Institute for Public Policy Research

IPPR

BETTER HEALTH AND CARE FOR ALL

A 10-POINT PLAN FOR THE 2020s

THE LORD DARZI REVIEW OF HEALTH AND CARE

FINAL REPORT

Lord Darzi

June 2018

ABOUT IPPR

The progressive policy think tank

FOREWORD
FROM LORD DARZI AND LORD PRIOR

We are former ministers of health from different parties. Over the last six months, we've worked together – supported by IPPR and an independent panel of experts – to create a shared plan for the future of the health and care system.

We call for greater public investment: a long-term settlement that returns the NHS to its historic rate of funding growth. In return, we propose a simplified, reformed and improved service. This means embracing 21st century technology, joining up health and care around the individual, and freeing up staff on the frontline to care.

Both of us have dedicated much of our careers to the NHS. We work for two of the world's leading academic hospitals at Imperial College and University College. But, in this report, three of our central recommendations relate to areas beyond the direct purview of the health service: social care, public health, and life sciences.

We make the case for new investment to make personal and nursing care free, underpinned by a new social contract between the citizen and the state; a bold package of measures to promote healthy living; and rising investment in the research, development and innovation that creates prosperity for our country.

Our plan for investment is also a plan for reform. High quality health and social care is a moving target; to stand still is to fall back. In this year of anniversaries, we must embrace and accelerate change to capture all the possibilities of the decades that lie ahead.

Health and care are human endeavours. NHS and social care professionals have been friends to millions. At the heart of our plan is to release time for professionals to care, to trust professional judgement and offer support to improve, to secure the resources for high quality care, and to make sure everyone has dignity at work and decent pay.

As individuals, we cannot know whether we will be around to celebrate the centenary of the NHS in the middle of this century. But we offer this plan to secure its future because a properly funded NHS is the foundation on which a fair, cohesive and inclusive society is built. All of us owe it to each other to offer a future where need not ability to pay, and compassion, dignity and respect characterise our most cherished institutions, for present and future generations.

Lord Darzi
Professor of Surgery and chair of the Institute for Global Health Innovation at Imperial College

Lord Prior
Chairman, University College Hospitals NHS Foundation Trust

THE LORD DARZI REVIEW OF HEALTH AND CARE

The Lord Dazi Review was commissioned by - and is housed within - IPPR, the UK's progressive think tank, with analytics provided by the consultancy firm, Carnall Farrar.

The Review will benefit from the experience and expertise of an advisory panel of leaders from the health and care system

Lord David Prior (Deputy Chair of the Lord Darzi Review) – Chair, UCLH & former Parliamentary Under Secretary of State, Department for Business, Energy and Industrial Strategy

Sir John Bell – Regius Professor of Medicine, University of Oxford & former President, Academy of Medical Sciences

Dame Ruth Carnall – Managing Partner, Carnall Farrar & former Director, NHS London

Dr Clare Gerada – Managing Partner, the Hurley Group & former President, Royal College of GPs

Norman Lamb – MP for North Norfolk & Chair, Science and Technology Select Committee

Mark Lloyd – Chief Executive, Local Government Association

Joanne Roney – Chief Executive, Manchester City Council

Professor Geraldine Strathdee – Consultant Psychiatrist, Oxleas NHS Trust & former National Clinical Director for Mental Health

Dr Paul Williams - MP for Stockton South and practising GP

Cllr Izzi Seccombe - Leader of Warwickshire County Council and Chairman of LGA Community Wellbeing Board

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ACKNOWLEDGEMENTS

SUMMARY

Earlier this year we published the interim report of this review. This took the 70th anniversary of the NHS – and the 10th anniversary of *High Quality Care for All* – as a moment to stand back and reflect on the progress and challenges of the last decade. In many ways, it revealed a story of success: despite a decade of austerity, the quality of care provided by the health and social care system has been maintained or improved. Yet it is also clear that the health and care system is under serious strain.

Patients left on trolleys in hospital corridors, operations cancelled, staff under pressure, and deficits on the rise. Moreover, despite improvements in care we are some way off achieving high quality care for all. Unless we address these issues now we will be unable to meet the challenges – and seize the opportunities – of the decade ahead. It is for this reason that the interim report concluded that a bold and long-term funding and reform plan is now needed to secure the NHS and social care for the future.

This final report of the Lord Darzi Review puts forward a 10-point plan to achieve this, as well as a 10-point offer to the public which sets out what the health and care system will be able to offer if this plan for investment and reform is adopted. Together, these chart a path towards a healthier, more prosperous decade ahead and will ensure that we will be celebrating the NHS's century of service to the British people in 30 years' time.

OUR 10-POINT INVESTMENT AND REFORM PLAN

1. **Invest in health, not just healthcare.** This means embracing a 'health in all policies' approach across government and getting serious about tackling obesity, smoking and alcohol consumption.

2. **'Tilt towards tech' to create a digital first health and care system.** This means investing in the digital infrastructure the NHS needs, enabling data sharing across the health and care system and embracing 'full automation' to release more time to care.

3. **Unlock the potential of health as a driver of wealth.** This means delivering a significant increase in R&D spending and driving uptake and access in the NHS by re-establishing the National Institute for Health and Care Excellence (NICE) as the 'innovators gateway'.

4. **Make social care free at the point of need.** This means extending the NHS's 'need, not ability to pay' principle to social care and fully funding the service as part of 'new social contract' between the citizen and the state.

5. **Establish a 'New Deal' for general practice, mental health and community services.** This means creating a new option of integrated care trusts for all out of hospital care and shifting power and funding away from the acute sector.

6. **A radical simplification of the system.** This means joining up NHS England (NHSE), NHS Improvement (NHSI), Health Education England (HEE) and Public Health England (PHE) by creating one NHS Headquarters and simplifying commissioning functions into a single structure – Health and Care Authorties (HCAs) – at the regional level.

7. **Revitalise quality as the organising principle of health and care.** This means creating a coherent quality strategy for health and care which rebalances the drivers of change from 'control' to 'improvement'.

8. **Invest in the talent of the team.** This means ensuring health and care are properly staffed by creating an integrated skills and immigration policy and providing fair pay for staff across the health and care system.

9. **Provide time and resource to transform health and care.** This means creating a fully funded transformation fund for health and care to allow change to take hold and investing in capital to provide the building blocks for a 21st Century NHS.

10. **Set out a long term funding settlement for health and care.** This means ending the 'feast and famine' cycle of funding by returning the NHS to its long run growth trajectory and 'ringfencing' National Insurance (NI) increases to pay for it.

OUR 10-POINT OFFER TO CITIZENS

1. Free personal and nursing care for everyone who needs it, regardless of your ability to pay – just like the NHS. Growing old shouldn't mean getting poor.

2. Fast and convenient access to primary care for working families, open during the evenings and over the weekend.

3. A digital NHS. An ability to access your medical records, order your prescription and have your consulation with the GP online.

4. A single named GP, a joint care plan, a personal budget and regular check-ups for people with long term conditions.

5. Shorter waiting times and better access to care. No waiting on trolleys. No delays in hospital beds. No cancelled operations.

6. Quality of care in England for people with poor mental health and cancer on par with best practise abroad.

7. Never knowingly under-staffed. Enough nurses and doctors in every hospital and GP practice across the country, with time to care and not just to treat.

8. Elimination of the postcode lottery in treatment. Access to the best treatments, approved by NICE, no matter where you live.

9. A reduction in health inequalities. Where you live should not determine how long you live.

10. An NHS that helps to create good jobs at home and increase our earnings from exports abroad – generating prosperity that's good for everyone.

PART I:
HIGH QUALITY CARE
FOR ALL
TEN YEARS ON,
TEN YEARS FORWARD

INTRODUCTION

The NHS is our most cherished national institution. For seven decades it has been there for us at our times of most basic human need, offering care and compassion. From cradle to grave, health and care services are where we experience our moments of greatest joy and overwhelming grief. It is the embodiment of the best of our values: compassion and kindness, generosity and reciprocity, underpinned by a profound commitment to fairness and equality. It has been built and sustained by our collective endeavour. We love it precisely because it reflects the best of us.

Social care matters because it supports people to live the life they want to live with as much independence and control as possible as they age. It plays a vital role in holding our communities together: by enabling individuals to lead as full lives as possible, by supporting families and carers, and by connecting people to a much broader range of services, from housing to healthcare. Many of the people receiving social care are among the most vulnerable in society; how we help and support them holds a mirror up to us all, reflecting our own values. Together, health and social care are vital for our society.

It is therefore unsurprising in the current context that people are worried about the future of health and social care. The NHS has endured the most austere decade in its history, while funding for social care has declined almost every year since 2010. As a result, we are seeing signs of a system under strain all around us: a dramatic drop in people receiving state-funded social care, patients left on trolleys in hospital corridors, operations cancelled, staff under pressure, and deficits on the rise.

Next month we will celebrate the 70th anniversary of the NHS. This year also marks 50 years since the Seebohm Report laid the foundations for modern social care. It is a time to reflect and a time to renew our commitment to health and social care. All political parties declare their affection for it and agree that it needs both funding and reform. There is a strong cross-party consensus in favour of retaining a health service that is based on need, not ability to pay. Yet enormous questions remain about how we deliver this in the years to come.

How do we make sure every patient gets high-quality care when they need it? How do we join up health and care around people and keep them out of hospitals for as long as possible? How will we keep up with advances in technology, therapies

and treatments? How do help people to lead healthier, more independent and more fulfilling lives? And, how will we fund the health and care system sustainably in the future?

This report provides bold answer to these difficult questions. It sets out a radical blueprint for the future of both the NHS and the social care. It goes beyond *High Qualiy Care for All* – produced a decade ago – offering a new vision of "high quality care for all that enables and supports people to lead their best lives, in a healthy and prosperous society". That means being as concerned with social care as the NHS, and investing more in public health and prevention.

It calls on politicians to make some bold reforms: a long-term funding settlement for health and care, the extension of the NHS's 'free at the point of need' principle to social care, the adoption of new technologies at pace to release more time to care, and the integration of all care – mental and physical; primary and community, health and social – at the local level to create a genuinely 'neighbourhood NHS'.

Health comes first, for all of us – our family, friends, neighbours and colleagues. Good health is the purest form of wealth: it allows us to lead the best version of our life possible and is the wellspring from which all our other experiences are derived. It is also a key determinant of our economic success as a nation. Health and social care allow people to stay productive and in work for as long as possible. The sector employs millions of people – some 13 per cent of all jobs in the UK economy (ONS 2018) – across the economy. And it operates at the limits of science, driving growth and prosperity in frontier sectors such as life sciences and tech.

In this anniversary year, we must stop treating the NHS and social care as liabilities to be managed, and see them for what they are: tremendous national assets to be invested in. We must embrace both more funding and reform to secure high quality care for future generations. In what follows, we set out a 10-point plan to achieve just this, alongside a 10-point offer to the public, if the plan is adopted and successfully implemented. Together, these chart a path towards a healthier, more prosperous decade ahead.

THE CASE FOR CHANGE

Earlier this year, we published the interim report of this review (Darzi et al 2018). This took the 70th anniversary of the NHS – and the 10th anniversary of *High Quality Care for All* – as a moment to stand back and reflect on the progress and challenges of the last decade. In many ways, it revealed a story of success: despite a decade of austerity, the quality of care provided by the health and social care system has been maintained or improved, thanks largely to the commitment and dedication of staff up and down the country.

Yet it is plain that the health and care system is under serious strain. Despite improvements in care, we are some way off achieving high quality care for all. There are even greater challenges – as well as opportunities – in the decade ahead. It is for this reason that the interim report concluded that a bold and long-term funding and reform plan is now needed to secure the NHS and social care for the future. In this chapter, we set out *the case for change* which underpins this claim.

LARGE AND GROWING INEQUALITIES

While life expectancy has continued to rise over the last decade, it has done so at a slower rate than the historical norm (Marmot 2017a). Quality of life has failed to keep pace with length of life: people are living more years of their life in ill-health or with a disability (PHE 2017a); we have seen the continued rise in mental health

conditions (ONS 2017); and there has been an outbreak of loneliness and isolation which threaten our 'social health' (Siddique 2017). Moreover, across all of these population health metrics there are wide and unacceptable inequalities, which in many cases are expanding once again (BMJ 2017a). This is particularly true for those on the edges of society, including excluded groups such as people who are homeless or those who experience serious and enduring mental illness (Marmot 2017b). This country has not invested enough in either prevention or in addressing the social determinants of health.

QUALITY OF CARE: REACHING A TIPPING POINT

The quality of care across most areas of the service – in both the NHS and social care – has been maintained or improved (Darzi et al 2018). Patient safety has improved. These improvements should be celebrated. This is no cause for complacency. In too many cases improvement has been from a low base: the UK lags behind international performance in treating cancers, and we are some way of achieving 'parity of esteem' for people with poor mental health (Molloy et al 2017). There also remains far too much variation in the quality of care: the distance between the best and the rest remains far too wide. Moreover, there is increasing evidence that we are reaching a tipping point with the drivers of improvement coming up short against the pressures on the system (Darzi et al 2018). We must intervene now to ensure the progress of the last decade is maintained.

THE RETURN OF RATIONING

If quality has been maintained or improved, the same is not true for access to services. There has been a serious decline in the number of people receiving state funded social care (Darzi et al 2018). This has pushed more and more responsibility onto informal carers and left many without the support they need (Age UK 2017). In the NHS, timeliness on everything from ambulance responses, to access to A&E, to getting a GP appointment has deteriorated (Darzi et al 2018). The stress on the whole system – primary and community services, acute care and social care – is vividly illustrated by the significant increase in delayed transfers of care over the period (which is even starker when we consider those medically fit for discharge) (Darzi et al 2017). Access to care when and where we need it should not be considered optional.

