population in London is faster than in other age groups. This will have a striking impact on the likely number of acute and general hospital beds needed by 2021. This is primarily because of the significant relationship between age and co-morbidity, recovery time and complexity which translates into longer lengths of stay (see Figure 6).

Using recent trend data showing hospital and bed-day use by age band, we have modelled the potential impact of London's changing age profile on demand for acute and general hospital care in 2021. Table 12 sets out the potential increase in bed days in London by 2021, and then calculates the related increase in beds required based on two bed-occupancy scenarios.

At 85 per cent bed occupancy, our analysis suggests that London may need 1,600 additional acute and general hospital beds by 2021 to keep up with demographic changes alone. At 80 per cent bed occupancy, 1,700 additional beds may be needed.

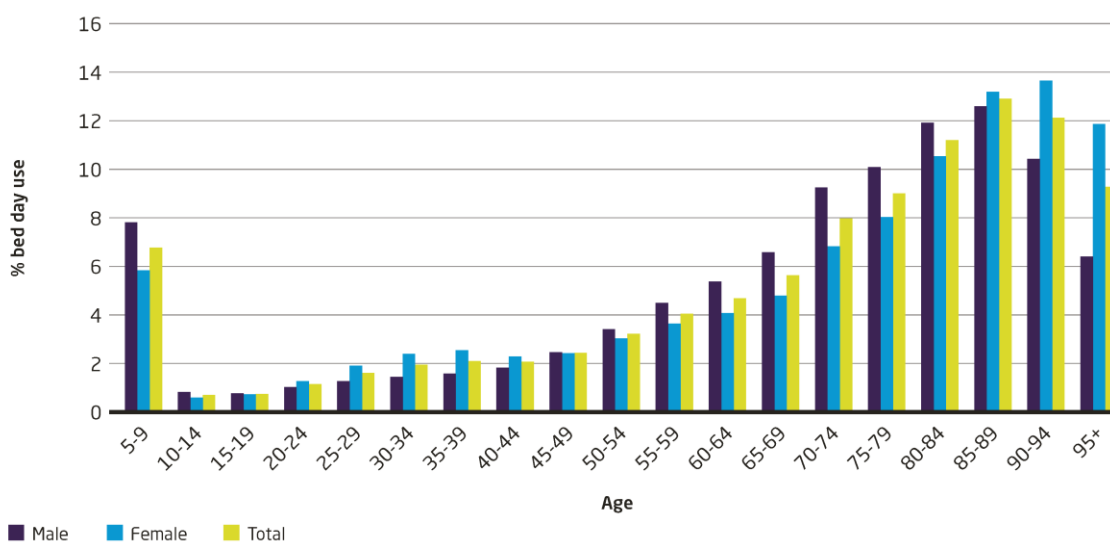
While 85 per cent bed occupancy is often considered to be a reasonable level for managing acute hospital demand, lower bed-occupancy rates may be needed to sustain further reductions in length of stay. This is because fewer patients with extended stays in hospital will lead to both a higher turnover of patients and a higher proportion of patients with complex care needs.

Table 11 Projected growth in acute hospital activity in London resulting from population changes, 2016 to 2021

STP	2016 to 2021 (% change)
North Central London	9.9
North East London	9.6
North West London	8.1
South East London	8.5
South West London	8.2
London	8.8
England	6.4

Source: Authors' projections

Figure 6 General and acute hospital bed day use in England by age group, 2015



Source: Authors' analysis of NHS Digital data

Table 12 Potential growth in general and acute bed days in London, 2016 to 2021, for given bed-occupancy rates

STP	Bed day growth (% change)	Additional beds needed, for given occupancy rate		
		80%	85%	90%
North Central London	11.0	290	273	258
North East London	9.9	364	343	324
North West London	10.4	436	411	388
South East London	8.9	327	307	290
South West London	9.6	283	266	252
London	9.9	1,700	1,600	1,511
England	9.0	11,218	10,558	9,971

Source: Authors' projections

What reductions in activity are being proposed in STPs?

Table 13 sets out the projections made in each of the five STPs about their ability to reduce elective activity by 2020/21, if they are able to successfully implement the service changes they propose. Table 14 sets out the projections made in STPs about non-elective activity. The figures in these tables reflect absolute changes against the 2015/16 baseline.

The most significant reduction in elective activity is expected in North West London's plan, a reduction of 19 per cent by 2020/21. The most significant reduction in non-elective activity is expected in North Central London, a reduction of 21 per cent.

A range of strategies are proposed to achieve these reductions, including avoiding admissions to hospital (for example, through active care management for people with long-term conditions), managing care more effectively in the community (for example, by providing more specialist support outside of hospital), and reducing length of stay in hospital (for example, by offering early supported discharge). These approaches are typically proposed in combination in STPs. Example interventions are described in Section 3.

Table 13 Projected changes in elective activity in London's STPs, 2015/16 to 2020/21

STP	STP 'do nothing' % change 2015/16 to 2020/21	STP 'do something' % change 2015/16 to 2020/21
North Central London	15	-9
North East London	12	9
North West London	10	-19
South East London	11	-6
South West London	16	-11

Source: STP planning documents

Table 14 Projected changes in non-elective activity in London's STPs, 2015/16 to 2020/21

STP	STP 'do nothing' % change 2015/16 to 2020/21	STP 'do something' % change 2015/16 to 2020/21
North Central London	15	-21
North East London	10	-8
North West London	28	-11
South East London	4	-12
South West London	18	3

Source: STP planning documents

Some STPs make assumptions about their ability to reduce the number of general and acute hospital beds as a result of adopting these strategies. South West London's plan, for example, assumes that a 44 per cent reduction in inpatient bed days can be achieved by 2020/21. This could translate into a reduction of around 450 beds. When set against the potential impact of demographic changes in London described above, which might require an additional 252 hospital beds in South West London, these planned reductions are significant.

Are there opportunities to reduce activity?

Bed audit data from London hospitals suggests that, as in other parts of the country, around 10–15 per cent of hospital admissions could potentially be avoided through better management in primary and community settings

(unpublished Oak Group data). As we set out on p 36, however, acting on these opportunities by shifting care into the community is extremely difficult.

Long-term reductions in length of stay in NHS hospitals have helped mitigate the need to build additional hospital beds in the past – and variations in length of stay suggest that further reductions are possible in future (Alderwick *et al* 2015b). Inpatient bed audits in ten London hospitals suggest that a large proportion (around 50–60 per cent) of patients in hospital could potentially be cared for in other settings (unpublished Oak Group data). Some of these patients could be sent home with no further care, while most others require a range of support including high intensity nursing home care (see Table A5 in Appendix A).

It should be stressed, however, that it would not be practical to move all these patients out of hospital. ‘Snap shot’ audits like those mentioned above typically identify some patients as ‘inpatients’ shortly before they are about to be discharged from hospital anyway. International experience suggests that in practice it would not be possible to move around 30 per cent of patients identified in audits as potentially eligible for other forms of care (Oak Group, personal communication).

It is also worth recognising that the long-term trend of falling length of stay in London and England is slowing (see Table 3). And as average length of stay goes down, making further improvements becomes more difficult. There is also a danger of double-counting; if hospital admissions are avoided for patients who could be cared for elsewhere, then the opportunity to reduce length of stay for the same set of patients disappears.

Are reductions on the scale assumed by STPs credible?

We tested a range of assumptions to show what it would take to make reductions in hospital activity and bed use in London on the scale assumed in STPs.⁴ We combined the impact of demographic change (which increases demand for hospital care – as we set out on p 49) with varying assumptions about the ability of the NHS and social care system to hold back and reverse overall hospital demand by 1 per cent, 5 per cent, and 10 per cent between 2016 and 2021.

⁴ For the purposes of this analysis, we have had to assume that the changes in hospital activity projected by the STPs apply both to general and acute as well as to specialised care. This is because NHS England has yet to provide STPs with any detailed projections on its planned changes in specialised commissioning.

To show the impact that these varying levels of demand will have on the number of hospital beds needed in London, we then made a range of assumptions about the NHS's ability to further reduce length of hospital stay by 2021, ranging from no further reduction in length of stay through to reductions of 2 per cent, 5 per cent, 10 per cent and 15 per cent. The results presented in Table 15 assume average occupancy remains at 90 per cent.

As we set out on p 44, bed occupancy of 90 per cent is in fact too high to run a hospital smoothly and safely, particularly if it is assumed that length of stay will fall significantly. We have therefore also modelled the same set of variables but for a bed-occupancy rate of 85 per cent (see Table 16), which is more appropriate but nonetheless ambitious for the NHS given existing pressures on services. To enable a like-for-like comparison, the changes in Table 16 are still set against the current baseline (where bed occupancy stands at 90 per cent).

Table 15 Change in the use of beds in London 2016 to 2021 under different scenarios, current (90 per cent) occupancy rates

Length of stay (% change)	Change in demand against demographic change (% change)		
	-10	-5	0*
0 (no change from current)	-160	676	1,511
-2	-461	358	1,177
-5	-912	-118	676
-10	-1,665	-912	-160
-15	-2,417	-1,706	-996

*change in demand at level of demographic change

Source: Authors' analysis

Table 16 Change in the use of beds in London 2016 to 2021 under different scenarios, 85 per cent occupancy rates

Length of stay (% change)	Change in demand against demographic change (% change)		
	-10	-5	0*
0 (no change from current)	725	1,610	2,495
-2	406	1,274	2,141
-5	-72	769	1,610
-10	-868	-72	725
-15	-1665	-912	-160

*change in demand at level of demographic change

Source: Authors' analysis

Tables 15 and 16 show that reducing the number of hospital beds in London would require significant improvements in length of stay and in the ability of the system to reduce demand for hospital care. Indeed, our modelling shows that significant improvements in these areas will be needed just to avoid extra hospital beds being required to meet the needs of the population.

These challenges will become even harder if London's hospitals are able to bring bed-occupancy rates down from 90 per cent to 85 per cent. Doing this would require a heroic effort by all parts of the health and care system – and would certainly require additional services to be available in the community to manage additional demand and provide more complex care. It may also require changes to staffing ratios within hospitals, as making significant reductions in length of stay would leave a greater proportion of hospital patients with more acute needs. Simon Stevens, Chief Executive of NHS England, recently stated that bed reductions should not go ahead unless STP leaders can show that sufficient services are available in the community prior to beds being closed (Campbell 2017).