THE LIMITS OF PRODUCTIVITY GROWTH

The last decade has been the most austere in the NHS's history; meanwhile funding has fallen in real and cash terms for social care despite significant efforts by local government to protect it (often at the expense of other important local services) (King's Fund 2017). Both systems have done well to deliver 'more for less', with productivity in the NHS well above its historic trend (Darzi et al 2018). Yet the main sources of productivity improvements – particularly the pay freeze and reductions in the tariff paid to hospitals – have now run out of road. Financial measures to sustain core services – for example, switching capital to revenue, disinvesting in prevention or community care, or dipping into reserves or growing deficits – are now largely exhausted. There is always room for greater efficiency in the NHS but we cannot rely on this to bridge the gap between funding and demand.

UNLEASHING REFORM IN HEALTH AND CARE

The reform agenda in health and care – set out most comprehensively in the Five Year Forward View (FYFV) (NHSE 2014) with its focus on a shift towards prevention and integration – has started to show results. Yet substantial progress is still the exception rather than the norm. This is partly because

transformation on this scale is challenging and takes time. But it is also because there are number of barriers to reform which are slowing down progress. These include the financial pressures on the service and significant workforce shortages but also the legislative framework in the NHS, and in particular the legacy of the 2012 Health and Social Care Act. To fully unleash the potential of reform in health and care, there can be no doubt that reform needs to be back on the table.

FOUR PRINCIPLES FOR A REFORMED HEALTH AND CARE SYSTEM

There is a growing consensus about what needs to change in terms of health and care reform, most compellingly set out by the Five Year Forward View (NHSE 2014). We have distilled this consensus into four key principles which are set out below. If we can deliver on these changes, future generations will flourish. But fail to do so and the NHS and social care systems will struggle.

Care must become more preventative

This means intervening earlier to prevent ill health rather than waiting for people to get ill. It will require a shift from a paternalistic model of care where doctors are experts and patients are recipients to one where both work together to co-produce care plans that are led by the patient in the community. NHS and social care staff will need to 'make every contact count' in shaping people's behaviours and utilise all of the best practice preventative interventions available to them, including new science and technology, as well as peer support groups and social prescribing.

Care must become more joined up

This means treating the whole person rather than individual medical symptoms. Support for physical, mental and social health must be fully joined up, and the divide between people's health and social care must also be closed. Services will need to be provided in the community where possible. People will still want a single point of contact, but this must be complemented with support from a wide range of professionals – including community nurses, social workers, community-based mental health teams as well as wider public services and the voluntary sector – with technology used to communicate and work together to meet the care needs of each individual.

Care must become more accessible

This means delivering care at the right time and in the right place. This is partly about reversing the increases in waiting times seen in the last decade. But it's also about changing where and how care is delivered. People with low intensity (one-off) needs will increasingly receive care remotely using new technologies (telehealth or telecare) or in person using easy access hubs which open out of hours to suit the needs of the patient.

Care must become more personal

This means tailoring care to needs of the individual. It's about giving patients choice over what care they receive and where they receive it. It requires health and care staff to work with each patient – treating them as an individual – to co-produce a care plan which speaks to their needs and wants. It means ensuring the heath and care service is professional but also relational. New developments such as genomic sequencing will also be a huge step towards personalisation. A universal service should be there for everyone, but not the same for everyone.

THE 'BABY BOOMER BUMP'

The UK's population is set to grow and age significantly over the next decade, becoming the largest – and most diverse – country in Europe by 2030 (Darzi et al 2018). The number of people over 65 will increase by 33 per cent – compared to a mere 2 per cent increase in the number of working age adults – while the number of over 85s will nearly double over the same time period (ibid). This is a sign of success which should be celebrated, but it will also drive a rising tide of chronic illness – including cancers, mental illness and dementia – which will require a significant shift in the model of care in the NHS and social care system (ibid). It will also see a rise in the number of people requiring end-of-life care, which is the costliest part of someone's health and care journey. These pressures cannot be ignored: they demand a response from policymakers and politicians.

FIGURE I.1: AN AGEING POPULATION WILL PUT COST PRESSURES ON HEALTH AND CARE

Increase in the share of people over the age of 65 and total NHS spend on different age groups
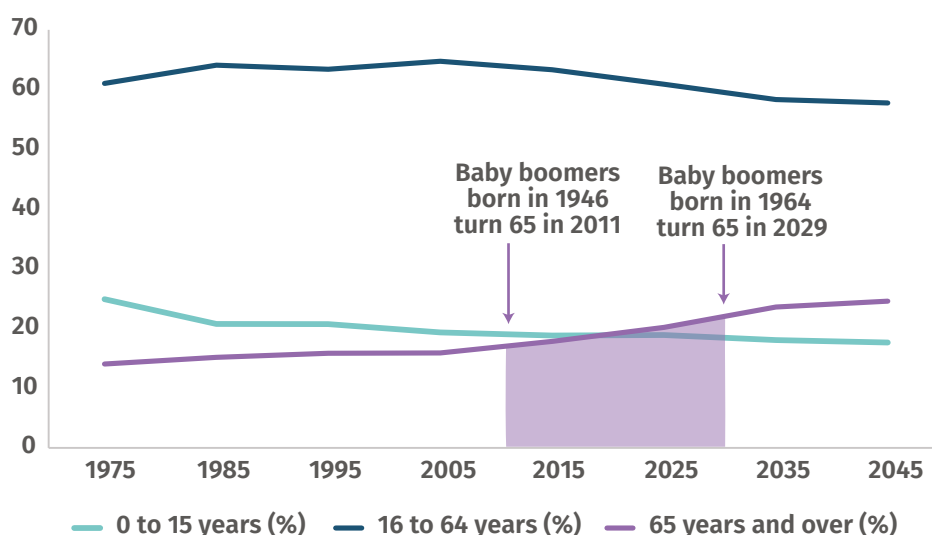
Source: ONS, OBR, Carnall Farrar Analysis

NEW SCIENTIFIC AND TECHNOLOGICAL POSSIBILITIES

We are on the cusp of another great leap forwards in terms of what is scientifically and technologically possible in terms of health and care. Robotics and artificial intelligence (AI), the internet of things (IOT) and big data, as well as new treatments such as cell and gene therapies, all present possibilities to transform health and care. The next generation will not stand for an analogue health and care service in a digital decade. However, as well as driving new possibilities in terms of health and care, new treatments and technology will also increase cost to the system and require the service to do things differently (Licchetta and Stelmach 2016). There is a huge risk that without a long-term funding settlement and reform plan, the health and care system will not be able to invest in new treatments and technologies and will therefore fail to keep up with science with significant implications for patients.

CONCLUSIONS

Together, these arguments make a compelling case for a radical change in health and care policy. The time has come for the government to abandon austerity in health and care and put forward a long-term funding settlement. More money may seem unachievable, but it is far from impossible. Governments must stop treating the NHS and social care as a liability to be managed, and instead look at it as investment that delivers a return. The decade to come offers a range of opportunities – the health service must be fit to seize them.

However, money alone will not be enough. We will need a bold reform plan if our health and a care system is to be fit for the 21st century. We must re-commit the health and care service to the vision set out in the Five Year Forward View – of a more preventative, joined-up, accessible and personalised service – but set out exactly how we go about delivering this both in the short and long term. As a result of the 2012 Health and Social Care Act, 'reform' has become a trigger-word for the NHS that understandably provokes alarm, yet the current situation is simply not sustainable. And so it is time to say what must be said: reform needs to be back on the table. The gift the NHS needs on its 70th birthday is a pragmatic plan to secure it for future generations.

PART II:
A 10-POINT PLAN FOR MORE HEALTH, WEALTH AND CARE IN THE 2020S

1.
INVEST IN HEALTH, NOT JUST HEALTHCARE

THE NATION'S HEALTH IS THE NATION'S WEALTH

Health comes first, for all of us, our family, friends, neighbours and colleagues. Health is the purest form of wealth because it is what allows us to lead the best version of our life possible; it is the wellspring from which all our other experiences are made possible. Each of us will have different hopes and dreams, but we all share a common desire to be in the best *possible* health – even if we don't live up to that aspiration all of the time.

Health is much more than the absence of illness or disease. The World Health Organisation defines it is "a state of complete physical, mental and social wellbeing". This definition is powerful because it sets a high bar and recognises that health is more than just a medical phenomenon. It also implies that increasingly the task of our health and care systems is not just to treat and cure but to prevent and provide care that builds independence and resilience in the face of chronic illness.

Health and care systems – traditionally defined – have a vital role to play in achieving this vision. While the wider social determinants of health are important, even the least-generous estimates find that one-fifth of health outcomes are determined by traditional health policy (Buck and Maguire 2015). Another study suggests that this could increase to around two-fifths of health outcomes if all best practice interventions within health and care were implemented (ibid). Today, around one-quarter of deaths in the UK are considered avoidable (for example, treatable in the NHS or amenable to wider public health interventions) (ONS 2015a).

That's why, in 2008, the NHS Next Stage Review set out a clear vision for the health service: that it should aim for "high quality care for all". That ambition was right: but it now needs to be broadened. We should aim to "enable and support people to lead their best lives, in a healthy and prosperous society". That will mean being as concerned with social care as the NHS, and investing more in public health and prevention.

If we are to achieve this ambition, we will need shift the NHS from a treatment service to one focussed on prevention. We will have to take public health and

health promotion seriously. And, we will need to make "health in all policies" the norm rather than the exception. We must put more emphasis on the social determinants of health across the lifecourse; from the first 1,001 days – critical to a childs life chances and future health and wellbeing – to the ageing well agenda for people when they retire. We must have higher expectations of each other: that we should contribute to improving our own health and that of our communities – whether at home, at work or at school.

Fortunately, there has never been a more exciting time to be taking on this challenge. New technologies, science and understanding of human behaviour are making the benefits of early diagnosis and intervention more and more obtainable. Genomic sequencing, big data and machine learning can shift us from 'diagnose and treat' to 'predict and prevent', technology can help us monitor our health remotely and make better decisions, while behavioural economics allows us to 'nudge' people towards a better lifestyle. We must embrace science and technology to make this a reality, something discussed at length in the next chapter.

TACKLING UNHEALTHY BEHAVIOURS

We know that close to half of the burden of illness in countries like the UK is associated with four main unhealthy behaviours: smoking, excessive alcohol consumption, poor diet and low levels of physical activity (Buck and Frosini 2012). These behaviours increase the risk of a wide range of health conditions including cancer, diabetes, lung and heart conditions and poor mental health. They are also associated with significant numbers of early deaths in the UK each year: around 80,000 for smoking (NHS Digital 2017), 7,000 for alcohol (ONS 2015b) and 30,000 for obesity (National Obesity Forum 2018).

As the interim report of this review set out, in many cases incidence of these unhealthy behaviours has been decreasing (Darzi et al 2018). Smoking has continued to decline, falling by 2 per cent a year on average between 2008 and 2015 (ibid). Alcohol consumption rose steadily from 1960 to peak in 2004; since then, it has consistently fallen so that it is now back to its mid-1990s level. On obesity, the picture is mixed. While rates amongst adults have plateaued, for children in year six they have increased at a significant pace – around 5 per cent a year for the past decade (ibid).

The pace of improvement should be accelerated. Complacency is not acceptable. These behaviours exhibit a clear social gradient: there is a strong correlation between income, education and class and the likeliness that someone smokes, drinks, has a bad diet and or lives a sedentary lifestyle (Buck and Frosini 2012). Evidence shows there is a clustering effect: a large minority of people in England – around one-quarter – exhibit three or more of these behaviours simultaneously (ibid), substantially increasing their risk. There is a strong moral case for intervention.

There is also a compelling economic and fiscal case for investing in early intervention. Smoking costs our economy in excess of £11 billion per year, of which around £2.5 billion falls on the NHS (Department of Health 2017). Obesity is even more expensive, totaling £5.1 billion to the NHS every year, with the wider costs to society estimated to be over five times that amount (House of Commons 2015). And, finally, alcohol consumption, which costs society as a whole £52 billion per year, around £3 billion of which is to the NHS (Public Health England 2016).

The narrative of personal responsibility and willpower is counter-productive. It disables necessary action and it runs counter to the evidence. Most people want

to be in better health – tapping into this desire and helping and supporting them is likely to be a more effective route than scolding and shaming them. Moreover, choices are driven by range of factors including people's upbringing, financial situation and education, as well as external influences such as affordability, availability and advertising. Proposals must deal with this complex reality.

The evidence over many years is clear that the best public health interventions are nationally-led – in partnership with local partners such as local authorities – and use all available levers simultaneously. This means going beyond soft levers such as awareness raising and education and embracing regulation and tax policy. Notable examples include the introduction of new laws and public investment to improve sanitation in the 19th century and the ban on smoking introduced in 2007. We must be prepared to be bold.

Technology is driving us towards ever more sedentary lifestyles. It is now easier than ever to be entertained while being inactive. Inactivity is bad for both our mental and our physical health. It is vital that we make a determined effort to reverse this trend.

We therefore need to promote healthy towns and cities. This could include measures such as outdoor gyms in public spaces, more pedestrianised streets, new cycle routes, restrictions on fast food outlets and so on.

Progress on smoking can be maintained by extending smoke free areas onto our highstreets and parks alongside other public places. England should also step up action to address alcohol consumption by following Scotland's lead and introducing a minimum price on alcohol (BMJ 2017b). Analysis shows that a 50p minimum unit price could reduce alcohol-related deaths by over a 1,000 and save £1.1 billion in costs over a five-year period (Foundation for Liver Research 2017). We must also step up our response to the obesity crisis. The sugar tax is a step in the right direction, but England should learn from Australia, Finland and Norway by extending it to include milk drinks, cakes, biscuits and confectionary (Griffith et al 2016).