As we set out above, none of these opportunities is easy to realise. Even if significant investment were to be made available for services in the community, the research evidence does not suggest that significant reductions in hospital use are easy to achieve within the timescales available. Based on our analysis, the reductions in hospital use in London being proposed in STPs are highly unlikely to be achievable.

Summary

The impact of population growth in London on hospital demand and activity will be significant. Other factors will also increase hospital use. STPs assume that they can moderate growth in acute hospital activity – and, in some cases, make absolute reductions in demand and, therefore, also in the number of acute hospital beds. Data suggests there are opportunities to avoid hospital admissions and improve length of stay. But achieving these opportunities in practice is challenging and will require both time and additional investment in health and care services in the community. Even then, it is highly unlikely that the ambitious projections to reduce hospital activity can be achieved. Indeed, with expected growth in London's population, heroic efforts will be needed simply to manage rising demand with existing hospital capacity.

C. Prioritising prevention and early intervention

The plans describe ambitions to prioritise prevention and early intervention to improve people's health (see p 17). The plans focus heavily on encouraging healthy behaviours and supporting people to manage their own health.

Inequalities in health outcomes are identified as a key issue to be addressed, and the importance of tackling the wider social, economic and environmental context and determinants of health is also acknowledged.

These ambitions should be welcomed. Potentially preventable behavioural risk-factors – like having an unhealthy diet, smoking and being physically inactive – make the biggest contribution to years lost to death and disability for people in England (Newton *et al* 2015). These behaviours are firmly embedded within people's social context; there is an inverse relationship between socio-economic status and healthy behaviours (Pampel *et al* 2010). The social determinants of health, such as people's housing, relationships, income and employment, have a significant impact on health outcomes (Booske *et al* 2010; Marmot *et al* 2010). Failure to address these non-medical factors has an impact on health care use and costs (Bachrach *et al* 2014). As well as improving people's lives, investment in prevention and public health services can be cost effective and provide both short- and long-term returns on investment (Masters *et al* 2017; McDaid *et al* 2015; World Health Organization 2013).

Is there enough detail in the plans?

The challenge lies in turning this knowledge of the problems and the ambitions to address them in STPs into actual improvements in population health. As in other parts of the country, London's STPs often lack clarity on how ambitious goals to prioritise prevention and early intervention will be delivered in practice. Missing details include specific aims for improvement, how interventions will be funded, and who will be responsible for implementation. While public health

services formally fall under the responsibility of local government, improving population health and wellbeing will require collaboration between the NHS, local authorities, wider public services, the voluntary sector, employers and local people. This is because the influences on people's health are spread widely across society and communities.

STPs should define in more detail how this collective action to improve population health will be led, co-ordinated and delivered both within STPs and across London. This should include the defined role of NHS services in identifying and addressing the non-medical needs of their patients. An agreed set of measures, including, for example, indicators to monitor local NHS performance in tackling socio-economic health care inequalities (Cookson *et al* 2016), should be used to monitor the impact of interventions and report on progress.

London's STPs describe how NHS services will draw on 'community assets' as part of their plans for prevention. But there are few details included on how this will be done. Community assets are the positive capabilities held within communities that can be used to promote health, including people's time and skills, existing support groups or social networks, buildings or physical spaces like churches, schools or libraries, and businesses that provide jobs for local people. Participating in community activities and having social networks can improve people's health and wellbeing (Munford *et al* 2017; Holt-Lunstad *et al* 2015). Various tools and resources can be used by STP leaders to help understand the 'assets' available within their communities, how they can be harnessed, and the impact of different approaches in supporting them (Foot 2012; Nelson *et al* 2011). Lessons can also be learnt from existing 'social prescribing' schemes operating in London, such as those in Tower Hamlets.

Will the investment be available?

An added challenge will be delivering ambitions to improve population health and wellbeing at a time when public health budgets are being cut. At a national level, local authority public health budgets will fall by nearly 10 per cent in cash terms between 2015/16 and 2020/21 (Local Government Association 2016). This is on top of an in-year cut of £200 million in 2015/16. Wider local authority budgets – which cover a range of services that have a direct impact on people's health, such as education and children's services – are also shrinking. Forecasts for 2016/17 suggest that local authority funding has shrunk by 26 per cent in real terms since 2009/10 (after accounting for changes to commissioning responsibilities) (Smith *et al* 2016).

We looked at recent trends in public health and wider local authority spending in London. Data on public health spending by local authorities in London starts in 2013/14, when many public health functions were transferred from the NHS to

local government. A number of changes made to public health budgets in 2015/16 – including an in-year budget cut and a (larger) transfer of funding for public health services for children under five from the NHS to local authorities – make comparisons across years difficult.

We stripped out the value of this transfer of funding for 2015/16 and 2016/17 to make the figures broadly comparable between years. We then compared local authority budgets (what was planned to be spent) and outturn (what was actually reported as spent) for public health services in London between 2013/14 and 2016/17. Table 17 shows that spending grew in 2014/15 but fell in 2015/16. Budgets fell by nearly 8 per cent between 2015/16 and 2016/17. These figures are all expressed in cash terms and so do not take into account the pressures of inflation and demographic changes.

Table 17 London local authority public health budgets and outturn cash values (stripping out services for children under five), 2013/14 to 2016/17

Year	Budget	Outturn	Budget (% change)	Outturn (% change)
2013/14	£558,712,000	£530,579,000		
2014/15	£587,566,000	£564,378,000	5.2	6.4
2015/16	£575,100,000	£538,730,000	-2.1	-4.5
2016/17	£529,443,000		-7.9	

Source: Authors' analysis of Department of Communities and Local Government 2017

How might this spending change in future? At a national level, we know that the public health grant faces further cuts of 9.6 per cent cash to 2020/21⁵ but we do not know how that reduction will be cascaded down to individual local authorities. If we assume that local authority budgets all fall in line with the planned national reduction, then we can construct a budgetary estimate for London boroughs' public health spending to 2020/21. This is presented in Table 18.

We include figures for the total planned public health budget and for the 'comparable' public health budget, the latter stripping out the transfer of spending on public health services for children under five. Again, these figures

⁵

www.local.gov.uk/documents/10180/11531/Letter+to+local+authorities+on+Spending+Review+2015/9935879f-b1a1-4064-b35f-7b9e588bdd27

are all presented in cash terms, which means they understate the reductions in spending power experienced by local authorities and do not adjust for population growth. This projection shows the likely continual reduction in public health spending in cash terms to 2020/21 for both the overall budget and the more comparable stripped out figures. The latter suggests London's local authorities will have less cash in 2020/21 than they were budgeting in 2013/14 for the same functions.

Table 18 London local authorities' public health raw and comparable budget cash values (stripping out services for children under five), forecasts to 2020/2021

Financial year	Budget (£)	'Comparable' budget (£)	% change raw budget	% change 'comparable' budget
2013/14	£558,712,000	£558,712,000		
2014/15	£587,566,000	£587,566,000	5.2	5.2
2015/16	£664,002,000	£575,100,000	13.0	-2.1
2016/17	£690,782,000	£529,443,000	4.0	-7.9
2017/18	£673,512,450	£516,206,925	-2.5	-2.5
2018/19	£656,001,126	£502,785,545	-2.6	-2.6
2019/20	£638,945,097	£489,713,121	-2.6	-2.6
2020/21	£638,945,097	£489,713,121	0.0	0.0

Wider local authority spending on services such as housing and education also has a significant impact on public health. Like elsewhere in England, local authority budgets in London have been falling over recent years. We have not calculated the specific effects of these reductions on different areas of local authority spending in London. But national data suggests that these reductions will have a substantial impact on local authorities' capacity to support wider functions that improve health (Buck 2014).

Summary

London's STPs emphasise the importance of prioritising prevention and early intervention to improve health and reduce inequalities. But the plans often lack detail on how this will be done in practice and the role of different organisations in delivering improvements. The direct contribution of the NHS in addressing non-medical needs and reducing inequalities should be defined. Concrete plans to involve communities in improving population health should be made. Funding for public health services and wider local authority services has been falling over

recent years and is likely to continue to fall over the years to 2020/21. This will make ambitions to prioritise prevention harder to deliver.

D. Reconfiguring acute and specialised services

All STPs include proposals to change the way that acute and specialised services are delivered. As we set out on p 24, these proposals range in scope from commitments to review whether some specialised services should be reconfigured to more concrete plans to consolidate acute services. Workforce shortages and opportunities to improve quality of care are commonly identified as the main drivers for acute reconfiguration. The financial sustainability of services is also identified as a factor. In some STPs, these changes are proposed alongside plans to reduce the number of acute hospital beds required in future.

These proposals continue a series of changes in the way that acute and specialised services have been delivered in London which have taken place over many years. Stroke and major trauma services are two recent examples (Appleby *et al* 2011). Evidence suggests that the centralisation of stroke services in London has led to reductions in patient mortality, length of stay in hospital, and cost per patient (Morris *et al* 2014; Hunter *et al* 2013).

What does the evidence say about reconfigurations of acute and specialised services?

We have not reviewed the evidence base for individual clinical service changes being proposed in London's STPs. This was outside the scope of this work. But relevant lessons can be drawn from a major review of the evidence underpinning clinical reconfigurations in the NHS carried out by The King's Fund in 2014 (Imison *et al* 2014). The authors analysed reviews of service reconfigurations conducted by the National Clinical Advisory Team. The report looked at the evidence behind a range of reconfigurations, including whole-trust reconfiguration, mental health services, A&E and urgent and emergency care services, acute medical services, acute surgical services, elective surgical care, trauma, stroke care, specialist vascular surgery, maternity services, neonatal services and paediatric services. STPs in London are planning or considering service reconfigurations in some of these clinical areas.

The review concluded that reconfigurations are an important approach to improve quality in the NHS, but are insufficient on their own. It found that those taking forward major clinical service reconfiguration do so in the absence of a clear evidence base or robust methodology with which to plan and make judgements about service changes. The review summarised the evidence on clinical service reconfigurations as follows.

-
- Evidence to support the impact of large-scale reconfigurations of hospital services on finance is almost entirely lacking.
 - Evidence on the impact on quality is mixed, being much stronger in relation to specialist services than other areas of care.
 - Evidence on the importance of senior medical and other clinical input to care is strong, particularly for high-risk patients; however, there is uncertainty about how many senior staff are needed, of what type, and for what time periods.
 - Evidence suggests that some services can be provided safely through the use of non-medical staff.
 - Technology offers opportunities to sustain local access to some services that previously might have been centralised, although the evidence on this is still developing.
 - Gaps in the evidence will often lead to different and sometimes conflicting views on the best way of providing safe, high-quality services within available budgets. This is particularly the case for non-specialist services where the evidence on the net benefit of centralisation is often lacking.

Workforce shortages in the NHS have become a more important consideration in clinical reconfigurations over recent years. In South West London, for example, the STP states that 'clinicians do not believe that we will be able to recruit or pay for sufficient workforce to deliver seven-day services at five acute sites'. These staffing pressures have a clear impact on the ability to deliver safe care. A lack of consultant presence, for example, is a threat to patient safety (Cullinane *et al* 2005). Working in clinical networks offers one way to make use of scarce specialist expertise between hospital sites (Edwards 2002), and NHS providers are increasingly working in partnership to address workforce shortages (Monitor 2014). But in some cases, clinical reconfigurations may be needed to improve the quality and safety of patient care within current financial and workforce constraints (Ham *et al* 2017).

Whatever their impact, clinical service reconfigurations represent a major organisational distraction. They take time and effort to implement. They also require support from a wide range of stakeholders, including clinicians, politicians and the public. The argument that quality of care may be improved by concentrating specialised services on fewer sites, especially when there are shortages of clinical staff, needs to be articulated more clearly and consistently. All proposals to reconfigure services will have to weigh up the varying considerations and complex trade-offs between access, quality, workforce issues and cost, as well as the potential role of digital technology in transforming how

care can be delivered (Imison *et al* 2014). Different stakeholders are likely to weight the value of these considerations differently (Imison 2011).

Will capital funding be available to support them?

Proposals to reconfigure clinical services in London's STPs will require capital funding. Taken together, the five London STP plans call for capital investment totalling £5.7 billion over the next four years (to 2020/21). Capital funding at national level is extremely constrained. It is therefore unlikely that capital funding will be available for all the projects described in London's STPs. We look in more detail at capital funding in STPs on p 74.

Summary

Reconfigurations of acute and specialised services are being proposed in London's STPs. The evidence base for clinical reconfigurations is mixed. Evidence that reconfigurations produce financial savings is almost entirely lacking and, whatever their impact, changes to hospital services represent an organisational distraction. Capital funding to support any changes is also constrained. But some clinical reconfigurations may be necessary to improve the quality and safety of patient care within current financial and workforce constraints particularly where there are staff shortages. Each case will have to be considered on its merits.

E. Closing gaps in NHS finances

In common with all 44 STPs in England, each London STP has calculated the funding gap it faces by 2020/21 without further action and service transformation. This is called the 'do-nothing' gap. These gaps essentially represent each STP area's share of the £22 billion funding gap described in the Forward View. We used the financial templates submitted by STPs to NHS England in October 2016 and related modelling work⁶ to understand how these gaps were calculated, the major schemes being proposed to close them, and some of the assumptions underpinning these calculations.

⁶ We have used two sources of information for this analysis: unpublished modelling material provided by each of the STPs, as well as data submitted by the STPs to NHS England in October 2016 (the finance and efficiency templates). It should be stressed that much of the financial modelling undertaken by STPs remains work in progress. Many of the savings and schemes referred to in this section reflect 'top-down' estimates developed in time for STP submissions to NHS England for October. Since then, STPs have been revising those estimates. However, they have been unable to complete these estimates in time for the outcome of this review.

What is the size of London's gap?

The aggregate London NHS 'do-nothing' gap is £4.1 billion as estimated by the STPs themselves (see Table 19). NHS England has said that around £5 billion of the £22 billion saving required across England will be made through central initiatives such as pharmaceutical pricing and continued NHS pay restraint, leaving around £17 billion to be found through local STPs. If London's 'do-nothing' gap was proportionate to its projected weighted population for 2020/21 (16 per cent of the total population in England) it would stand at around £2.7 billion. It is not clear if the significantly larger scale of London's 'gap' in STPs is an indication that the size of the overall NHS gap has grown since NHS England's initial analysis, or if London faces a more significant challenge than elsewhere (for example, due to the higher level of deficits experienced at London's provider trusts⁷).

Within London, the scale of the 'do-nothing' financial challenge relative to each area's projected population size also varies. Quantified as a gap per head of weighted population, the scale of the challenge for London's STPs ranges from £286 a head in North East London to £510 a head in North Central London. The reasons for these differences are likely to be related to the uneven distribution of provider deficits, and the significant variation in the rate of funding increases – determined largely by projected demographic changes – that commissioners can expect over the next four years.

⁷ By the end of the third quarter of 2016/17, the year-to-date underlying NHS-wide provider deficit (after emergency 'sustainability funding' is excluded) stood at £2.24 billion, the equivalent of £39 per head of population. Of that, £582 million was held at London's provider organisations – the equivalent of £65 per weighted head of population in the capital.

Table 19 Projected financial 'gaps' in London's STPs by 2020/21

STP	'Do-nothing' NHS gap, 2020/21 (£m)	% share London's 'do-nothing' gap	% share London weighted population, 2020/21	'Do- nothing' gap per head of weighted population (£)	Expected % annual growth in CCG allocations by STP area, 2015/16 to 2020/21 ⁸
North Central London	797	19.5	16.7	510	2.7
North East London	590	14.4	22.0	286	4.2
North West London	1,113	27.2	23.6	503	2.4
South East London	934	22.8	21.3	467	3.0
South West London	659	16.1	16.4	430	3.1
London	4,093			437	3.1

Source: STP Finance and Efficiency Templates, submitted to NHS England, October 2016; NHS England overall weighted populations for core CCG allocations, 2016-17 to 2020-21⁸

STPs have also attempted to supplement their forecast NHS 'do-nothing' gap with a further funding gap attributable to adult social care. Only one STP area (North West London), however, was confident enough to include a figure for this in its formal (unpublished) data submission to NHS England in October (increasing its total gap by a further £300 million).

How is the gap calculated?

The 'do-nothing' gap for each STP has been calculated by STP analysts using a similar method to that used by NHS England to forecast the original £22 billion gap for the whole NHS. This involves projecting forward the STP footprint's current expenditure on providing NHS services by forecast levels of NHS cost inflation (averaging at around 2.6 per cent a year 2015/16 to 2020/21)⁹ and by

⁸ CCG allocations for recurrent programme spending, excluding (administrative) running cost allowance.

⁹ NHS Improvement's economic assumptions for provider cost inflation to 2020/21 do not currently recognise measures announced at the 2016 Spring Budget. These measures included a change in the public sector pension discount rate which we estimate will increase NHS provider costs by a further 0.7 per cent in 2019/20. The average level inflation cited here (2.6 per cent a year) reflects this. Without the change in the discount rate, provider cost inflation 2015/16 to 2020/21 would average at 2.5 per cent a year.

forecast levels of activity increase, determined in part by expected population growth and change, but also by the recent trend that has seen the volume of NHS activity increase at an average rate of around 3 per cent a year. The resulting expenditure projection for 2020/21 is then compared to the forecast funding allocation for the area, with the difference equalling the 'do-nothing' gap. As specialised services are commissioned centrally, NHS England has notified each STP area of an additional gap, representing its share of the expected gap in the specialised commissioning budget for 2020/21. The specialised commissioning gap makes up £651 million of the total £4.1 billion 'do-nothing' gap for London, which is broadly proportionate with the overall size of the specialised commissioning budget nationally.

There is very little information available about how NHS England has calculated the specialised commissioning gap, but our understanding is that the gap is equivalent to around a 4.4 per cent annual gap between 'do-nothing' expenditure and available resources. There are, again, significant variations in the size of the specialised commissioning 'gap' between London's STPs – ranging from just £36 million in North East London to around £190 million in both South East London and North West London.

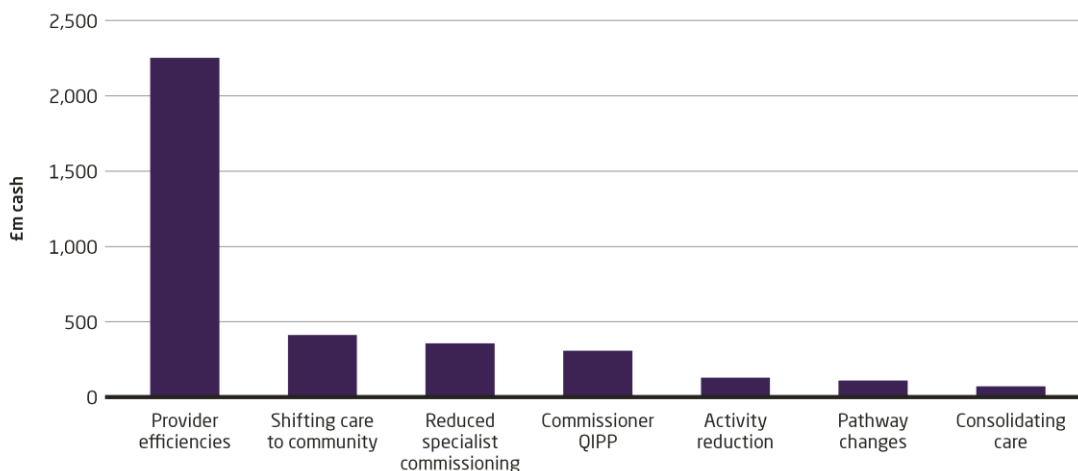
Each STP then shows how its proposed service transformations and efficiencies will close their 'do-nothing' gaps, through 'do-something' measures. None of the five STPs believe they will be able to close their gap completely through transformation and efficiencies alone. Instead, they plan to reduce the gap from a potential £4.1 billion to £650 million in 2020/21.