RECOMMENDATIONS

Create healthy towns and cities by placing a new statutory duty on local authorities to actively *promote* health in planning decisions.

Extend smoke free areas from indoor public spaces to outdoor public spaces, starting with parks, high streets, school gates and leisure centres.

Introduce a minimum unit price for alcohol on the same basis as Scotland.

Expand the scope of the sugar tax to include milk drinks, cakes, biscuits, and confectionary.

THE SOCIAL DETERMINANTS OF HEALTH

The evidence is clear that dealing with unhealthy behaviours alone will not be enough. We must also address what Sir Michael Marmot calls the "causes of the causes" (often known as the social determinants of health). These include everything from employment to housing; income levels to education levels; the environment to personal relationships. It is inequalities in these social factors, more than anything else, that drive inequalities in health outcomes.

FIGURE 1.1: HAVING IMPROVED FOR A NUMBER OF YEARS, HEALTH INEQUALITIES ARE GETTING WORSE AGAIN

Annual change (months) in absolute gap in life expectancy between most deprived LAs (20 per cent) and rest of England, 2004–12 and 2013–15

Source: BMJ (2017a)

As the interim report for this review set out, inequalities in England are significant (see figure 1.1 (Darzi et al 2018). Women in the most prosperous areas of the country live, on average, seven years longer and have 20 additional years of good health than those in the poorest areas. The comparable figures for men are nine and 19 (Public Health England 2017b). These differences – while narrowing for much of the period – have started to grow once again (BMJ 2017a). As such, it is time to step up our response and address this 'burning injustice'.

Local government – which contributes to the health promotion agenda through its provision of housing and community assets such as parks and libraries, as well as through its remit over public health – should retain responsibility for health promotion in England, but should be given a wider remit and more powers to address the 'causes of the causes'. This should also include a significant increase in funding with more deprived boroughs receiving a 'health premium' (additional resources).

CASE STUDY: COVENTRY, A MARMOT CITY

Coventry is one of several 'Marmot Cities': a group of English local authorities with a priority to collaborate with multiple partners and services – and embed the principles of the Marmot Review into their policies – in order to reduce health inequalities and improve everyone's health outcomes.

Coventry has used an assets-based approach and successfully managed to ensure health is a priority for all organisations across the city, including but not limited to all local government services, the police service, the fire service and the voluntary sector.

This has led to a wide range of initiatives across all areas of policy, including investment in clean transport (such as cycling), training programmes for new mothers to improve parenting, and intensive employment support to get people back into work.

The result: the life expectancy gap between the most affluent and most deprived has narrowed, school readiness at five has improved, as have health outcomes, life satisfaction and employment (Health Foundation 2017).

Health inequalities narrowed between 2004 and 2012, partly as a result of a coherent and active government strategy on health inequalities. This has since expired. The government should create a new 'health in all policies' strategy to tackle the social determinants which should be overseen by a cabinet committee chaired by the prime minister. This should look to address the social gradient not just in terms of income levels but protected characteristics as well including race, gender and sexuality.

RECOMMENDATIONS

Create a new 'health in all policies' strategy which should be overseen by a cabinet committee chaired by the prime minister.

Expand the scope and increase the funding for local government health promotion.

Local authorities with poorer populations should receive a greater 'health premium' in terms of funding, to be funded out of sin taxes.

CREATING A COALITION FOR CHANGE

The coalition that promotes good health must be broadened. On average, people spend nearly 40 hours per week at work (ONS 2018). Employers therefore have a significant impact on whether their staff are happy and healthy or stressed and sick. Indeed, the evidence suggests that each year more than a million working people in the UK experience a work-related illness (NICE 2015). This leads to around 27 million lost working days, costing the economy an estimated £13.4 billion (ibid).

The reasons for poor workplace health are broad, and include long and irregular hours, lack of control over work, and discriminatory practices (Stevenson and Farmer 2018). There are a wide range of evidence-based interventions that can address these causes and promote better health in the workplace. These include offering access to workplace physiotherapy, mental health support, subsidised

exercise (gyms etc.) and healthy food, as well as less tangible changes in culture, management style and support mechanisms (ibid). Some organisations have led the way by providing these opportunities, but many are behind. The government should roll out the 'Wellbeing Premium' being trialled in the West Midlands Combined Authority, with businesses offered tax relief if they can evidence employee access to NICE-approved wellness at work interventions.

Government should lead by example and ensure that all public organisations promote good health amongst staff and service users. This should include promotion of exercise, healthy food and support for mental wellbeing with a focus particularly on hospitals and schools. Health promotion should be included in the regulatory criteria of both CQC and OFSTED.

RECOMMENDATIONS

Roll out a scheme of tax relief to employers who can evidence employee access to NICE approved wellness at work interventions.

Include health promotion in the criteria for CQC and OFSTED ratings of health and care providers and schools.

AGEING WELL

Over the next decade, the demographics of the UK will shift fundamentally. There is set to be a 30 per cent increase in the population aged over 65, while the working age population will increase by just 2 per cent (Darzi et al 2018). The importance of ageing well is set to increase significantly.

We therefore need to pay much more attention to enabling people to lead as healthy lives as possible for as long as possible. It will be particularly important to focus on a good start to retirement. Retiring from full or part time employment is one of the biggest changes in life circumstances that any of us will experience. Rather than the liberating and joyful characterisation commonly offered, it can be a difficult time for many people. Work provides people with much more than an income—it is vital for social connection and wellbeing, for a sense of purpose, and as a way of staying physically active too. It should not be a surprise, then, that many people experience strong feelings of loss when they retire.

There should be a much stronger focus of public policy on this crucial transition period. Getting off to the right start to retirement can help to ensure that health and wellbeing is sustained rather than lost. We therefore propose that a new programme is established in partnership with the voluntary sector, called "Sure Start to Retirement". This programme would help people in the six months pre and post retirement to think about how to spend their newly found free time well. It would include connecting people with purposeful activities and volunteering opportunities, and helping people to structure their time post-retirement to ensure ongoing social connection and physical activity.

RECOMMENDATION

Establish a "Sure Start to Retirement" programme in partnership with the voluntary sector

2.
TILT TO TECH FOR A DIGITAL FIRST HEALTH AND CARE SYSTEM

Tech is transforming society. Everything from how we shop to how we socialise, from how we bank to how we date is changing. This revolution has started to impact on our health and social care already; but we are yet to fully harness it as a driver of change. We need a more radical 'tilt towards tech' to truly transform health and care in the 2020s.

The fourth industrial revolution is fuelled by data. The NHS has some of the best data sets anywhere in the world – far ahead of the US and many other nations. Our 'single payer' system means that we currently have a distinct advantage in the completeness of data for the whole population. Too often, hollow exhortations are made about how the NHS is or can be the envy the world. But this is different. We have a unique combination of assets, not found elsewhere. These are:

- single payer healthcare with some of deepest and broadest datasets anywhere on earth
- world-leading big data and artificial intelligence, based in clusters around Cambridge and King's Cross in London
- world-leading life sciences research. The 'golden triangle' between London, Cambridge and Oxford is one of the most important life sciences hubs.

Other countries have strengths in some of these areas. But none have all of these components simultaneously. We owe it to ourselves to capture the opportunities in front of us. If we look back to today from the vantage point of 2030, not seizing the opportunities of tech to transform health and care would be a matter of enormous regret. We must act now with determination to make it happen.

When the NHS was founded, we led the world by example. As the NHS approaches its 70th birthday, we have the opportunity to lead the world once more. The NHS and social care system needs a comprehensive strategy to harness 21st century technology and innovation at pace. This should be one of the biggest priorities for politicians and policymakers going forward.

Today, 73 per cent of UK citizens have access to a smart phone, and 90 per cent have access to the internet (ONS 2017b), yet only 2 per cent of the population report any digitally-enabled transaction with the NHS (Imison et al 2016). This is not because of a lack of demand on the part of patients (see figure 2.2) but because of a lack of capability – or awareness of what is available – within the health and care service and patient population. It's time to change this.

It is time for a 'digital first' health and care system.

FIGURE 2.1: THE PUBLIC ARE READY TO EMBRACE NEW TECHNOLOGY IN HEALTH AND CARE BUT THE SERVICE LAGS BEHIND

Percentage of patients who would use selected new technologies to improve their health
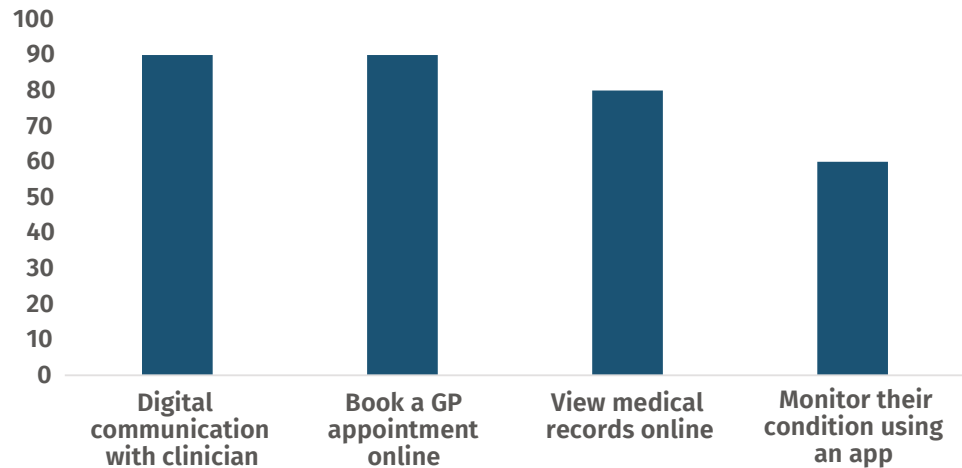
Source: Imison et al (2016)

THE 'TILT TO TECH' OPPORTUNITY SET

There are an astonishing array of opportunities that could be captured for the health, care and prosperity of this country in the decade ahead through a 'digital first' approach. The top 10 opportunities are set out below.

Population health

1. **Tech for better health**
   The health sector has a tremendous opportunity to radically scale up prevention by using tech to promote healthy behaviour. From smartphones to wearables and even implantables, tech enables us to get close to patients. Health professionals see a typical patient just once a year; many people spend hours every day on their smartphones. New health-promoting apps and devices mean the NHS can leverage someone else's assets to promote better health.

2. **Healthy and supportive homes and workplaces**
   In the next decade, tech has the potential to transform the home and workplace. This includes new technologies to promote healthy behaviours such as a home or work health dashboard. Intelligent sensors and remote monitoring can be used to support people to stay healthy for longer – and for rapid response if they deteriorate. Intelligent sensors and remote monitoring means that people can be supported to stay healthy for longer – and for rapid response if they deteriorate. Tech offers new ways to maintain independence in older age, with innovations such as home robotics that meaning that social care can focus on emotional and social engagement.

3. **Power to predict and prevent**
   The application of machine learning to big datasets offers unprecedented opportunities to change the model of care from 'diagnose and treat' to 'predict and prevent'. By applying novel technologies to integrated big datasets generated by the NHS, we will be able to predict illness and act early to prevent it. This means that care can move from a reactive to a proactive stance, actively reaching out to patients to help them secure and sustain their health.

Better therapies and diagnostics

4. **Treatments at the scientific frontier**
   We want NHS patients to have access to the most advanced treatments – those at the frontiers of scientific endeavour. That means offering the opportunity to be enrolled in the latest clinical trials for every patient who might benefit. The power of the NHS's data means that the UK could be the destination of choice for clinical trials globally. By using data to select patients that are most likely to benefit, the NHS has the potential to dramatically lower the costs of major trials. Through tech, we can offer NHS patients the chance to receive the world's most advanced treatments while also attracting inward investment.

5. **Personalised medicine**
   We are on the cusp of a revolution in medicine where treatments can be targeted to take account of individual variability in genes, environment and lifestyle. The cost of sequencing an individual's genetic information has fallen from more than £2 billion in 1990 to around £750 in 2016 (Darzi and Keown 2016). The speed at which sequencing takes place has also been transformed: the first human genome took around 13 years to sequence – now it takes only a day or so. Soon whole populations will have their genome sequenced (ibid). This promises to bypass 'trial and error' and 'one size fits all' treatments and provide provision medicine which is safer, more effective and more efficient.

6. **Better clinical decision-making**
   Tech has the potential to significantly improve clinical decision-making. This includes better decision support for clinical professionals, by putting evidence-based clinical protocols at their fingertips. It also means applying machine learning to improve the accuracy of diagnostics, in particular imaging such as CT and MRI. By the end of the 2020s, every CT and MRI image should be read by machines first.

Better care

7. **Data-led quality improvement**
   The application of machine learning to big datasets has the potential to identify anomalies – leading indicators of where care quality may be deteriorating – as well as yield new insights into novel quality improvement opportunities. By giving frontline clinicians access to meaningful, comparable and actionable data on outcomes, it can empower them to improve care. Despite having data that is among the best in the world, NHS professionals are often left 'flying blind' when it comes to quality of care.

8. **Fast, easy and convenient care access**
   In other aspects of our lives, tech has made consumer experiences far faster, easier and more convenient. There is no reason that the NHS and social care can't make accessing services as easy as a few taps on an app. A single care app should be a source of information for self-care, the route for first contact for primary care, and provide easy and convenient booking for online or face-to-face appointments. Similarly, it could offer on-demand social care support direct to the home.

9. **Joined-up care**
   Better data sharing can improve the way care is organised and delivered. This means better coordinated, integrated care for people, so patients don't have to repeat their story every time they meet a new care professional. It also means potential life-saving enhancements – it is a scandal that data is not routinely shared so that when a patient arrives in A&E, doctors have no idea what medicines have been prescribed. And when a patient is discharged from A&E or hospital, GPs are often not informed. Tech presents every opportunity to make sure that care is truly joined-up.

10. **Efficient and reliable care**
    Automation – the process by which manual labour, and increasingly human

intelligence, is substituted for technology – is one of the most significant disruptions of the decade ahead. An estimated 60 per cent of occupations have at least 30 per cent of activities which could be automated by already-proven technologies (Lawrence et al 2017). Health and care is less susceptible to automation because it involves more time spent on activities which have a low potential for automation, including caring, applying expertise and managing others (McKinsey 2018). But there is still an opportunity valued at £12.5 billion for the NHS and £6 billion for social care (see below).

CAPTURING THE OPPORTUNITIES

The challenge going forward is how to unlock these benefits. In what follows, we set out three key building blocks – at a national level – that will drive progress going forward including: investing in the right IT infrastructure; the data sharing capabilities to allow this infrastructure to 'talk to each other'; and the changes in equipment and care pathways to unlock the potential of automation.

We also believe that each of these 10 opportunities needs to be translated into a 'use case'. This is the way to bridge from technological opportunity to practical improvements to health and care. It is a method of problem solving used in the tech world where an objective is set and mapping techniques are used to understand what needs to happen to achieve it. Examples could include coordinating care for people with long-term conditions across multiple settings (the 'joined-up care' opportunity described above) or a 'digital first' approach to primary care. The transformation fund (set out in chapter 9) should put £0.5 billion into these competitions as way of catalysing progress.

INVESTING IN THE DIGITAL INFRASTRUCTURE

Digital infrastructure is the foundation on which a tilt towards tech can take place. While there has been significant progress in making the NHS paperless, particularly in primary care which is further ahead than its counterparts in other countries, there is much further to go. This is particularly true in the acute sector where a majority of trusts still do not have all of their medical notes in a digital format (Wachter 2016). The ambition to achieve universal digital records by 2018 will not be delivered until 2020 or beyond (ibid).

The barriers to progress in this objective are many and complex. These include a lack of interoperability between IT systems in the NHS (which mean they don't always 'talk to each other') (ibid); underinvestment in digital transformation (with the Wachter Review suggesting at least £3 billion in investment is needed rather than £1.8 billion committed) (ibid); and a lack of awareness among patients of what is available (partly driven by poor access and interface to digital tools such as access to patient records).

Security issues must be addressed as a matter of priority. The May 2017 'WannaCry' ransomware attack on NHS systems brought security gaps into sharp focus. Today, there is far too much variation in security systems. NHS digital security needs to be stepped up and applied consistently throughout the service. Security is a necessary precondition of a tilt to tech in the NHS.

There is also a major gap in capability and a gulf between clinical staff and information technology. In the future, all NHS trusts should have a chief technology officer (CTO) at board level. The CTO should supported a team of clinician-informaticians (five are needed in the average trust). These must be roles that are at least 80 per cent dedicated to the task, rather than an additional responsibility tacked on to day-to-day clinical practice. Today, there is not a trust in the country without the post of chief financial officer (CFO), and CFOs are

supported by dedicated finance teams; the same should be true for technology in the future.

The government should re-commit to 'going paperless' by the end of the parliament with a focus on interoperability and cloud-based technology. To help achieve this, they must provide all the funding called for by the Wachter Review (ibid). Some of this additional funding should be invested in training and recruiting the staff needed at both board and delivery level to take these IT transformation programmes forward.

RECOMMENDATIONS

Launch a national competition worth £500 million for new solutions to capture the 'tilt to tech' opportunity set.

Commit to 'going paperless' by the end of the parliament (2022) with a focus on interoperability and cloud-based systems.

Double the £1.8 billion investment currently available to 'going paperless' by the end of the parliament as suggested by the Wachter Review.

Aim for each trust to be spending 5 per cent of their turnover on IT by 2022.

Mandate all NHS trusts to have a chief technology officer (CTO) at board level, each with dedicated in-house teams.

EMBRACE FULL AUTOMATION TO RELEASE TIME TO CARE

Given the scale of productivity savings required in health and care – and the shortage of frontline staff – automation presents a significant opportunity to improve both the efficiency and the quality of care in the NHS. Unlike many industries, where there are fears that automation will result in mass unemployment, in health and care automation will primarily complement human skills and talents, by reducing the burden of administrative tasks – communicating medical notes, booking appointments, processing prescriptions – while freeing up time for clinical decision making and caring.

It is possible to envisage a future of digital first triage of patients in fully automated assessment suites. For inpatients, 'bedside robots' may become a reality, assisting patients with meals, transportation and mobilisation (portering patients between places, helping in patient rehabilitation and moving patients in and out of beds). Digital systems will enhance communication with friends and family, and biosensors will allow the remote monitoring and alerting responses to clinical observations (such as in sepsis). In the 21st century NHS, it might not be the sound of a bedpan dropping that is heard in Whitehall, but that of a robot picking it up.

One area with significant potential is diagnostics where there is evidence to suggest that AI-based systems including machine learning algorithms can be used to improve the accuracy of diagnosing diseases from radiological images (such as x-rays, CT scans and MRIs). They can also offer enhanced automation in accurately diagnosing conditions such as pneumonia, breast and skin cancers, eye diseases and heart conditions (Harwich et al, 2018). Robotic systems can also offer advances in direct patient care, for example in surgery where we are already seeing some robots that can on average carry out some tasks (such as tying knots, making stitches) with greater accuracy and dexterity than humans.

There are, of course, a myriad of barriers to moving towards automation at pace including: a lack of investment in the technological infrastructure; a need to

redesign care pathways around automated solutions; and to retrain impacted staff to perform new roles. But the opportunity is too great to ignore. That is why the NHS and social care system should embrace a managed process to achieve 'full automation'. To make this happen, the health and care transformation fund should include a sizeable automation strand with a remit to invest in the required infrastructure and to help staff re-design care pathways around it. In most cases new technology and staff will be complementary but in instances where this is not the case the government should introduce a 'right to be retrained and redeployed' for workers impacted by automation.

QUANTIFYING THE POTENTIAL OPPORTUNITY FROM AUTOMATION AND ARTIFICIAL INTELLIGENCE (AI)

Building on the work of Laycock (2017) we have calculated the amount and value of time that could be released through automation in health and care. Figure 4 below shows that if all of the potential for automation of current roles was realised there would be a potential productivity improvement valued at £12.5 billion a year. This is equivalent to 9.9 per cent of the NHS budget in England.

TABLE 2.1: THERE IS SIGNIFICANT UNTAPPED POTENTIAL FOR AUTOMATION IN THE NHS

Potential time freed up through automation and resulting productivity improvement

Job role	Potential time freed up for care and value added activities	Value (£m) of time released
HCHS doctors	23%	1563
Nurses & health visitors	29%	2605
Midwives	11%	80
Ambulance staff	35%	196
Scientific, therapeutic & technical staff	25%	1193
Support to clinical staff	57%	3433
NHS infrastructure support	30%	1567
GPs	31%	962
GP support incl patient care and non-clinical	53%	880
Total		**12,479**

Source: IPPR analysis of McKinsey 2018, NHS Digital 2018, NHS Digital 2018

Automation also has the potential to transform the social care sector by connecting support at home, in residential care, and in hospitals, thereby smoothing the transitions between settings. There is huge potential for smart homes that include point-of-care diagnostics together with remote monitoring, meaning that people will be able to live independently, secure in the knowledge that help is close at hand if their condition deteriorates. Robotics and virtual reality systems could be deployed to homes to deliver rehabilitation. A 'rehabilitation robot' can provide assistance in muscles exercise and movement types, calibrating the level of support as controlled movement is recovered (Prescott and Caleb-Solly 2017).

Robots have the potential to help people to age well by promoting good health and enabling people to maintain their independence (ibid). 'Home Help Robots' could help people to get out of bed, to wash and dress, to eat and drink, and with

mobility and social engagement. Robots can help people maintain their homes – automated vacuum cleaners and lawnmowers are early examples of this kind of technology (ibid).

The future is full of possibilities where robots empower people in old age, enabling better, longer, and more fulfilling lives. Robots will enable people to remain more socially connected to friends and family. Trials are already underway of robotic pets, providing some of the comfort that already comes from companion animals but without caring responsibilities that live animals require (ibid).

The table below examines potential productivity gain in adult social care, using the same methodology as above. We find that across all of the adult social care workforce, 30 per cent of the work could be automated by adapting currently demonstrated technology. If fully implemented, and assuming output remains consistent, this could lead to productivity improvements valued at £6 billion.

TABLE 2.2: SOCIAL CARE WILL ALSO BENEFIT FROM THE DIGITAL REVOLUTION

Potential time freed up through automation and resulting productivity improvement

Job role	Potential time freed up for care and value added	Value (£m) of time released
Total managerial	36%	1322.4
Regulated professions		
Social worker	11%	62.9
Occupational therapist	25%	21.9
Registered nurse	29%	397.4
Other regulated profession	21%	13.4
Direct care		
Senior care worker	24%	377.3
Care worker	24%	3425.3
Support and outreach	24%	252.2
Other direct care	24%	96.7
Total		**5969.5**

Source: IPPR analysis of ONS 2015, McKinsey 2018, NAO 2017

RECOMMENDATIONS

Establish a managed process to achieve 'full automation' to fill staffing gaps and increase productivity.

Create a substantial automation component to the new transformation fund (chapter 9) to help deliver these objectives.

Introduce a 'right to retrain' for all staff impacted by automation in health and social care.

DATA INTEGRATION AND INFORMATION GOVERNANCE REFORM

The NHS has some of the richest datasets in the world. For the data to be at its most useful, it needs to be integrated to make it possible to understand information from a patient perspective, regardless of the care setting, and over time. Integrated datasets offer multiple advantages for patients.

- **Safety.** Today, if a patient arrives at A&E it is impossible to know what medications they may have been prescribed in primary care, relying solely on the patient's own recall. It should be a basic expectation that this information is available. Similarly, e-prescribing has been shown to reduce the number of errors from poorly written scripts (Honeyman et al 2016).
- **Experience.** Today, people with long-term conditions are forced to repeat their story over and over again every time they meet a new clinician. In the 21st century this is wholly unnecessary, since integrated data makes it possible to show both their diagnoses, treatments, and their journey through services in a single dashboard (ibid).
- **Coordination and efficiency.** A typical journey through the NHS and care system can involve six different organisations. One way is to simplify the system (as we propose in this report) but at a minimum, the right information should flow from one setting to another so care can be properly coordinated and duplication avoided (ibid).
- **Prevention.** By analysing big datasets, new algorithms are able to identify patients that are at risk of deterioration, meaning that services can proactively reach out to provide preventative care. Without data integration, this is not possible (London and Dash 2016).
- **Research.** Both scientific and health services research can be powered by datasets, ensuring that quality of care is improved over time. There is a powerful moral imperative to improve care for others through research. This does not require personally identifiable data; it does require integrated datasets.

Some areas – such as north-west London, Tower Hamlets, and Kent and Medway – have succeeded in integrating data. But the national attempt through care.data was cancelled in 2016 after concerns about how the programme was managing security risks and patient engagement. As is too often the case in the NHS, the example set by the best illustrates the failure to learn from successes and scale up innovation.

The NHS's approach to data is built on a false premise. It is based on a flawed understanding of public attitudes towards data sharing. Most ordinary people assume that there is an 'NHS computer' that contains all clinically relevant information. They would be horrified to learn that the health service has tied itself in knots about making clinically important information available to frontline staff who need to see it. When people hear about 'data sharing' they do not imagine this is from one NHS clinician to another (which they support). They understandably assume it is about selling their data for profit outside the NHS or allowing nosey neighbours to see their private records (which they oppose) (see figure 2.2) (Ipsos MORI 2014).

FIGURE 2.2: PEOPLE ARE HAPPY FOR DATA TO BE SHARED INSIDE THE NHS BUT WORRY ABOUT ACCESS FOR PRIVATE ENTERPRISE

Public attitudes towards data sharing for health purposes
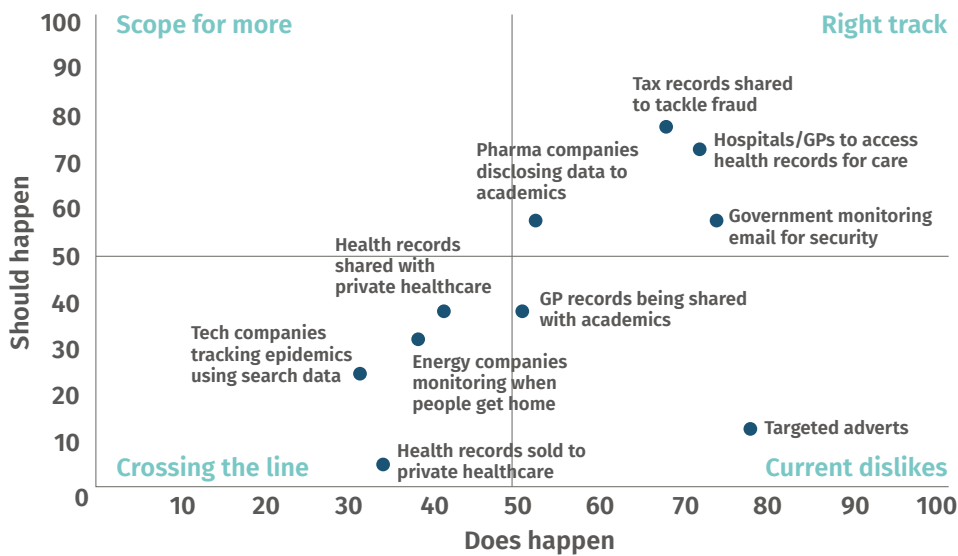
Source: Ipsos MORI (2014)

The current information governance regime is not fit for purpose. It is too biased against innovation and takes too narrow a view of patients' interests. Privacy should never be optional, but neither should be patient safety or high quality care. There does not need to be a trade-off between privacy and quality; with the right approach, both can be achieved together.