To close the remaining gap, NHS England has given each STP area an indicative share of the £3.8 billion Sustainability and Transformation Fund for 2020/21, ring-fenced at the time of the 2015 Spending Review. This money is to be spent on shoring up NHS provider finances and investment in service transformation. London's expected share of the Sustainability and Transformation Fund is £624 million. After factoring in their share of the Fund, four out of the five STP areas plan modest surpluses in 2020/21, aggregating to £46 million. One London STP area, North Central London, has stated that it does not believe it is possible to completely close its gap by 2020/21. It plans instead to end 2020/21 with a £75 million deficit, down from a 'do-nothing' gap of £797 million and equivalent to around 2.5 per cent of its spending allocation for that year. As of October 2016, the net plan for London as a whole is to end 2020/21 with a £29 million deficit.

How do STPs plan to close the gap?

Figure 7 sets out the main components of the financial savings assumed in London's STPs.

Figure 7 London's planned savings by 2020/21



Source: STP finance and efficiency templates, submitted to NHS England, October 2016

Provider efficiencies

Of the 'do-something' financial savings set out by each of the five London STPs, more than one-third relate to so-called 'business as usual' efficiencies by NHS providers. These 'business as usual' efficiencies are planned to cumulatively reduce total 'do-nothing' provider costs by £1.4 billion by 2020/21. Averaged over the four years between 2016/17 and 2020/21, those efficiencies equate to an average annual recurrent reduction in total operating costs of 1.8 per cent.

In addition to 'business as usual' provider efficiencies, all the London STPs assume providers will also find further recurrent efficiencies through measures such as collaborative procurement and the rationalisation of their estates. These additional efficiencies increase the total planned level of provider efficiency by £562 million, increasing the average annual recurrent reduction in costs to 2.5 per cent.

NHS England has indicated that it will expect around 45 per cent of the £651 million London-wide specialised commissioning gap to be filled through provider efficiencies. This means that the average rate of planned provider efficiencies for STPs in London between 2016/17 and 2020/21, against the 'do-nothing' scenario, stretches to around 2.9 per cent – just under two-thirds of the total effort to 'fill' the gap.

There are variations in the rate at which London's STP are asking providers to make these operational efficiencies (ranging from 2.4 per cent to 3.7 per cent a year over the four years from 2016/17). These differences may be a result of how these opportunities are classified between STP areas. For example, a

number of the initiatives regarded primarily as service changes also involve provider cost efficiencies – such as reductions in the length of stay for inpatients. This means that there is a risk that some plans may double-count the opportunity to make savings from ‘provider efficiencies’ and savings from ‘service transformation’.

Are the levels of provider efficiencies expected in the plans achievable? In the three years between 2013/15 and 2015/16, the average annual rate of recurrent efficiency saving reported by regulators was 2.2 per cent. Throughout 2016/17, NHS providers struggled to meet the financial targets set out in their operating plans (with ‘slippage’ of around £500 million expected in the final accounts for the year). NHS providers will therefore need to make additional ‘catch-up’ efficiencies – somewhere in the region of a further 1 per cent – in the years from 2017/18 onwards above and beyond those included in the STPs.

Once these additional catch-up efficiencies are included, the level of year-on-year cost savings being expected of providers in STPs looks unsustainable, if not unachievable. Indeed, the prime driver of the deficit found in the NHS provider sector today is the inability of the sector to meet earlier annually recurrent efficiency requirements of 4 per cent between the years 2011/12 and 2014/15 in order to match year-on-year real-terms reductions in payments to hospitals of the same proportion (Gainsbury 2016).

It is also worth noting that the recent level of recurrent efficiencies in the NHS was achieved in the context of year-on-year increases in provider activity, averaging around 3 per cent. Similar efficiencies will be hard to achieve if other measures contained within the STPs to reduce the volume of hospital activity (either in absolute or relative terms) are successful.

Commissioner efficiencies

In addition to ‘business as usual’ provider efficiencies, four out of the five London STPs have also pencilled in significant savings from ‘business as usual’ commissioner efficiencies – referred to as ‘commissioner QIPP’. These are CCG savings schemes badged under the ‘quality, innovation, productivity and prevention’ (QIPP) programme, established in 2010.

The background finance documents prepared by each STP show that around £300 million worth of savings are planned to come from commissioner QIPP schemes by 2020/21 (around 8 per cent of the total savings planned). There is very little information available, however, about what these are likely to entail. In general, QIPP schemes involve reducing commissioner spend through initiatives that reduce demand or activity rates in acute care and other services. There is therefore another risk of double-counting the potential savings in STPs,

as savings assumed from QIPP schemes may overlap with separate savings assumed from service transformation schemes.¹⁰

Service transformation

Around 16 per cent of the savings planned across London are due to come from transforming services. In Figure 7 (p 68) we have loosely categorised these transformation schemes as: shifting care from acute settings into the community; consolidating planned and cancer care to improve quality and efficiency; and changes to the pathway of care for common conditions. As with provider efficiencies, there is no set way to categorise these measures and in practice it is possible for individual schemes to involve elements of all three – such as a change to a musculoskeletal pathway involving elective care at a centralised acute provider, followed by physiotherapy delivered in the community.

What the schemes all have in common, however, is that they involve a planned reduction in the cost of acute care through a mixture of clinical efficiencies (such as standardising practice to avoid the need to readmit patients) and reducing activity in acute hospitals (for example, by managing people with long-term conditions better, or reducing follow-up outpatient appointments). A further 10 per cent of the total 'do-something' savings are due to come from the specialised commissioning budget and are expected to involve a mixture of activity reductions and clinical efficiencies through service consolidation. Another 3 per cent of savings (around £130 million) appear to be related purely to planned activity reductions and decommissioning (for example, of services deemed to be of low clinical value). In total, these 'service transformation' schemes are planned to contribute more than £1 billion towards closing London's 'do-nothing' gap.

How have STPs costed savings attributed to reduced acute activity?

A number of these transformation schemes assume that financial savings can be made by reducing acute hospital activity and the resulting costs of care. In contrast to primary, community and mental health care, costing in the acute sector is relatively transparent and advanced. Patients are coded when they come into contact with hospitals according to their disease group, diagnosis and the type of care, procedures or treatments they receive. This is then reflected in the price hospitals charge commissioners for that care, usually determined by the national tariff. Providers also collect data on the costs of the care they

¹⁰ One STP – North Central London – attempts to guard against double-counting savings that may be made through QIPP and those that may be found through other schemes, as it only counts QIPP savings made in respect of commissioner savings in non-acute budgets.

deliver, including diagnostics such as x-rays, surgical procedures, and nursing care in a hospital bed. The dataset containing these costs is called reference costs.

Over recent years a significant gap has opened up between the tariff prices paid by commissioners for each unit of hospital care, and the actual, higher costs of providing that care. By the end of 2015/16, the average gap stood at 5 per cent, and this is the prime driver behind the deficit position most acute providers find themselves in today (Gainsbury 2016). At the level of individual patients and individual activities within a hospital, however, the discrepancy between tariff price and the actual cost to the provider can be much larger. This discrepancy between cost and price can also go in either direction: for some services, providers will make a nominal 'profit' which will be used to cross-subsidise other services. For other types of patient care, providers will make a 'loss', sometimes far in excess of 5 per cent.

This presents an obvious problem for estimating savings that can be made by reducing acute activity: what 'cost' is being saved? The cost (or price) paid by the commissioner, or the cost of provision born by the hospital? In terms of ensuring NHS system-wide savings, costs need to be removed from providers rather than just commissioners. The problem becomes more complex when trying to account for the varying share of fixed and semi-fixed costs between different types of procedure. It becomes even more complex when trying to account for the additional costs that will be incurred when care is shifted from hospitals into the community, often called re-provision costs.

STPs vary widely in their approach to costing these savings, both between themselves and between the individual schemes that make up their plans (see Table 20).

Table 20 Summary of range of assumptions used in London's STPs on fixed and reprovision costs

Type of costs	Range of assumptions
Reprovision costs, elective care	20% to 80% of acute costs
Reprovision costs, non-elective care	40% to 75% of acute costs
Acute provider fixed costs below the current baseline of activity	0 to 50%
Acute provider fixed costs of mitigated activity growth above current baseline	0 to 50%

Source: STP finance modelling for October 2016 submission to NHS England

In many cases, STPs have rightly considered that if acute providers experience a reduction in their activity (and therefore income from commissioners) they will be unable to recoup the full cost of that activity in the form of financial savings. Instead, the provider may be able to save the variable cost (such as the drugs the patients will no longer consume, and the cost of paying for the staff time which will no longer be needed to care for them), but its fixed costs are likely to remain the same unless the physical space no longer required for that patient's care can be closed and the fixed costs reduced proportionately. If the fixed costs and overheads do remain, the upshot for providers can be to increase the unit costs of care for the activity that remains, as the fixed costs are effectively shared across the lower volume of activity.

Some STPs have tried to account for this problem by assuming that, where activity reduces, a certain proportion of costs will remain within providers, and so cannot be planned as savings against their 'do-nothing' gap. In North Central London, for example, the STP has assumed that acute providers face fixed costs of around 40 to 50 per cent of their reference cost for each activity. When activity in A&E and admitted patient care is reduced in absolute terms – below the level of activity in 2015/16 – the STP assumes that only 50 to 60 per cent of costs can be saved by providers. Alternatively, when growth is mitigated (against the 'do-nothing' 2020/21 scenario) it assumes that 100 per cent of this future, unrealised 'do-nothing' cost can be removed. The STP has assumed that the costs of re-provision will be around 45 per cent of the acute care tariff price.

In other cases, STPs have assumed that they can recoup the full cost of acute activity reductions. In North East London, for example, the STP's savings from reducing acute activity are based on the assumption that 100 per cent of acute costs can be removed over a five-year period, even where activity is reduced below the 2015/16 baseline. This is very unlikely to be achievable. As with other STPs, re-provision costs are assumed at around 40 per cent of acute costs.