A new system of information governance must now be developed that enables the right changes to be made and at the same time safeguards patients' privacy. Government should address public concerns by offering an absolute and inviolable guarantee that patient information will not be shared outside the health, care and research systems. The burden of proof should be shifted so that providers are required to show how they are using data to improve quality, safety, and efficiency.

RECOMMENDATIONS

Establish a new information governance scheme that promotes quality, efficiency and access as well as privacy.

Mandate every local health economy to create an integrated data set, building on the work in Kent and Medway, Tower Hamlets and north-west London.

3.
UNLOCK THE POTENTIAL OF HEALTH AS A DRIVER OF WEALTH

Healthcare operates at the limits of science, constantly pushing the boundaries of what is possible through new discoveries and breakthroughs. The UK is at the forefront of this scientific and technological frontier. British doctors and scientists have – and continue to be – at the cutting edge. We discovered DNA, pioneered the first heart, lung and liver transplants, have been at the forefront of modern genomics and created a plethora of new devices from the MRI scanner to the clinical thermometer. As we enter the next wave of innovation – from robotics and AI to new treatments such as cell and gene therapies – it is crucial that we maintain or improve this position.

There are a range of benefits associated with having a world-class life sciences and tech industry here in the UK. These include the following.

- Innovation in health and care is a major source of economic growth in the UK. The UK's life science sector is world leading: it already generates around £64 billion in revenue each year, employing a quarter of a million people nationwide (OLS 2016a). The sector is also one of the most productive in the UK economy and more productive than its foreign competitors (US, Germany). It is also a major – and growing – source of UK exports (OLS 2017).

- Innovation in health and care is a major driver of improvements in our health and care system, which in turn leads better quality and longer lives for patients. Some studies suggest that that up to 50 per cent of the increase in life expectancy between 1960–90 is attributable to science, technology and innovation (Wang et al 1999). This is valuable in its own right, but it is also a determinant of increased economic growth and prosperity as health is a form of human capital.

As a result, there is the potential to create a virtuous cycle by simultaneously growing health and wealth in the UK. This 'double dividend' can be achieved by stimulating growth and innovation in the life science sector – in part, by giving it access to the NHS as an asset in discovery and innovation – and in return the NHS will becomes more innovative and therefore more effective which will then stimulate yet more economic growth. This is a prize worth pursuing vigorously.

Progress towards this goal is far from inevitable. The NHS can only support the life science sector if it is properly funded and fit for purpose. Brexit poses a significant threat to innovation in health and care with changes to immigration and regulation potentially allowing us to fall behind. And, the UK economy faces a number of structural challenges that could inhibit growth in the sector, not least a deficiency of investment compared to other developed countries.

Policymakers must be ambitious in addressing these challenges in the coming years in order to unlock the opportunities that innovation in health and care present to our economy, public services and society. A number of pieces of work have recently been undertaken by leading thinkers in the sector to point

the way forward including the Life Science Industrial Strategy led by Sir John Bell and the Accelerated Access Review. We must now fully implement the recommendations of these reviews and build on them to secure an economy and NHS fit for the 21st century.

PUSHING THE BOUNDARIES OF SCIENCE

World class science requires world class investment. Research and development (R&D) spend is particularly important as a driver of innovation in the sector and growth in the economy. Unfortunately, this is not one of our strengths. Over the past 20 years, as a proportion of GDP, UK spending on public and private R&D has remained more or less flat, while that of our major competitors has risen. In 2015, the UK invested 1.7 per cent of GDP in R&D, compared with 2.8 per cent in the US, 2.9 per cent in Germany and 3.5 per cent in Japan (Jacobs et al 2017).

FIGURE 3.1: THE UK LAGS BEHIND ITS COMPETITORS IN TERMS OF R&D INVESTMENT
OECD member states gross domestic expenditure on R&D (% of GDP)
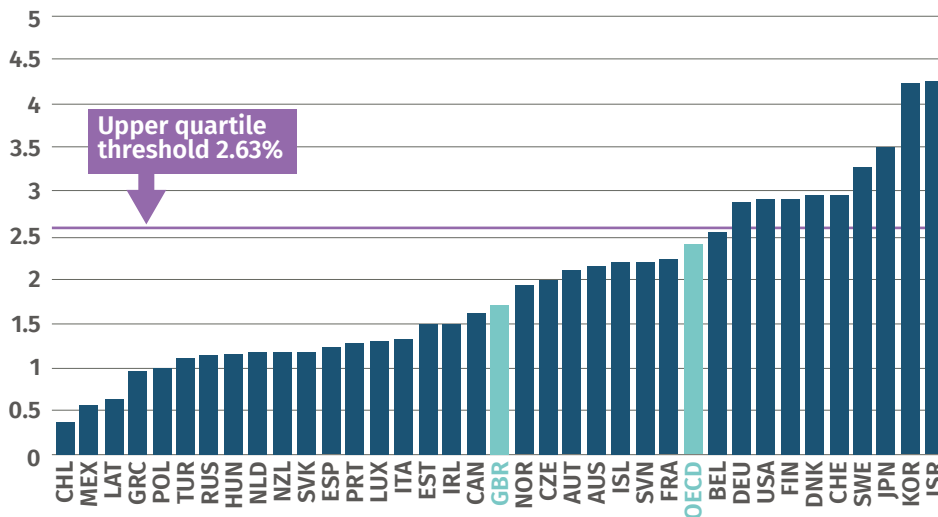
Source: Jacobs (2017)

Brexit risks us falling even further behind. The EU organises several programmes and agencies which fund and coordinate medical research. The UK is a key contributor – but net beneficiary – of these schemes. For example, since 2014 the UK has received €420 million of research investment from a scheme called Horizon 2020 (Dayan 2017). While the UK government has said it will guarantee money won under Horizon 2020, this does not secure the biggest prizes of membership: eligibility for future funding rounds, and the opportunity for UK scientists and institutions to join bids which will be at the forefront of global science.

Going forward, as a minimum, we must ensure that we do not fall behind in terms of investment as a result of Brexit. This means negotiating continued participation in Horizon 2020 and other EU research programmes, potentially as an associate member (Dayan 2017).

But we must go further. There is a strong case for the government to adopt an 'investment-led growth strategy' as part of its industrial strategy, using a higher level of public sector investment to drive up private sector investment. In the past, public investment was often believed to 'crowd out' private investment. But today it is widely acknowledged that the reverse process – 'crowding in' – is much more likely to occur: when demand is deficient and borrowing costs low, public investment induces greater investment by the private sector (Griffith-Jones and Cozzi 2016). This new public investment should be targeted using 'missions' focused on solving major societal and technological challenges, one of which should relate to the future of health and care (Mazzucato 2013 2017). Through this mechanism, we should aim to at least match the upper quartile of OECD R&D spend – around 2.6 per cent of GDP – in the next five years.

RECOMMENDATIONS

Fully implement the recommendations of the Life Science Industrial Strategy.

Negotiate continued participation in Horizon 2020 and other EU research programmes, potentially as an associate member.

Set a national mission to "make the UK's population the healthiest and best cared for in the world by 2040".

Set a national target to at least be in the upper quartile of OECD R&D spending over the next five years, meaning an increase from 1.7 per cent of GDP 2.6 per cent GDP.

KEEPING UP WITH THE SCIENCE

While the UK is world leading in science and research, it is relatively slow at getting innovations into use in NHS, and on some measures is getting worse over time (OLS 2018) (figure 2.4). This challenge appears to be getting worse: there is a growing consensus that the gap between what we know and what we do in the NHS is starting to grow. A number of reasons for slow uptake and access have been identified by reviews into health and care over the last decade.

Evidencing that new innovations are both clinically and cost effective is often challenging, as it requires real world application with a sufficient sample size within the NHS. The challenge is even greater for ground-breaking innovations – particularly personalised medicine – which often target smaller population sizes. Some areas are better at driving forward with clinical trials than others. This variation is holding the NHS and British industry back. We should move towards a system of 'innovation by default' by trialling opt-out rather than opt-in clinical trials – with an aim of delivering a 50 per cent increase in trials in the NHS over the next five years. There is a huge opportunity to use the NHS's comprehensive datasets to radically improve the efficiency of major clinicals trials (which now typically cost $1 billion) by improving patient selection. By giving supervised and controlled access to these datasets for the purposes of trials, there is also potential for the NHS to secure preferential commercial terms from industry.

Complexity is another problem. Despite being called a national service, the NHS is, in fact, thousands of individual organisations, all of which are potential purchasers of innovation. This makes it hard for sellers to match with buyers (especially for non-medicines which are not entitled to an assessment and funding mandate by NICE). It will be important to restore the influence of NICE – once considered 'the innovators gateway' – to ensure that innovation is diffused and adopted across the

NHS. We should correct this by giving it a remit over all medicines and devices and ensuring its guidance is taken up at the local level.

Austerity has also had an impact. Adopting innovations is often cost-additive in the short term (upfront investment for long run savings) or indefinitely (as the scope of treatment expands). Funding cuts and the NHS's one-year commissioning cycle is therefore a barrier to innovation. There has also been a lack of investment in adopting and diffusing new innovations. The most obvious example of this was the introduction of a new affordability criteria introduced in the NHS for treatments, leading to rationing of cost effective new treatments (with up to one in five new medicines impacted). This should be reversed.

FIGURE 3.2: ENGLAND IS SLOW TO ADOPT AND DIFFUSE NEW TREATMENTS

Per capita uptake of medicines with a positive NICE recommendation against per capita uptake for 15 comparator countries
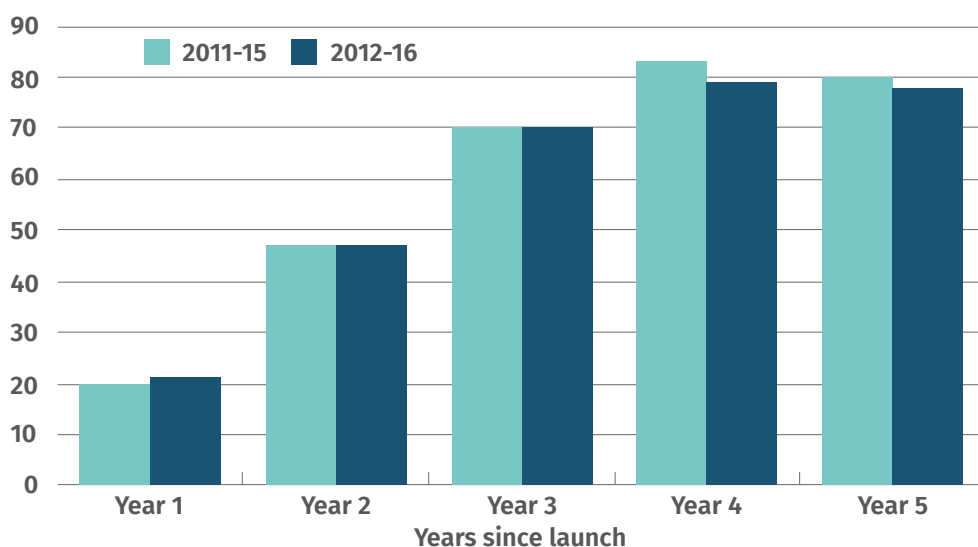
Source: OLS (2018)

There is also a risk going forward that Brexit exacerbates this uptake and access problem. In particular, we are currently part of the EU's systems of medicines regulation. This means regulation is coordinated centrally across Europe by the European Medicines Agency (EMA). This delivers financial savings by avoiding duplication of work but more importantly makes the UK a priority for the introduction of the latest drugs as part of one of the world's largest markets (Dayan 2017).[1] A similar process is undertaken for medical devices through the CE marking scheme, which certifies compliance with relevant EU law (ibid). We must ensure we retain these benefits post-Brexit.

Action on this agenda is not optional. Without reform, people in the UK may not reap the benefits of new advances in science and technology. High quality care is a constantly moving target: to stand still is to fall back. Moreover, this is also a challenge for the life science industry in the UK: they need the NHS as a partner to create and test new innovations and as a market to purchase them. If the NHS fails to innovate, so does our life science economy. As a result, the government must

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1   This system does not cover assessments of how well drugs work and whether they should be funded by health systems like the NHS – this power has always stayed with member states.

act fast to put in place bold measures to ensure improved uptake and access in the NHS.

RECOMMENDATIONS

Fully implement the recommendations of the Accelerated Access Review.

Negotiate to remain part of the European Medicines Agency.

Give NICE a remit over all medicines (including specialised and highly specialised medicines) and create a funding mandate for non-medicines.

Reverse the affordability threshold on new medicines and move towards value-based assessments of new innovations instead.

Give CQC a role in ensuring local uptake of NICE approved innovation and NICE guidance.

Pilot opt-out rather than opt-in for clinical trials and in so doing support 50 per cent more clinical trials over the next five years.

4.
MAKE SOCIAL CARE FREE AT THE POINT OF NEED

We need a new social contract between the citizen and the state for the 21st century.