South West London's STP, by contrast, has supplemented its modelling with 'bottom-up' estimates from its providers quantifying how much they anticipate they will be able to save by discharging non-elective patients into community and home-based care. Savings estimates from its four acute providers range from 60 to 80 per cent of the NHS-wide full cost of a non-elective bed day. Re-provision costs are similarly estimated through a 'bottom-up' approach that takes into account the staff needed to care for patients in alternative settings, which suggests re-provision costs will be 75 per cent of the current cost.

South West London assumes far lower re-provision costs for its programme aimed at reducing elective care activities – around 20 to 30 per cent of current acute cost. However, this relatively low cost assumption may reflect the

emphasis in the programme on using demand management and digital tools to reduce activity and referral rates, rather than provide alternative forms of community-based care. Provider savings from reduced elective activity are assumed at 100 per cent of their current cost.

In North West London, plans to change elective pathways to shift more care into the community and primary care hubs assume that re-provision costs will average 80 per cent of the acute care tariff.

What might this mean for the workforce?

For NHS providers, staff pay costs make up around 65 per cent of operating expenses. It is therefore inevitable that a substantial element of the £3.4 billion savings plans for London will be found through a reduction in expenditure on staff, at least when set against the 'do-nothing' scenario.

STPs are in the early stages of working out the impact their savings plans will have on the shape and size of their future workforce. Analysts working on STPs in London indicated to us that the figures cited in their planning documents were highly tentative and in places incomplete. One London STP – North West London – did not provide us with any workforce estimates as the figures it had provided NHS England in October were being corrected as this report was being drafted.

Across the four STPs that were able to include some early estimates, the reported impact of their combined savings plans was to reduce, in absolute terms, whole-term equivalent staffing numbers between 2016/17 and 2020/21 by 1.4 per cent, or slightly more than 2,000 staff. This included 3,800 fewer registered nurses, midwives and health visitors (a reduction of 7 per cent against the 2016/17 level) and 600 fewer hospital doctors and dentists (a reduction of 3 per cent). These reductions would be partially off-set by a projected one-third increase in GP and GP support staff (3,670 extra WTEs). Some STPs are likely to seek to manage these reductions in qualified clinical staff by increasing the numbers of trained health care support staff working in the community.

Summary

The 'do-nothing' gaps in NHS finances projected in London's STPs are significant - totalling £4.1 billion by 2020/21. These financial gaps vary widely between STP areas. It is assumed that efficiencies made by providers and commissioners will make a large contribution to closing these financial gaps. The plans lack detail on how these savings will be achieved. Providers are being asked to deliver a higher level of efficiencies than the NHS has been able to achieve over recent years, and in a more challenging environment. There are differences in the way that STPs calculate potential savings from reducing acute activity and in some

cases the plans may overstate the savings that might be achieved. Early projections in STP finance templates about reductions in staff numbers must be heavily stress-tested to ensure that they align with the vision for transforming services set out in the rest of the STP.

F. Securing capital investment

London's STPs set out the capital spending they think is required to support plans for transforming services. The plans are seeking capital to invest in a variety of different initiatives including, for example, the development of new facilities in primary care, improving existing acute hospital facilities, or to support plans to consolidate services on a single site. Capital is also required to invest in IT and other technologies, for example, where plans to reduce outpatient appointments are predicated on the use of telemedicine or other remote monitoring technologies.

STPs also describe the need to invest in the day-to-day maintenance of existing buildings and facilities, as well as the need to update or renew IT and equipment such as CT (computerised tomography) scanners. Across the five London STPs, this 'business as usual' capital requirement totals £3.7 billion between 2017/18 and 2020/21. The capital requirements associated with the 'do-something' measures set out by the STPs then add a further £2 billion (see Table 21).

This means that London's STPs hope to be able to access and invest £5.7 billion of capital over the next four years. The STPs believe that they can generate just over a quarter of that money through a combination of internally generated cash surpluses (11 per cent) and through the proceeds of selling parts of their estate (16 per cent). But even if London's STP areas were able to identify sources for the remaining funds, the size of the total spending requirement risks breaking the Department of Health's capital expenditure limit. That limit is set at £6 billion a year between 2017/18 and 2020/21 – although in practice it is likely that a proportion of the Department of Health's capital budget, as in the past two financial years, will need to be transferred to the revenue budget to offset revenue overspends.

London's capital total requirement for the years 2017/18 to 2020/21 would represent a quarter of the Department of Health's total capital expenditure limit for the period. For 2016/17, the Department of Health allocated NHS providers a capital spending limit of £2.7 billion. If a similar limit is set for 2017/18, London's five STPs would consume 60 per cent of that.

Table 21 Total capital requirements in London's STPs by 2020/21

STP	Total over four years to 2020/21 without transformation £m (cash)	Total over four years to 2020/21 with transformation £m (cash)
North Central London	948	1,491
North East London	478	721
North West London	733	1,561
South East London	625	787
South West London	892	1,130
London	3,676	5,691

Source: STP finance modelling for October 2016 submission to NHS England; STP October submissions

Summary

STPs in London are seeking a total capital investment of £5.7 billion by 2020/21. Around £2 billion of this investment relates to initiatives described in the STPs, while the remaining £3.7 billion is effectively the 'business as usual' capital requirement for running London's NHS services as they currently stand. Given the constraints on capital funding at a national level, it is unlikely that all the investment asked for by STPs will be available.

G. Implementing the plans

The STP process so far has focused primarily on defining *what* service changes are needed by 2020/21. Less attention has been given to *how* these changes will be delivered in practice and the contribution of different organisations in taking forward the plans. All STP areas have been working since October to develop more detailed delivery plans to support their STP.

This task is made more difficult by the complex and fragmented organisational landscape in the NHS. Every STP area includes many different organisations and services, each held to account for their own performance rather than their collective impact. Formal decision-making responsibilities sit with these organisations rather than with STPs. While STPs provide a framework for joint planning, they have neither the power nor resources to deliver them. This means that the implementation of STPs must be led by existing statutory organisations within STP areas.

Doing this will require action at multiple levels, including:

- within CCG and local authority areas (for example, to develop more integrated health and social care services based around GP practices)

-
- between groups of CCGs working together (for example, to commission services jointly, as is already happening across London)
 - by NHS providers working both individually and collectively (for example, to reduce unwarranted variations in care and develop shared approaches to back-office services)
 - within STP areas (for example, to address system-wide workforce pressures)
 - across multiple STP areas (for example, to improve specialised services)
 - across the whole of London (as we explore in the final section of the report).

STP leaders and their teams have an important role to play in co-ordinating these efforts and ensuring that they form part of a mutually reinforcing approach rather than a disjointed set of initiatives. Making this happen will rely on alliances and collaborations in different parts of their system (Timmins 2015; Senge *et al* 2014). STPs also have a role to play in bringing together professionals from different services to agree standard operating procedures and processes to improve care (Dixon-Woods and Martin 2016).

While STPs should avoid creating new layers of bureaucracy, dedicated teams and resources will be needed to help manage the STP process and support service changes that span organisational boundaries. National NHS bodies have an important role to play in this process too, by ensuring that their approach to regulation and performance management supports collaboration between organisations rather than making it more difficult (Alderwick *et al* 2016).

Skills and resources for improvement

London's STPs must also consider the practical skills and resources needed to support staff to make improvements in care, including the quality improvement methods that will be used (and how staff will be trained to use them), how the impact of service changes will be measured and reported, and how patients and families will be involved in redesigning services. Some of London's STPs, for example, North Central London and North West London, describe the need for staff to be trained in quality improvement methods and leading change across systems (see p 31). But, overall, the focus on quality improvement skills and approaches across the five London STPs is limited. Addressing these gaps is likely to involve support from various organisations across London – such as academic health science centres, the Healthy London Partnership, and the regional teams of NHS England and NHS Improvement (see final section of this report).

Defining the priorities for implementation

As in other parts of the country (see Ham *et al* 2017), the proposals in London's STPs are broad in scope, covering prevention and care in the community through to highly specialised services in hospitals. The proposals also vary in detail both within and between STP areas. As the process moves from planning to implementation, a key task for local leaders must be to identify the top priorities for improving care in their area. This is particularly important given the limited investment available to fund new services. Our view is that proposals to redesign care in the community and strengthen prevention and early intervention should be given high priority in all areas. The most contentious proposals are likely to be those involving changes to acute hospital services. Priority should be given to taking forward the most advanced proposals where the case for change has been clearly made.

Summary

STPs lack detail on how their ambitious goals for improvement will be delivered in practice. This includes detail on the overall approach to making change happen, as well as how individuals and teams will be equipped with the skills and resources to improve services. Implementing STPs will depend on collaboration between organisations. STPs must find ways of leading and co-ordinating improvements across their local system. But delivering improvements in care will require different partnerships and approaches at multiple geographical levels. Each STP must define the top priorities for improvement in its area.

5 An agenda for action across London

In this section of our report, we discuss a number of issues that need to be addressed across London to support implementation of the ambitious proposals set out in STPs. These issues are: prevention, estate, workforce, specialised services, innovation, and system leadership.

Prevention

The report of the London Health Commission in 2014, *Better health for London*, offered a comprehensive analysis of the health of Londoners and a programme of action to address the main health challenges in the city. These challenges need to be addressed in neighbourhoods, boroughs, the areas covered by STPs, and across London as a whole. They include tackling obesity, supporting Londoners to eat more healthily, getting London walking, improving air quality and making London smoke-free. London's NHS has a major role to play in delivering these ambitions through its spending power, its role as an employer, and by playing its part in the 'radical upgrade in prevention'. Simon Stevens has argued for in the Forward View.

The aim of *Better health for London* was to make London the healthiest major global city. The London Health Commission argued that achieving this aim would require significant leadership from the Mayor, local councillors, the NHS, Public Health England and many other organisations in London, with the public at the heart of the changes needed. The need for leadership on these issues remains – and the Mayor's recent intervention on air quality and his focus on tackling health inequalities are examples of where this is happening.

The transfer of public health responsibilities from the NHS to local authorities underlines the need for co-ordination to make progress on these issues – as, for example, in the case of sexual health services (Baylis *et al* 2017). Addressing the wider social, economic and environmental determinants of health requires collective action between many individuals and organisations. STPs offer an opportunity to improve this co-ordination across London.