As the population ages, the importance of good social care is set to rise. By 2030, the number of people over the age of 65 is set to increase by 30 per cent from today (Darzi et al 2018) with a corresponding increase in the demand for care. Funding for this care cannot be found from existing local government budgets: already vital services are being cut and pressures elsewhere – including demand for care amongst younger people with disabilities now living longer - are growing. For the majority of people under our current system the responsibility for this care is falling on the individual and their family members. This dependence has increased in recent years as publicly-funded social care has been cut since 2010 (five per cent per annum) (ibid).

The result of this has not necessarily been less care: it has been a dramatic rise in informal care provided by friends, families and neighbours (Age UK 2017) many of whom get very little support. This shift in responsibility from state to the citizen may have been sustainable in the past when three generations of the same family lived together, community bonds were stronger and female labour force participation was lower. But as the world has changed it has become a growing challenge – with people increasingly going without vital care and support and carers increasingly having to reduce hours or give up work to support their loved ones.

This is not the only motivating factor for social care reform. There is also longstanding consensus that the divide between health and care is no longer tenable. In 1948, when the NHS was created, a boundary was drawn between the two systems. Ever since, policymakers have attempted to join them up by addressing the four fragmentations identified by the Barker Commission (Barker 2014) below.

1. **Entitlements:** The NHS remains largely free at the point of use. Social care is both heavily needs- and means-tested.
2. **Funding:** The NHS is paid for out of nationally raised general taxation whilst social care is paid for either privately or by locally raised (and non-ring fenced) local authority budgets.
3. **Commissioning:** Healthcare is commissioned by the NHS (either Clinical Comissioning Groups or NHSE) while social care is commissioned by local authorities.
4. **Provision:** The majority of healthcare is provided by the public sector whereas increasingly social care (residential) is provided by the private sector.

However, most of these attempts have only been partially successful. The divide still remains. This must change. After all, as individuals we make no such distinction about our care needs. People rightly expect an elderly friend or relative to receive the same level of care – with the same entitlements – if they have

dementia or cancer. Unsurprisingly, most are bemused – not to mention distressed – to find that this is not the case.

The current system is also poor value for the public purse. A lack of funding has meant that social care is only provided to those in greatest need, leading to underinvestment in prevention. Public funding is only available once a person has already deteriorated – when they will by definition have much more intensive needs – rather than at a stage when their health and independence can be maintained. There is also a cost to the NHS: between 2010 and 2016 delayed transfers of care grew three-fold (Darzi et al 2018) (though this has been reversed to some extent more recently). Nearly 2.3 million hospital bed days were lost to delays in 2016/17 (up from 1.4 million just five years before) (Andrews et al 2017). Recent bed audits show that four times this number are medically fit to leave (ibid). On an annualised basis this is costing the NHS around £3 billion (ibid).

Likewise, as it stands, around half of all deaths in England occur in hospital. This is costly. On average, the last year of life costs around £10,000 per patient (aged 80–84) (Hazra et al 2017); this could be reduced significantly if end of life care was shifted into the community (for example, a move towards palliative care) (PHE 2017c). Moreover, such a shift would be better for patients in terms of the quality and safety of care, and is more aligned with their preferences (with a majority of people in favour of dying at home). However, these benefits can only be unlocked if an investment is made in social care and community-based healthcare. This is evidenced internationally; there is a strong positive correlation between investment in community and social care and the proportion of deaths in a community setting (Orlovic et al 2017).

Whichever way you look at it, the case for comprehensive funding and reform of social care is unassailable. Investment in social care makes good sense. If social care were a medicine, it would be NICE approved. Moreover, it is the right thing to do for elderly people and their families. Society as a whole must confront the challenge and embrace bold reform.

Recent years have seen multiple proposals for reform. These include: free personal social and nursing care – as in Scotland (Barker 2014); the adjustment of the means test – and cap on care costs (Dilnot 2011); and a variant on this proposed by the Conservative policy at the last election.[2] Each of these proposals would be an improvement on the status quo; and all have strengths and weaknesses (Bottery et al 2018). But none of these have been implemented and social care reform has consistently been kicked into the long grass. We can no longer afford for this to continue.

We recommend embracing a bold reform and funding plan for social care by moving to universal, free-at-the-point-of-need personal and nursing care[3] for adults in England. This would operate on similar terms to the Scottish system (though correcting for some of the challenges faced)[4] (Audit Scotland 2008), meaning that all domiciliary care would be free at the point of need, while the government would provide a 'fair price' for residential care.[5] As proposed by the

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2   The Conservatives proposed the existing means test threshold would be replaced by a single £100,00 threshold (much higher than the original threshold) and that savings and assets would be included in the means test for the both residential and domiciliary care (assets are currently excluded for the latter). They later included a cap on care costs in the proposal.

3   Personal care is defined as personal hygiene, food and diet, immobility problems, counselling and support, simple treatments, and personal assistance. Nursing care involves the knowledge and skills of a qualified nurse. It might include care like administering injections or managing pressure sores.

4   Though with a number of corrections based on lessons from Scotland, including a clearer definition of what is included in personal care and without the funding gap evident in Scotland.

5   In Scotland, this is set at £171 for personal care, plus an additional £78 per week for nursing care services should you need them. Government would need to work with the sector to set an equivalent price for England (or sub-sections of).

Barker Commission, this would focus on people with 'critical' and 'substantial' needs in the short term (costed below) and be extended to 'moderate' need in time (which would involve additional cost over and above the estimates set out below) as per the previous 'fair access to care' system.

Accommodation costs should remain subject to a means test as is the case today[6]: it is appropriate that the health and care system draws a boundary between health and care needs and housing needs. The state should not pay for accommodation costs for those that can afford to pay those costs for themselves. This approach would substantially reduce the amount of means-testing in the health and care system.

This reform would have three main benefits.

1. **Pooled risks**. Free personal and nursing care would eliminate catastrophic care costs (of over £100,000), which at present impact on around one in 10 elderly people. It would also ensure that no-one who needs care has to go without; as it stands, there are over 1.2 million people who need care are not receiving it, and the gap between need and provision is largest for those on the lowest incomes (Wenzel et al 2018).

2. **Efficiency.** Free personal and nursing care promotes investment in prevention and reduces frictional costs. This would create a more coherent and logical system (for example, creating parity of esteem between conditions such as cancer and dementia). But it would also allow for better integration of care. For example, Scotland's experience suggests that it can help move care into the community and reduce frictions such as delayed transfers of care (Bell et al 2013).

3. **Quality and time to care**. Evidence shows that free personal and nursing care does not reduce informal care, but improves its quality. Family, friends and neighbours spend less time on functional tasks and more time on social and emotional support, addressing a significant weakness in our current system (Wenzel et al 2018). Crucially, informal care becomes more manageable (especially for women) as it can be done more flexibly (out of work hours).

The additional costs of moving to free personal and nursing care are less than is commonly assumed. Maintaining our existing system would require around an additional £11 billion per annum by 2030. The additional cost of the system proposed by the Conservative party in the 2017 general election would be a further £5.6 billion by 2030. The incremental cost of moving to free personal and nursing care would be £2 billion by 2030 on top of that (Bottery et al 2018). Assuming spending on social care was set to rise in line with increases in the tax base anyway, this would mean an extra £7.8 billion per year in social care spending by the end of the parliament, and would mean an extra £13.5 billion by 2030.[7]

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6   The thresholds could be set at the original level or made more generous (though this would cost more money).
7   These additional costs do not include costs of care and support for young people, which are rising as people live longer with complex conditions. This sits outside of the remit of this review but must be considered by government in any future funding settlement.

Social care funding gap (£bn) in under various policy changes
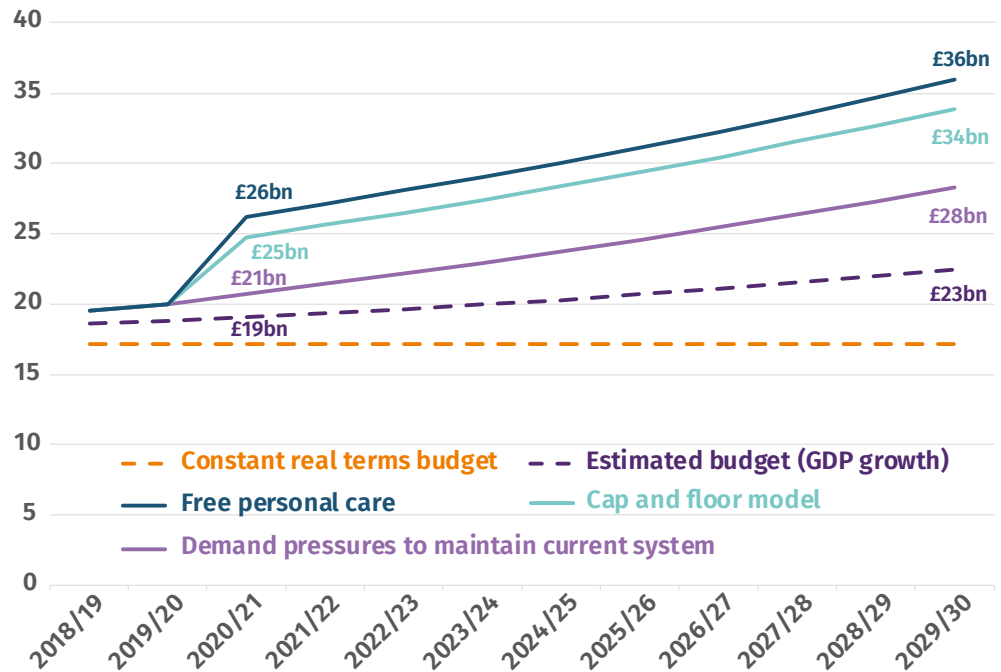
Source: Bottery et al (2018), PSSRU (2015), IPPR calculations

While this is significant compared with historical funding for social care, it is small in comparison to both total government spending and government spending on the NHS.

The government should commit to fully funding free personal and nursing care. The majority of this should come from national insurance rises – as set out in more detail chapter 10 – especially as it is established (in the early years after it is introduced). As the new system is bedded in and becomes a fully integrated service, additional social care funding should be achieved through a 'new social contract' between the citizen and the state. This would mean changing the package of benefits for older people (especially for those with lower care needs) in return for free personal and nursing care when they need it most.

As part of this new social contract, consideration should be given to means testing Winter Fuel Payments as well as Attendence Allowance and Carer's Allowance[89] (DWP 2017). These changes would not need to be introduced until 2021/22. Funding free personal and nursing care should be part of a wider conversation in society about how to age well, and the balance of responsibilities between citizens and the state.

All future savings made in NHS spending as a result of the investment in social care could also help to fund social care. There is significant evidence that more integration between health and care could reduce the cost of delayed transfers

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8   There is a precedent for this with people in Scotlan ineligible for Attendence Allowance if they take free personal and nursing care.
9   Means testing Winter Fuel Payments using Pension Credit as a 'gateway benefit' would save £1.8 billion per year. Attendance Allowance currently costs £5.8 billion per year and Carer's Allowance costs £3.2 billion per year. There are no recent estimates of how much means testing would save.

and medically fit patients, which currently cost around £3 billion per annum. Meanwhile, there may also be a reduction in cost at the end of life by shifting the location of care into the community, with studies suggesting a net saving of around £478 per person (Georghiou and Bardsley 2014). The possibility of free personal social care reducing cost elsewhere in the system is borne out by evidence from Scotland, where increased spending on social care has resulted in *lower* spending overall on health and care for older people (Bell et al 2013).

RECOMMENDATION
Make personal and nursing care in England publicly-funded, free-at-the-point-of-need for everyone with 'substantial' and 'critical' needs – expanding to those with 'moderate' needs in time.

We also need to make sure that this additional investment leads to more and better quality care and not simply increased profit margins for care providers (though increased funding is needed to ensure that the sector is sustainable). Quality in social care *is* the quality of its workforce: it is a labour intensive and capital light sector. The makes the current workforce challenges in the sector all the more concerning: high turnover and vacancy rates. This is partly a result of poor pay. This must change in the wake of a new financial settlement. Today, only a small proportion (14p–18p per additional £1 paid to providers) (Grimshaw et al 2015) makes it through to care workers' pay. The voice and power of the social care workforce must be amplified by moving to sectoral collective bargaining. This would see employers' representatives, trade unions, and local government establish a legally binding collective agreement setting out minimum standards pay and terms and conditions in the sector as is the case in the NHS.

RECOMMENDATION
Introduce sectoral collective bargaining for social care through a social partnership of employers, trade unions, and government.

5.
THE NEIGHBOURHOOD NHS: A NEW DEAL FOR GENERAL PRACTICE, MENTAL HEALTH, AND COMMUNITY SERVICES

BUILDING THE NEIGHBOURHOOD NHS

Over the past 70 years, there have been many changes to the way that the NHS is administered. But there have been few changes to the structure of how care is provided. Today, we continue to organise care around professionals with broadly similar skills: generalist doctors work in GP practices, specialists work in hospital trusts, mental health professionals work in mental health trusts, and so on. There are, of course, many excellent examples of these boundaries breaking down: GPs working in A&E units, psychiatrists providing mental health input on general hospital wards, and specialists working in the community. But these are the exceptions, not the norm.

In the future, care should be organised around groups of people with broadly similar needs. Rather than care provided around primary versus secondary, mental versus physical, or healthcare versus social care, we should strive towards a system that holistically considers all aspects of care for a particular individual. The groupings that we propose are based on the work by the 'Whole Systems Integrated Care' programme in north-west London for adults (see figure 5.1) (North West London Integrated Care 2015). The NHS was founded on the principle of universality: that access to healthcare should be based on need, not ability to pay. But a universal service should be there for everyone, not the same for everyone.