Estate

One of the opportunities identified by the London Health Commission was better use of the NHS estate. This opportunity needs to be seized if the ambitious proposals in STPs are to be taken forward. There is little capital available to fund new investments at a national level, making it even more important that value is realised from underused and, in some cases, unused NHS estate. This includes investments in general practice and community services to enable the development of new care models. There is also the opportunity to be more creative in driving greater social (as well as financial) value from the use of NHS estate, including by considering how the NHS estate could be used help to address London's severe housing need.

The Commission highlighted the absence of a London-wide strategic overview of the NHS estate, fragmented responsibility for decision-making, and complex and inconsistent rules on how land and associated assets should be used for the benefit of patients and the public. The establishment of the London Estates Board should enable some of these issues to be addressed. The London devolution deal, which is yet to be formally agreed, has the potential to provide new flexibilities to use receipts from the sale of NHS land and property within and across the city. There are potentially significant benefits to be realised from this if common ground can be found between the many organisations that have a stake in these issues.

Workforce

The NHS and social care workforce is critical to improving health and health care in the city. Workforce issues and their impact on care are identified as a key priority in London's STPs. These issues have become more important since publication of *Better health for London*, with growing evidence of workforce shortages and concerns about the impact of Brexit on EU staff working in the NHS in London. Workforce concerns exist right across England, but are accentuated in London by the higher costs of living and the lack of affordable housing.

The establishment of the London Workforce Board signifies the importance of these issues and recognition of the need to co-ordinate action by NHS trusts and other employers with the work of the institutions responsible for education and training. Addressing these issues is also linked to work on NHS estates and the opportunity to use the redevelopment of NHS land and buildings to include affordable housing for NHS staff and other key workers. This will require close partnership between the NHS and local authorities, as well as strategic oversight by the Workforce Board and the Mayor. There are also opportunities to consider

how costs of transport in London could be reduced for key health and care staff working in the city.

The Workforce Board also has a potentially important role in supporting health and social care integration – for example, through changes to training and development and the use of the apprenticeship levy. This includes co-ordinating work already under way in different STP areas in London to introduce new staff roles such as care co-ordinators and health coaches.

Specialised services

There is a greater concentration of specialised services in London than in any other city in England. These services are used by people from across the country, as well as by those living in London. STPs include proposals for improving specialised services. In some cases, these proposals require collaboration between two or more STPs in London (as, for example, in work under way in south London) and in other cases will depend on collaboration with STPs outside London (as, for example, in plans under development across the south of England). The London Specialised Services Commissioning Board has been set up to provide leadership in this area. The need for co-ordinated action on these issues is highlighted by the scale of the financial pressures facing specialised commissioning budgets in London by 2020/21 (see p 27), as well as the limited detail in STPs about how these gaps will be closed.

Innovation

The concentration of world-leading universities and centres of medical excellence in London offers an opportunity for the city to become a global leader in research and innovation. The presence of three academic health sciences centres, the Crick Institute and other research facilities such as Google DeepMind creates a strong platform to build on. Closer collaboration is needed to realise the connections that exist between these organisations and build links with pharmaceutical and other companies – for example, through MedCity, as argued in *Better health for London*.

Realising this opportunity will require ongoing partnership between the Mayor, the NHS, local authorities, universities and others to develop and implement a strategy on medical innovation. The involvement and support of the government will be needed as part of its commitment to life sciences if London is to compete globally on these issues. The economic benefits of such an approach could be considerable, but will not be achieved without a much stronger London-wide strategy than has been evident to date.

Innovation is also important in supporting STPs deliver their plans. This will require an ability to identify and share learning about service improvements, wherever they occur, and to offer expertise on improvement methods and how innovations in care can be spread. Work on quality improvement being taken forward by the Improvement Collaborative, under the aegis of Healthy London Partnership, with the involvement of London's three academic health sciences centres is an attempt to do this more systematically.

Leadership

The abolition of the strategic health authority in 2013 created a vacuum in system leadership in the NHS in London. This vacuum has been filled in part by the work of NHS England and NHS Improvement and the increasing alignment of their activities in London. Since its formation in 2015, the Healthy London Partnership has provided NHS leadership on issues such as cancer care, mental health and health care for people who are homeless as part of a collaboration between the Mayor, Public Health England, CCGs and NHS England.

System leadership is also exercised through the London Health Board, which is chaired by the Mayor. The Board is composed of leaders of three local authorities, the London-wide clinical commissioning council, two senior representatives from NHS England and Public Health England in London, as well as the Mayor and Mayoral Health Adviser. The Board has a focus on tackling health inequalities and on advancing devolution in London, among other things, in association with London Councils.

The emergence of STPs requires greater alignment between the work being done within individual STP areas and the work of organisations operating across London. Alignment will help to avoid wasteful duplication of activities, identify common issues to be addressed, and enable the best use of scarce expertise and resources.

This board could help to provide strategic oversight of STPs in London. This should involve supporting changes to NHS services where they will improve care for Londoners, including changes to hospital services where the clinical case for change has been made. The Mayor also has a role in ensuring that the NHS has sufficient resources to deliver these improvements and to meet the needs of the growing and changing population in London.

Next steps

In identifying these six issues for action across London, we would re-iterate that implementing STPs requires work to be undertaken at various levels and by

various organisations or combinations of organisations. The issues we have discussed in this section are those that, in our view, would benefit from London-wide co-ordination – recognising that many other STP proposals can and should be taken forward more locally based on the principle of subsidiarity.

Appendix A: additional data

Table A1 Number of maternity beds in London, 2005/6 to 2016/17

Financial year	England, bed count	England, year-on-year % change	London, bed count	London, year-on-year % change
2005/6	8,881		1,557	
2006/7	8,643	-2.7	1,539	-1.2
2007/8	8,441	-2.3	1,488	-3.3
2008/9	8,386	-0.7	1,546	3.9
2009/10	8,392	0.1	1,526	-1.3
2010/11	7,874	-6.2	1,452	-4.8
2011/12	7,922	0.6	1,535	5.7
2012/13	7,851	-0.9	1,510	-1.6
2013/14	7,751	-1.3	1,469	-2.7
2014/15	7,804	0.7	1,566	6.6
2015/16	7,759	-0.6	1,555	-0.7
2016/17	7,809	0.6	1,587	2.1
2005/6 to 2016/17	-1,072		30	
2011/12 to 2016/17	-113		52	
Average annual change 2005/6 to 2016/17		-1.2		0.2
Average annual change from 2011/12		-0.3		0.7

Table A2 General and acute bed occupancy in London and England, 2005/6 to 2016/17

Financial year	England (%)	London (%)
2005/6	86	87
2006/7	85	87
2007/8	85	88
2008/9	87	88
2009/10	87	87
2010/11	87	89
2011/12	87	87
2012/13	88	88
2013/14	88	89
2014/15	89	90
2015/16	89	89
2016/17	90	89

Table A3 Elective activity growth in London

STP	2013/14 to 2014/15 (% change)	2014/15 to 2015/16 (% change)
North Central London	4.69	4.49
North East London	0.22	2.19
North West London	3.88	6.86
South East London	1.28	2.69
South West London	1.93	2.69
England	2.92	2.31

Table A4 Non-elective activity growth in London

STP	2013/14 to 2014/15 (% change)	2014/15 to 2015/16 (% change)
North Central London	9.20	0.60
North East London	0.15	4.64
North West London	0.34	-1.16
South East London	3.89	3.78
South West London	2.82	3.78
England	2.56	1.86

Table A5 Requirements for additional alternative care provision for hospital patients who could be cared for elsewhere, based on Oak Group audit data

Service	Additional provision required (%)
Home with services	24
Home no services	13
Intermediate care	10
Community hospital	9
Nursing home	8
Rehab community	8
Other	6
Sub-acute care	5
Rehab alternative	5
Rehab complex	3
Palliative or Hospice	3
Home with support services	2
Psychiatric facility	2
Long-term care	1
Residential care	1
Home with clinical services	1

Appendix B: London's STPs

North Central London:

www.candi.nhs.uk/about-us/north-central-london-sustainability-andtransformation-plan

North East London:

www.nelstp.org.uk/

North West London:

www.healthiernorthwestlondon.nhs.uk/documents/sustainabilityand-transformation-plans-stps

South East London:

www.ourhealthiersel.nhs.uk/about-us/

South West London:

www.swlccgs.nhs.uk/category/questions-and-answers/stpfa

References

Alderwick H, Dunn P, McKenna H, Walsh N, Ham C (2016a). *Sustainability and transformation plans in the NHS: how are they being developed in practice?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/stps-in-the-nhs (accessed on 28 March 2017).

Alderwick H, Ham C (2017). 'Sustainability and transformation plans for the NHS in England: what do they say and what happens next?'. *BMJ*, 356, j1541.

Alderwick H, Ham C (2016a). 'The NHS in England embraces collaboration in tackling biggest crisis in its history'. *BMJ*, 352, i1022.

Alderwick H, Robertson R, Appleby J, Dunn P, Maguire D (2016b). *Better value in the NHS: the role of changes in clinical practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/better-value-nhs (accessed on 29 March 2017).

Alderwick H, Vuik S, Ham C, Patel H, Siegel S (2016c). *Healthy populations: designing strategies to improve population health*. Report of the WISH Healthy Population Forum 2016. Doha: World Innovation Summit for Health. Available at: www.kingsfund.org.uk/publications/articles/healthy-populations (accessed on 23 May 2017).

Alderwick H, Ham C, Buck D (2015a). *Population health systems: going beyond integrated care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/population-health-systems (accessed on 29 March 2017).

Anandaciva S (2017). 'The capped expenditure process explained'. The King's Fund. Available at: www.kingsfund.org.uk/publications/capped-expenditure-process-explained (accessed on 4 September 2017).

Appleby J, Ham C, Imison C, Harrison T, Boyle S, Ashton B, Thompson J (2011). *Improving health and health care in London: who will take the lead?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/improving-health-and-health-care-london (accessed on 29 March 2017).

Bachrach D, Pfister H, Wallis K, Lipson M (2014). *Addressing patients' social needs: an emerging business case for provider investment*. New York: The Commonwealth Fund. Available at: www.commonwealthfund.org/publications/fund-reports/2014/may/addressing-patients-social-needs (accessed on 29 March 2017).

Bagust A, Place M, Posnett J (1999). 'Dynamics of bed use in accommodating emergency admissions: stochastic simulation model'. *BMJ*, vol 319, no 7203, pp 155–8.

Baird B, Charles A, Honeyman M, Maguire D, Das P (2016). *Understanding pressures in general practice*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/pressures-in-general-practice (accessed on 29 March 2017).

Bardsley M, Steventon A, Smith J, Dixon J (2013). *Evaluating integrated and community-based care: how do we know what works?* London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/evaluating-integrated-and-community-based-care-how-do-we-know-what-works (accessed on 29 March 2017).

Baylis A, Buck D, Anderson J, Jabbal J, Ross S (2017). *The future of HIV services in England: shaping the response to changing needs*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/future-hiv-services-england (accessed on 23 May 2017).

Blunt I (2013). *Focus on preventable admissions: trends in emergency admissions for ambulatory care sensitive conditions, 2001 to 2013*. London: The Health Foundation, Nuffield Trust. Available at: www.health.org.uk/publication/qualitywatch-focus-preventable-admissions (accessed on 29 March 2017).

Booske BC, Athens JK, Park H, Kindig DA, Remington PL (2010). *Different perspectives for assigning weights to determinants of health* [online]. County Health Rankings Working Paper. University of Wisconsin, Population Health Institute website. Available at: <http://uwphi.pophealth.wisc.edu/publications/other/different-perspectives-for-assigning-weights-to-determinants-of-health.pdf> (accessed on 29 March 2017).

Buck D (2014). 'Public health gains despite slimmer budgets'. Blog. Public Finance website. Available at: www.publicfinance.co.uk/2014/11/public-health-gains-despite-slimmer-budgets (accessed on 29 March 2017).

Buck D, Gregory S (2013). *Improving the public's health: a resource for local authorities*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/improving-publics-health (accessed on 29 March 2017).

Campbell D (2017). 'NHS England chief brings in new rules on ward bed closures'. *The Guardian*, 2 March. Available at: www.theguardian.com/society/2017/mar/02/nhs-england-chief-brings-in-new-rules-on-hospital-bed-closures (accessed on 29 March 2017).

Collins B (2015). *Intentional whole health system redesign: Southcentral Foundation's 'Nuka' system of care*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/commissioned/intentional-whole-health-system-redesign-nuka-southcentral (accessed on 29 March 2017).

Cookson R, Asaria M, Ali S, Ferguson B, Fleetcroft R, Goddard M, Goldblatt P, Laudicella M, Raine R (2016). 'Health equity indicators for the English NHS: a longitudinal whole-population study at the small-area level'. *Health Services and Delivery Research*, vol 4, no 26.

Cullinane M, Findlay G, Hargraves C, Lucas S (2005). *An acute problem?* London: National Confidential Enquiry into Patient Outcome and Death. Available at: www.ncepod.org.uk/2005aap.html (accessed on 29 March 2017).

Curry N, Ham C (2010). *Clinical and service integration: the route to improved outcomes*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/clinical-and-service-integration (accessed on 29 March 2017).

Department of Communities and Local Government (2017). 'Local authority revenue expenditure and financing'. GOV.UK website. Available at: www.gov.uk/government/collections/local-authority-revenue-expenditure-and-financing (accessed on 29 March 2017).

Department of Health (2000). *Shaping the future NHS: long term planning for hospitals and related services. Consultation document on the findings of the national beds inquiry*. Available at: http://webarchive.nationalarchives.gov.uk/+/www.dh.gov.uk/en/Consultations/Closedconsultations/DH_4102910 (accessed on 29 March 2017).

Dixon-Woods M, Martin G (2016). 'Does quality improvement improve quality?'. *Future Hospital Journal*, vol 3, no 3, pp 191– 4.

Dunhill L (2017). 'Revealed: "strongest" STPs to share £325m of new investment'. *HSJ* website, 19 July. Available at: www.hsj.co.uk/finance-and-efficiency/revealed-strongest-stps-share-325m-of-new-investment/7020132.article (accessed on 4 September 2017).

Edwards N (2016). *Sustainability and transformation plans: what we know so far*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/resource/sustainability-and-transformation-plans-what-we-know-so-far (accessed on 23 May 2017).

Edwards N (2002). 'Clinical networks. Advantages include flexibility, strength, speed, and focus on clinical issues'. *BMJ*, vol 324, p 63.

Erens B, Wistow G, Mounier-Jack S, Douglas N, Jones L, Manacorda T, Mays N (2016). *Early evaluation of the integrated care and support pioneers programme: final report*. London: Policy Innovation Research Unit.

Foot J (2012). *What makes us healthy? The asset approach in practice – evidence, action, evaluation* [online]. Jane Foot website. Available at: www.janefoot.co.uk/downloads/index.html (accessed on 23 May 2017).

Gainsbury S (2016). *Feeling the crunch: NHS finances to 2020*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/feeling-the-crunch-nhs-finances-to-2020 (accessed on 29 March 2017).

Goodwin N, Smith J, Davies A, Perry C, Rosen R, Dixon A, Dixon J, Ham C (2012). *Integrated care for patients and populations: improving outcomes by working together*. London: The King's Fund, Nuffield Trust. Available at: www.kingsfund.org.uk/publications/integrated-care-patients-and-populations-improving-outcomes-working-together (accessed on 30 March 2017).

Goodwin N, Sonola L, Thiel V, Kodner D (2013). *Co-ordinated care for people with complex chronic conditions: key lessons and markers for success*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/co-ordinated-care-people-complex-chronic-conditions (accessed on 30 March 2017).

Gilburt H (2015). *Mental health under pressure*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/mental-health-under-pressure (accessed on 30 March 2017).

Ham C (2017). 'The general election, the NHS and social care'. *BMJ*, 357: j2840. Available at: www.bmj.com/content/357/bmj.j2840.full (accessed on 4 September 2017).

Ham C, Alderwick H, Dunn P, McKenna H (2017). *Delivering sustainability and transformation plans: from ambitious proposals to credible plans*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/delivering-sustainability-and-transformation-plans (accessed on 28 March 2017).

Ham C, Alderwick H (2015). *Place-based systems of care: a way forward for the NHS in England*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/place-based-systems-care (accessed on 30 March 2017).

Ham C, Dixon A, Brooke B (2012). *Transforming the delivery of health and social care: the case for fundamental change*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/transforming-delivery-health-and-social-care (accessed on 30 March 2017).

Ham C, Edwards N, Brooke B (2013). *Leading health care in London: time for a radical response*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/leading-health-care-london (accessed on 30 March 2017).

Holt-Lunstad J, Smith T, Baker M, Harris T, Stephenson D (2015). 'Loneliness and social isolation as risk-factors for mortality: a meta-analytic review'. *Perspectives on Psychological Science*, vol 10, no 2, pp 227–37.

Humphries R, Thorlby R, Holder H, Hall P, Charles A (2016). *Social care for older people: home truths*. London: The King's Fund, Nuffield Trust. Available at: www.kingsfund.org.uk/publications/social-care-older-people (accessed on 30 March 2017).

Hunter RM, Davie C, Rudd A, Thompson A, Walker H, Thomson N, Mountford J, Schwamm L, Deanfield J, Thompson K, Dewan B, Mistry M, Quoraishi S, Morris S (2013). 'Impact on clinical and cost outcomes of a centralized approach to acute stroke care in London: a comparative effectiveness before and after model'. *PLoS ONE*, vol 8, no 8: e70420.

Imison C (2011). *Reconfiguring hospital services*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/articles/briefing-reconfiguring-hospital-services (accessed on 30 March 2017).

Imison C, Curry N, Holder H, Castle-Clarke S, Nimmons D, Appleby J, Thorlby R, Lombardo S (2017). *Shifting the balance of care: great expectations*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/shifting-the-balance-of-care-great-expectations (accessed on 30 March 2017).

Imison C, Sonola L, Honeyman M, Ross S (2014). *The reconfiguration of clinical services: what is the evidence?* London: The King's Fund. Available at: www.kingsfund.org.uk/publications/reconfiguration-clinical-services (accessed on 30 March 2017).

Kaier K, Mutters N, Frank U (2012). 'Bed occupancy rates and hospital-acquired infections – should beds be kept empty?'. *Clinical Microbiology and Infection*, vol 18, no 10, pp 941–5.

Local Government Association (2016). *Public health funding in 2016/17 and 2017/18* [online]. Local Government Association website. Available at: www.local.gov.uk/sites/default/files/documents/public-health-funding-201-690.pdf (accessed on 30 March 2017).

London Health Commission (2014). *Better health for London* [online]. Available at: www.london.gov.uk/sites/default/files/better_health_for_london.pdf (accessed on 30 March 2017).

Marmot M, Allen J, Goldblatt P, Boyce T, McNeish D, Grady M, Geddes I (2010). *Fair society, healthy lives: the Marmot review. Strategic review of health inequalities in England post-2010*. London: The Marmot Review. Available at: www.gov.uk/dfid-research-outputs/fair-society-healthy-lives-the-marmot-review-strategic-review-of-health-inequalities-in-england-post-2010 (accessed on 30 March 2017).

Masters R, Anwar E, Collins B, Cookson, Capewell S (2017). 'Return on investment of public health interventions: a systematic review'. *Journal of Epidemiology and Community Health*. doi: 10.1136/jech-2016-208141

Maybin J, Charles A, Honeyman M (2016). *Understanding quality in district nursing services: learning from patients, carers and staff*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/quality-district-nursing (accessed on 30 March 2017).

McDaid, D, Sassi F, Merkur S (eds) (2015). *Promoting health, preventing disease: the economic case*. Maidenhead: Open University Press.

Monitor (2014). *Facing the future: smaller acute providers*. London: Monitor. Available at: www.gov.uk/government/consultations/challenges-facing-small-acute-nhs-hospitals (accessed on 31 March 2017).

Morris S, Hunter R, Ramsay A *et al* (2014). 'Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis', *BMJ*, vol 349: g4757.