We need to move towards the 'Neighbourhood NHS', where social health is given as much importance as physical and mental health. This will mean embracing social prescribing and joining healthcare services up with a wider array of public services such as job, welfare and housing support. The modern NHS must start with people and how best to meet *their* needs, *their* wants, and *their* expectations – not those of the system. Moreover, it must help and support people to maintain their independence and participation in their communities. This understanding of the different needs of different groups should be the foundation on which an 21st century NHS is built.

FIGURE 5.1: A UNIVERSAL SERVICE SHOULD BE THERE FOR EVERYONE BUT NOT THE SAME FOR EVERYONE

Patient segmentation model designed and used in north-west London

Age	'Mostly' healthy (rest of the population)	One or more physical or mental long term conditions	Cancer	Serious and enduring mental illness	Learning disability	Severe physical disability	Advanced dementia, Alzheimer's, etc	Socially excluded groups
0–12	1. 'Mostly' healthy children	5. Children and young people with one or more LTCs or cancer		9. Children with intensive continuing care needs			N/A	15. Homeless individuals and/or families (including children, young people, adults and older people), often with alcohol and drug dependencies
13–17	2. 'Mostly' healthy young people			10. Young people with intensive continuing care needs				
18–64	3. 'Mostly' healthy adults	6. Adults with one or more long term conditions	8. Adults and older people with cancer	11. Adults and older people with SEMI	12. Adults and older people with learning disabilities	13. Adults and older people with physical disabilities	14. Adults and older people with advanced dementia and Alzheimer's	
65+	4. 'Mostly' healthy older people	7. Older people with one or more long term conditions						

Source: North West London Integrated Care (2015)
Note: Mental health is present across all components

CASE STUDY: BROMLEY BOW CENTRE AND SOCIAL PRESCRIBING

The Bromley by Bow Centre in the East End of London was established in 1984 as an innovative health living centre. The centre includes a GP practice which places high value on social prescribing – a process whereby GPs prescribe non-clinical forms of care, ranging from debt support to community therapy. The practice works with over 2,000 patients a month, and only 30 per cent of its prescriptions are clinical. Once referred by a GP, patients have an in-depth consultation with social prescribing link workers, who assess their needs and point them in the direction of services or projects that may be of help. In early 2017, the programme was also extended to cancer patients via a partnership with Macmillan.

Embracing social prescribing as a tool for primary care has been remarkably effective since it enables practitioners to reach into the social determinants of care. As professor Sir Michael Marmot's 2010 review, *Fair Society, Healthy Lives*, demonstrated, the majority of health outcomes can be explained by non-clinical, socio-economic factors. Giving general practitioners the tools to have a more holistic approach to care and to help tackle the root of patient needs has significant potential to reduce healthcare costs in the long run and improve quality of care. Although there is a limited amount of robust, comprehensive empirical evidence on social prescribing, case-specific results suggest that there have been improvements in self-esteem and psychological wellbeing (Kimberlee 2013) and even a reduction in the use of acute and primary care (Dayson and Bennett 2016).

There is a great deal of consensus on what people want. All people want to see their GPs in modern, convenient spaces, and all people want access when they need it to specialist care delivered in real centres of excellence. Yet different people want different things from their care, depending on their individual circumstances. Broadly, people in work want quick, convenient care; older people want continuity and a focus on their social needs; those with long term conditions want well-coordinated, efficiently planned care. People with intensive needs want care that comes to them.

This means that care should:
- be organised around real places – neighbourhoods – with care organisations serving between 25,000 and 100,000 people (Addicot and Ham 2014a)
- offer multi-disciplinary teams with different experts with different skills, including physical, mental and social care, potentially joined up with a wider array of public services as well (for example, welfare support, housing support, etc) (Addicot and Ham 2014b)
- be housed in modern facilities, located in the community – potentially in buildings alongside other community assets such as libraries and leisure centres – complete with diagnostics
- focus on care planning and coordination to make sure people get the right care at the right time in the right place.

Crucially, modern care needs to be more proactive – reaching out to predict and prevent ill health – and outbound to those who need it most but are least likely to access care (for example, people who are homeless, or those with enduring serious mental illness).

RECOMMENDATIONS

Design care around groups of people with similar needs rather than around groups of professionals with similar skills.

All people of working age should be offered the option of digital consultations with in-person appointments available via easy access facilities at 24-hours' notice, with access at the weekend and in the evenings.

All people with one or more long-term conditions should have a single care coordinator, a co-produced care plan and longer routine appointments with the GP by 2022.

People with serious enduring mental illness should have routine physical health care available at their homes by embedding GPs in community mental health teams.

Every neighbourhood in England (25,000 to 100,000) should have access to a purpose-built multi-specialty integrated care facility with embedded diagnostics by 2030.

HOW TO GET THERE

The challenge is the journey not identifying the ultimate destination. Moving care into the community and joining it up around the person has been an objective of health and care for years. In the NHS, this shift was set out most recently in the Five Year Forward View, with some progress made in driving it forward. Sustainability and Transformation Plans (STPs) have been published for 44 health and care economies, authored by partnerships of local health and care

commissioners and providers. The most advanced of these are in the process of delivering new models of care (NMC) (Collins 2016) – sometimes known as the 'vanguards' – and becoming integrated care systems (ICSs) (Charles 2018). These arrangements should help make this vision a reality.

These examples provide proof of concept, but they remain the exception rather than the norm. Islands of success speak to a wider failure to adopt this approach at scale and on a universal basis. Just 10 localities are set to proceed with integrated care systems as it stands. Most areas are therefore behind the curve, retaining a fragmented system or moving more slowly towards integration through shallower 'work-around' arrangements, such as loose federations or partnership arrangements. This is partly because transformation on the scale required is challenging and takes time (Charlesworth et al 2015). But there are more significant barriers, too.

There are three main reasons for the failure to achieve integrated care at scale. First, there are too many organisational boundaries that make achieving integration on the groun a challenge. These boundaries exist not only between organisations, but also at the top of the system, with different regulators demanding different priorities from organisations – one of the legacies of the failed 2012 reforms. Second, there are wide disparities in funding levels: social care is means-tested, whereas health is not; only a fraction of mental health needs is fully-funded, whereas all but a few exceptions of physical health needs are. Third, there are very different cultures, governance, funding flows and financial incentives across different organisations. This has made integrating them difficult (though far from impossible).

We therefore propose a number of steps to realise this vision of a neighbourhood NHS. Together these steps make up a much needed 'new deal' for primary, community and mental health services.

THE ONE-TEAM APPROACH: INTEGRATED CARE TRUSTS

The best way to work together *as* a team is to work together *in* a single team; the best way to align incentives is to have a single set of incentives; and the best way to share information is to collect it once. We therefore propose a new option should be created for local health economies: new Integrated Care Trusts (ICTs).

Integrated Care Trusts would be responsible for the holistic care needs of a defined population. These organisations would specifically focus on providing better out-of-hospital care by bring all local primary, community, mental health and social care needs into one organisation. ICTs could be formed from existing trusts – extending the scope and responsibilities of existing trusts – or by creating new organisations.

There has been considerable consolidation in NHS trusts over the past 30 years. NHS acute physical providers are at greater scale; the same is true for community trusts and mental health trusts. There are also examples of different types of trusts joining together. It is now common to find acute trusts and mental health trusts that also provide community health services. This is particularly true following the advent of primary and acute care systems (PACS) and multispeciality community providers (MCPs) as part of the Five Year Forward View (NHS 2017). The proposal for Integrated Care Trusts would build on this development.

There is evidence that this would lead to better outcomes. Delivering primary and community care at scale is best for the patient: the Care Quality Commission (CQC) points to a clear correlation between size and CQC ratings (see figure 5.2) (CQC 2017a), while others have found links with hospital admissions as well (IFS 2014). It also makes a wider-team-based approach to primary care, diagnostics and

specialisms in the community and longer opening hours viable. Experts suggest that the right scale is between 25,000 and 100,000 population (Addicot and Ham 2014a).

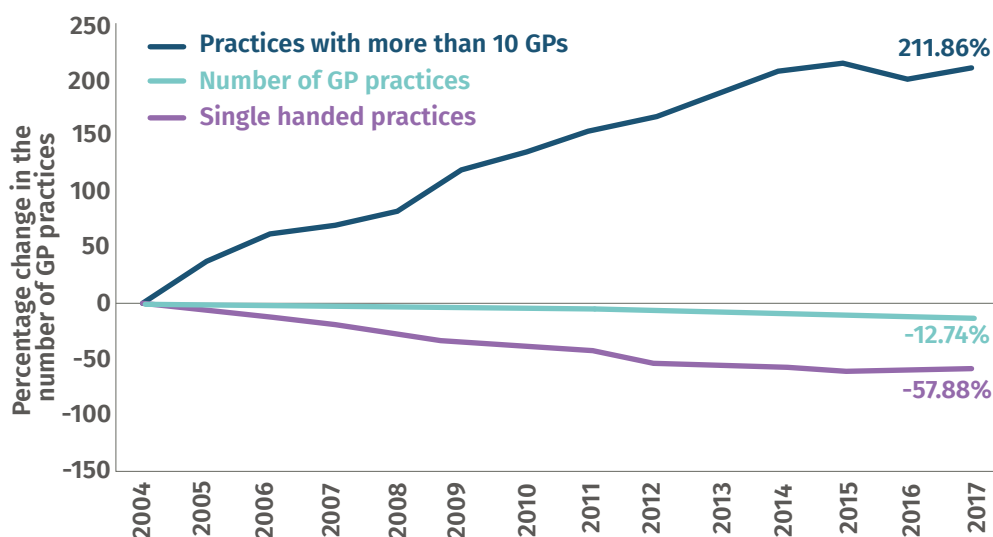**FIGURE 5.2: BIGGER IS BETTER IN PRIMARY CARE**
Average number of registered patients per practice and CQC ratings
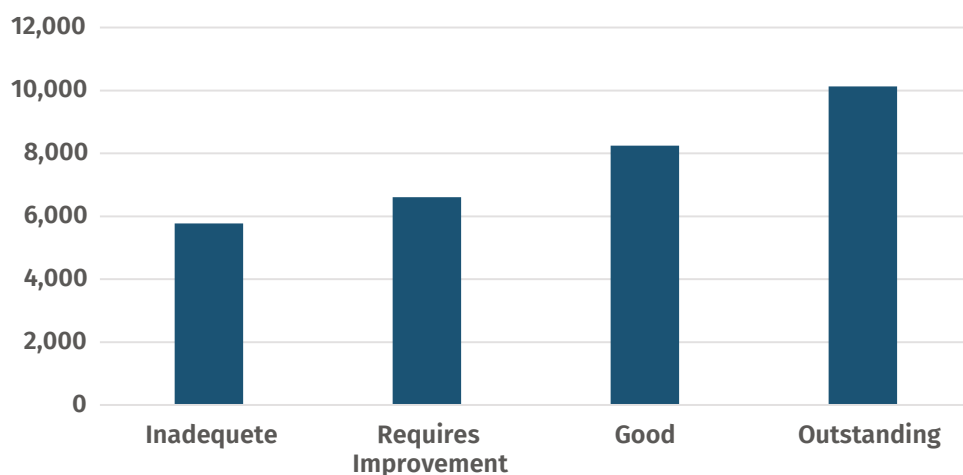
Source: CQC (2017a)

FIGURE 5.3: PRACTISES HAVE BEEN GROWING IN SIZE FOR OVER A DECADE
Percentage change in the number of GP practices in England 2004–2017

Source: NHS Digital, Ewbank et al (2016)

This change has started to happen, with the number of GP practices in England falling and average patient list size rising. But there is further to go. Too often these new 'organisations' would benefit from deeper integration (Pettigrew et al 2016). This means something more akin to so-called 'super-practices' or

MCPs, rather than the loose GP federations and informal partnerships which are currently the main organisational form for primary care at scale and team-based community care (ibid).

One of the great strengths of general practice has been is strong ownership ethos and entrepreneurial ethic. These characteristics are valuable – and would be even more valuable if diffused across the NHS more widely. We therefore propose that alternative models of ownership should be trialed in ICTs, including mutuals and cooperatives. The NHS also suffers from a democratic deficit. We therefore propose that ICTs should be co-terminus with local authority boundaries – and should be made up of whole local authorities when they are at a larger scale than existing local government boundaries. This will help ensure democratic accountability.

CASE STUDY: THE MODALITY PARTNERSHIP IN SANDWELL AND WEST BIRMINGHAM

Under the Five Year Forward View in 2014, NHS England provided funding for 50 'vanguard' sites to develop new models of care. One of these vanguard sites – an MCP called the The Modality Partnership in Sandwell and West Birmingham – has received positive initial feedback. As part of the MPC, the Modality Partnership – a super-partnership of 24 GP practices – was created.

The Modality Partnership is designed to tackle fragmentation within service delivery and to facilitate high-quality, integrated care at the local level by utilising economies of scale. The Modality Partnership offers primary care services at 15 practices in Sandwell and Birmingham for a population of 70,000. Recently, it extended beyond the West Midlands to include four practices in Hull. Its ownership structure consists of an executive board supported by a senior management team which acts on behalf of 59 shareholding GP partners.

The Modality Partnership's use of economies of scale has enabled it to develop a 24/7 single point of access. Its constituent general practices provide access both to primary care and long-term conditions management through triaging patients to face-to-face appointments, telephone or Skype consultations, or digital resources.

It has also pioneered risk-stratified pathways of care, separating the population into categories depending on the complexity of their care needs, as a means of targeting resources and tailoring service delivery. To achieve this, it offers specialist outpatient services in dermatology, rheumatology, x-ray cardiology, gynaecology, urology, orthopaedics, respiratory and ophthalmology amongst other specialities, which helps to span the primary and acute sector.