Munford L, Sidaway M, Blakemore A, Sutton M, Bower P (2017). 'Associations of participation in community assets with health-related quality of life and healthcare usage: a cross-sectional study of older people in the community'. *BMJ Open*; 7: e012374. Available at: <http://bmjopen.bmj.com/content/7/2/e012374> (accessed on 31 March 2017).

National Maternity Review (2016). *Better births: improving outcomes of maternity services in England* [online]. NHS England website. Available at: www.england.nhs.uk/mat-transformation/mat-review/ (accessed on 28 March 2017).

Nelson B, Campbell J, Emanuel J (2011). *Development of a method for asset-based working* [online]. Available at: <https://mmu.rl.talis.com/items/1BF07176-5736-1118-B7A1-58EEA515D4BE.html> (accessed on 23 May 2017).

Newton J, Briggs ADM Murray CJL *et al* (2015). 'Changes in health in England, with analysis by English regions and areas of deprivation, 1990-2013: a systematic analysis for the Global Burden of Disease Study 2013'. *The Lancet*, vol 386, no 10010, pp 2257–74.

NHS England (2017a). *Next steps on the NHS five year forward view* [online]. NHS England website. Available at: www.england.nhs.uk/publication/next-steps-on-the-nhs-five-year-forward-view (accessed on 23 May 2017).

NHS England (2017b). *Sustainability and transformation partnerships progress dashboard – baseline view*. Available at: www.england.nhs.uk/publication/sustainability-and-transformation-partnerships-progress-dashboard-baseline-view/ (accessed on 4 September 2017).

NHS England (2016a). *NHS five year forward view recap briefing for the Health Select Committee on technical modelling and scenarios*. Technical briefing. Available at: www.england.nhs.uk/2016/05/fyfv-technical-brief/ (accessed on 30 March 2017).

NHS England (2016b). *Sustainability and transformation plan footprints* [online]. NHS England website. Available at: www.england.nhs.uk/wp-content/uploads/2016/02/stp-footprints-march-2016.pdf (accessed on 30 March 2017).

NHS England, Care Quality Commission, Health Education England, Monitor, NHS Trust Development Authority, Public Health England (2014). *NHS five year forward view* [online]. NHS England website. Available at: www.england.nhs.uk/ourwork/futurenhs (accessed on 28 March 2017).

NHS England, NHS Improvement, Health Education England, National Institute for Health and Care Excellence, Public Health England, Care Quality Commission (2015). *Delivering the Forward View: NHS planning guidance 2016/17–2020/21*. NHS England website. Available at: www.england.nhs.uk/ourwork/futurenhs/deliver-forward-view/ (accessed on 31 March 2017).

NHS England, NHS Improvement (2016). *NHS shared planning guidance: NHS operational planning and contracting guidance 2017–2019*. NHS England website. Available at: www.england.nhs.uk/ourwork/futurenhs/deliver-forward-view/ (accessed on 31 March 2017).

Nolte E, Pitchforth E (2014). *What is the evidence on the economic impacts of integrated care?* Policy summary 11. Copenhagen: World Health Organization. Available at: www.euro.who.int/en/about-us/partners/observatory/publications/policy-briefs-and-summaries/what-is-the-evidence-on-the-economic-impacts-of-integrated-care (accessed on 31 March 2017).

Oxford E (2017). 'New London devolution deal postponed'. *HSJ* website, 14 March. Available at: www.hsj.co.uk/topics/policy-and-regulation/new-london-devolution-deal-postponed/7016494.article (accessed on 4 September 2017).

Pampel F, Krueger P, Denney T (2010). 'Socioeconomic disparities in health'. *Annual Review of Sociology*, vol 36, pp 349–70.

Purdy S, Paranjothy S, Huntley A, Thomas R, Mann M, Huws D, Brindle P, Elwyn G (2012). *Interventions to reduce unplanned hospital admission: a series of systematic reviews*. Available at: www.bristol.ac.uk/media-library/sites/primaryhealthcare/migrated/documents/unplannedadmissions.pdf (accessed on 31 March 2017).

RAND Europe, Ernst & Young LLP (2012). *National evaluation of the Department of Health's integrated care pilots*. Cambridge: RAND Corporation.

Royal College of Emergency Medicine (2017). Winter flow final report, 2016/2017. Available at:

www.rcem.ac.uk/RCEM/Quality_Policy/Policy/Winter_Flow_Project/RCEM/Quality-Policy/Policy/Winter_Flow_Project.aspx (accessed on 4 September 2017).

Schluter P, Hamilton G, Deely J, Ardagh M (2016). 'Impact of integrated health system changes, accelerated due to an earthquake, on emergency department attendances and acute admissions: a Bayesian change-point analysis'. *BMJ Open*, vol 6: e010709. Available at: <http://bmjopen.bmj.com/content/6/5/e010709> (accessed on 31 March 2017).

Senge P, Hamilton H, Kania J (2014). 'The dawn of system leadership'. *Stanford Social Innovation Review*, winter, pp 27–30.

Smith N A, Phillips D, Simpson P, Eiser D, Trickey M (2016). *A time of revolution? British local government finance in the 2010s* [online]. Institute for Fiscal Studies website. Available at: www.ifs.org.uk/publications/8705 (accessed on 31 March 2017).

Steventon A, Bardsley M, Billings J, Georghiou T, Lewis G (2011). *An evaluation of the impact of community-based interventions on hospital use*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/an-evaluation-of-the-impact-of-community-based-interventions-on-hospital-use (accessed on 31 March 2017).

The Health Foundation, The King's Fund (2015). *Making change possible: a transformation fund for the NHS*. London: The Health Foundation. Available at: www.kingsfund.org.uk/press/press-releases/making-change-happen-transformation-fund-nhs (accesses on 31 March 2017).

Timmins N, Ham C (2013). *The quest for integrated health and social care: a case study in Canterbury, New Zealand*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/quest-integrated-health-and-social-care (accessed on 31 March 2017).

Timmins N (2015). *The practice of system leadership: being comfortable with chaos*. London: The King's Fund. Available at: www.kingsfund.org.uk/publications/practice-system-leadership (accessed on 14 September 2015).

Turner S, Ramsay A, Perry C, Boaden R, McKeivitt C, Morris S, Pursani N, Rudd A, Tyrrell P, Wolge C, Fulop N (2016). 'Lessons for major system change: centralization of stroke services in two metropolitan areas of England'. *Journal of Health Services Research and Policy*, vol 21, no 3, pp 156–65.

West D, Dunhill L, Clover B, Coggan A (2017). 'New national savings drive will "challenge the values" of NHS leaders'. *HSJ* website, 5 June. Available at: www.hsj.co.uk/topics/finance-and-efficiency/exclusive-new-national-savings-drive-will-challenge-the-values-of-nhs-leaders/7018461.article (accessed on 4 September 2017).

Wistow G, Gaskins M, Holder H, Smith J (2015). *Putting integrated care into practice: the North West London experience*. London: Nuffield Trust. Available at: www.nuffieldtrust.org.uk/research/putting-integrated-care-into-practice-the-north-west-london-experience (accessed on 31 March 2017).

World Health Organization (2013). *The case for investing in public health: a public health summary report for EPHO 8*. Luxembourg: World Health Organization. Available at: www.euro.who.int/en/health-topics/Health-systems/public-health-services/publications/2015/the-case-for-investing-in-public-health (accessed on 31 March 2017).

About the authors

Chris Ham is Chief Executive of The King's Fund. He rejoined the Fund in 2010, having previously worked here between 1986 and 1992. He has held posts at the universities of Birmingham, Bristol and Leeds and is currently emeritus professor at the University of Birmingham. He is an honorary fellow of the Royal College of Physicians of London and The Royal College of General Practitioners.

Chris was director of the strategy unit in the Department of Health between 2000 and 2004, has advised the WHO and the World Bank, and has acted as a consultant to a number of governments. He has been a non-executive director of the Heart of England NHS Foundation Trust, and a governor of the Health Foundation and the Canadian Health Services Research Foundation.

Chris researches and writes on all aspects of health reform and is a sought-after speaker. He was awarded a CBE in 2004 for his services to the NHS and an honorary doctorate by the University of Kent in 2012.

Hugh Alderwick is Senior Policy Adviser to Chris Ham. Since joining the Fund in 2014, Hugh has published work on NHS reform, integrated care and population health, and opportunities for the NHS to improve value for money.

Before he joined the Fund, Hugh worked as a management consultant in PricewaterhouseCoopers' (PwC) health team. At PwC, Hugh provided research, analysis and support to a range of local and national organisations on projects focusing on strategy and policy.

Hugh was also seconded from PwC to work on Sir John Oldham's Independent Commission on whole-person care, which reported to the Labour Party at the beginning of 2014. The Commission looked at how health and care services can be more closely aligned to deliver integrated services meeting the whole of people's needs.

Nigel Edwards is Chief Executive at the Nuffield Trust. Before becoming Chief Executive in 2014, Nigel was an expert adviser with KPMG's Global Centre of Excellence for Health and Life Sciences and a Senior Fellow at The King's Fund.

Nigel was Policy Director of the NHS Confederation for 11 years and joined the organisation from his former role as Director of the London Health Economics Consortium at the London School of Hygiene and Tropical Medicine, where he remains an honorary visiting professor.

Nigel has a strong interest in new models of service delivery and a practical focus on what is happening at the front line as well as a wealth of experience in wider health care policy in the UK and internationally.

Nigel is a well-known media commentator, often in the spotlight debating key policy issues. Nigel is currently working with the WHO Regional Office for Europe and the European Observatory on Health Systems and Policies on developments in health care provision in Europe.

Sally Gainsbury joined the Nuffield Trust in October 2015 as Senior Policy Analyst. Her focus is on health and social care funding and the NHS financing system. She also contributes to the Trust's rapid response and analysis of emerging policy issues.

Before joining the Trust, Sally was an investigative journalist at the *Financial Times*, working on UK and international investigations spanning public spending, tax avoidance and money laundering. Before joining the *FT*, Sally was chief reporter and news editor at *Health Service Journal*.

Sally has a PhD in history and a Masters in politics.