PROTECT THE 'JEWEL IN THE CROWN'

A pre-requisite of delivering on this vision of integrated primary, community, social and mental health care at scale is reform to general practice. General practice has been the foundation on which the NHS has been built. This should remain the same. But there is growing evidence that our existing model requires reform: primary care must be delivered at scale in the future and the enormous strain placed on GPs must be relieved.

When the NHS was founded in 1948, physical and psychiatric hospitals were brought into public ownership but general practice was left in the private sector, where, for the most part, it has remained. This has – in some cases (but not all) - made it harder to move to primary care at scale at pace because it requires small organisations to take on big contracts or come together to form partnerships. It has also put more pressure on GPs – to run a business as well as provide medical care – with levels of stress and dissatisfaction in the UK disproportionately high compared to other countries (Martin et al 2016).

While some think the partnership model is ideal and will want to retain it, it is not right for everyone. More and more GPs do not want to become partners because of the levels of responsibility and financial risk involved in it as well as the geographical immobility it requires. Evidence suggests that many GPs would be open to moving to a salaried model (Lind 2016).

That's why the NHS should welcome general practitioners into the health service, as full employees, on the same basis as their colleagues in hospitals. This could occur as part of a transition to Integrated Care Trusts. All existing GPs should be offered salaried employment for their core clinical services. Those that wish to retain their existing contractual arrangements should be allowed to do so – this is likely to be particularly important in rural communities, for example. Overall, these changes would remove the risk and stress that currently exists for many general practitioners.

Additional funding should be provided on a capitation basis to pay for nursing, and clinical and administrative support services. Furthermore, new funding streams should be opened for the provision of enhanced services, to sustain the entrepreneurial and innovative characteristics of much of general practice.

A NEW DEAL FOR PRIMARY CARE, COMMUNITY CARE AND MENTAL HEALTH

In recent years, funding has maintained the existing care model, dominated by large acute providers, rather than shifting investment towards primary and community care. Policy changes like the the The General Practice Five Year Forward View and the commitment to parity of esteem for mental health have started to change this – with spend on mental health and general practice both increasing – but they do not go far enough.

This is a missed opportunity. The evidence is clear: healthcare systems that invest more in primary and community care are more likely to deliver better health outcomes, including lower mortality rates, fewer premature deaths, higher satisfaction with the healthcare system and a decrease in utilisation of hospitals and emergency departments (Macinko et al 2003). Likewise, the need to invest more in mental health remains: even in the Five Year Forward View, a significant proportion of mental health conditions will still not be treated. We would not find it acceptable to say that our ambition was to treat a fraction of people with heart disease or cancer; it should not be acceptable to only treat a fraction of people with mental illness.

Without such investment in primary, community and mental health services, the shift towards preventative and community based care is virtually impossible. We must act now. We therefore believe we should make a commitment to ensure that primary care, community care and mental health all increase as share of NHS spend year-on-year.

CHANGE THE DEFAULT ON FUNDING

For many years, the stated strategy of the NHS has been to invest in primary and community care in order to reduce necessary spend in acute services. The NHS has committed to shifting more care to be provided closer to people's homes. In practice, the NHS has delivered the inverse of its stated strategy. Spend in the acute sector has risen, while spend on primary, community and mental health has fallen as a proportion of NHS spending.

Despite policy commitments under successive governments, the practical reality has been moving in the opposite direction. To date, the path dependency of the existing system has exceeded the power of policymakers to change it. Articulating priorities and issuing instructions has not worked; neither has the shift towards GP commissioning under the 2012 reforms. It is time for a different approach.

We propose changing the default in NHS funding so that new Integrated Care Trusts should be offered the option of holding the whole care budget for its local population. Funding would follow the patient on a tariff basis – so, if the ICT failed to prevent an acute admission, its budget would be impacted at the tariff rate. If it succeeded in preventing acute admissions, it would retain the resources to re-invest in local services (or deliver a surplus).

RECOMMENDATION
Allow ICTs to take on whole care capitated budgets for population groups.

6.
RADICALLY SIMPLIFY THE SYSTEM

The health and care system has grown in complexity over the past 70 years, becoming ever more fragmented (Timmins 2012). This has been greatly exacerbated by the Health and Social Care Act 2012. The 2012 reforms ran counter to international evidence and have not been replicated by any other health system anywhere in the world.

The number of local commissioners was increased significantly from 152 Primary Care Trusts (PCTs), each of which was already subscale and struggling to develop the necessary capabilities for effective commissioning, to 212 clinical commissioning groups (CCGs). Whereas PCTs commissioned the majority of health services, CCGs now commission acute and community care, while the majority of primary care and specialised commissioning moved to NHS England at a regional level. The division between health and social care has continued.

At a regional level, 10 strategic health authorities (SHAs) were abolished. The SHAs had been responsible for performance managing the PCTs and for managing any underperforming providers. They were also the key vehicle for delivering quality-enhancing changes to service configurations at scale. London SHA, for example, led the process of stroke and major trauma reconfiguration that has saved hundreds of lives in the capital. Every other health system has a so-called 'intermediate tier' for regional health system management – even the US has state departments of health that take on this function at the state rather than federal level.

At the national level, the 2012 reforms fragmented the leadership functions, with roles split between the Department of Health, NHS England, Health Education England, Public Health England, Monitor and NHS Trust Development Authority (now NHS Improvement), and the Care Quality Commission. By creating a separate institution for each health system function, the 2012 has resulted in confusion at individual provider level, with competing priorities and instructions.

The World Health Organisation (WHO) describes the first task of health systems strengthening to "reconcile multiple objectives and competing demands" (WHO 2007). The NHS's current national institutional configuration makes this task extremely difficult, if not impossible. On this, at least, NHS staff seem to agree: a recent poll found that 71 per cent of NHS staff would support restructuring the national structure to simplify and clarify national leadership (PWC 2016). We propose just such a clarification is taken forward as a matter of priority.

Making the necessary changes to these structures would be more straightforward had the institutional architecture not been fixed in primary legislation. The result is that policymakers are having to resort to the use of inadequate 'work arounds' to the legislative framework, often mimicking more rational structures but without legal underpinning (for example, the creation of 44 STPs and the merger of Monitor, the NHS Trust Development Authority to create NHS Improvement, which is now being more closely joined up with NHS England). However, the need for 'work arounds' is slowing progress towards integration, and leading to

a breakdown in clarity and transparency regarding where and how decisions are being made.

NATIONAL SIMPLIFICATION

We propose that a single NHS Headquarters is established, reporting directly to the Department of Health. This should incorporate what is currently NHS England, NHS Improvement, Health Education England, and the health protection and delivery functions of Public Health England. This is the logical conclusion of recent announcements of the near-merger of NHS England and NHS Improvement and the creation of a single finance and performance management system, albeit with the retention of two chief executives due to the statutory framework. The NICE and the CQC would complete the national institutional architecture.

The service delivery elements of health protection in Public Health England (the national screening programme, vaccinations and immunisations, addiction services, and sexual health services) should be transferred to the NHS Headquarters. The health promotion functions should be delegated in full to local authorities, with the budget flowing directly from the Department of Health to local government. National policymaking for public health should continue under the chief medical officer of England in the Department of Health.

RECOMMENDATION
Merge NHS England, NHS Improvement, Health Education England and the health protection and delivery functions of Public Health England into a single NHS Headquarters reporting to the Department of Health.

LOCAL SIMPLIFICATION

The fragmentation of local commissioning structures – exacerbated by the 2012 Health and Social Care Act – runs completely counter to evidence. No other health system in the world has chosen to fragment rather than consolidate. In 1990, Germany had around 2,000 healthcare payers; by the turn of the millennium, this was close to 200, and today it is nearer to 50. Denmark consolidated from 13 counties to five larger regions (Denmark Ministry of Health 2017); Norway from 18 counties in 2002 to a single 'board of health supervision' with four health regions by 2007 (Norwegian Directorate of Health 2009). We are now attempting to do the same thing, but against the grain of the legislation.

As we set out in the interim report, with the benefit of strong relationships, leadership and some ingenious work-arounds, it is possible to pool commissioning functions and integrate care, but in these cases the solution lacks transparency and is on shaky legal grounds. Meanwhile, in most areas the barriers to achieving change (at least at pace) are too great. Reform is the exception and not the rule. It is time to correct this by bringing together all elements of the health and care system (primary, community, acute, mental health, social care and some specialised care) into five to 10 single strategic commissioners.

These bodies – known as health and care authorities (HCAs) – would replace CCGs, STPs and NHS England regions and have genuine powers to intervene in local health and care economies. They should focus on setting local priorities, ensuring national standards and shaping system-wide changes (for example, change programmes, reconfigurations etc). HCAs would be governed by a board of non-executive directors made up of one-third local NHS leaders (including clinicians),

one-third local government leaders, and one-third lay members and voluntary sector leaders.

RECOMMENDATIONS

Establish five to 10 health and care authorities as the strategic commissioners of health and care services.

Abolish all 195 clinical commissioning groups, NHS England local area teams, and NHS Improvement regional offices

SYSTEM SIMPLIFICATION

In some respects, the 2012 Act was merely the culmination of a 30-year experiment with quasi-markets that began with the 1991 introduction of the internal market. This change created a split between the bodies that commission care and those that provide it, with the latter competing against each other to win contracts. This split has been deepened over the years by an increase in the ability of private providers to compete for NHS contracts, amongst other things.

Proponents of these changes argued that the internal market would be a more effective way of allocating limited resources, resulting in better care for less money. They argued it would do this by allowing commissioners – and later, following the introduction of payment by results and the tariff, individual patients – to select the best provider and in so doing displace other providers, creating stronger incentives for providers to deliver better care and value for money. Proponents have also claimed that it would act as a counter-weight to the dominance of providers, allowing commissioners to challenge traditional patterns of resource allocation and move more care into the community.

However, in reality the evidence for any of these claims is minimal. There is some very limited – and highly contested evidence – that the increase in competition between 2000–10 led to a small improvement in quality and efficiency (Cooper et al 2011; Gaynor et al 2011) while other studies have found no – or even negative – effects (Propper et al 2004, 2008a). Likewise, the evidence that the provider-commissioner split has driven a new model of more integrated and community focused care is weak: it is exactly because it has failed to do this that we are still trying to reform the health and care service today.

Meanwhile, we have significant evidence that the transaction costs of the market are high (Paton 2014). Putting services out to tender usually results in NHS providers continuing to provide services; however, the procurement process creates significant direct (for example, the cost of running the process, staffing commissioners) and indirect costs (for example, changeover costs, staff uncertainty, disruption). The reality is that the commissioning arrangements in the NHS appear to subtract value rather than to add value. It is time to end what is very clearly a failed experiment by ending compulsory competitive tendering for services.

RECOMMENDATIONS
Terminate the compulsory competitive tendering requirements for services.

HCAs (or ICTs if they have whole care budgets) should have the ability to commission out services but this should be optional.

EMPOWERING PATIENTS

Patient choice is guaranteed under the NHS Constititon. We do not believe that this right should be withdrawn from people. It is a principle that is rooted in the moral and clinical importance of engaging and empowering patients, not the technocrats' ambition to create quasi-markets. Patients empowered in this way are more likely to take greater responsibility for their own health, and to dedicate their own time, effort and energy to solving their health problems. This partnership is especially important for those with long-term conditions and their carers. We must therefore continue to empower patients with greater choice, better information, and more control and influence.

Moreover, patient choice is sometimes presented as the pre-occupation of the wealthy and the educated, yet the evidence shows that it is the poorest and least well educated who most desire greater choice. The British Social Attitudes survey consistently finds that people in routine and semi-routine occupations express a stronger desire for choice that those in managerial or professional occupations; those with lower education attainment express a stronger desire for choice than those with a higher level of education. A health service without freedom of choice is not one capable of providing personal care. Indeed, when the health service was founded in 1948, the Attlee government informed members of the public that they would have a choice of GP from the outset.

RECOMMENDATION
Patient choice should be retained with money following the patient if they choose to use services outside of their locality.

7. REVITALISING QUALITY AS THE ORGANISING PRINCIPLE

The first and most basic objective of all healthcare services is universal coverage and access to healthcare when it is needed most. As a goal, this is uncontested in every country (with the notable exception of the United States). Once universal coverage has been achieved, as it has in the UK, health systems must shift their focus from the quantity to the quality and efficiency of care.

In 2008, *High Quality Care for All,* set out to make quality of care the organising principle of the NHS (Darzi, 2008). More recently, the Five Year Forward View recognised the importance of driving improvements in quality: 'closing the care and quality gap' is one of just three strategic challenges it is looking to address (NHS 2014).

WHAT DO WE MEAN BY THE QUALITY OF CARE?

High Quality Care for All made the argument that quality of care was best understood from the perspective of the patient or service user. It made a clear distinction between access to care – receiving the care required in a timely and convenient fashion – and quality of care. The report brought clarity to quality by defining three distinct dimensions.

1. **Safety.** The first dimension of quality must be that we do no harm. This means ensuring the environment is safe and clean and as harm- and error-free as possible. It is particularly true for those that are most vulnerable, especially for older people at home, in care or nursing homes, or healthcare facilities.

2. **Effectiveness.** This means providing care that works as effectively as possible. This can range from maintaining mobility and independent living to providing evidence-based therapies and treatments, to boosting survival rates for complex surgery.

3. **Experience.** This means care that is caring: providing services with compassion, dignity, and respect. It also means an experience of interacting with services that is convenient and similar to the standards of service we would expect in other areas of life.

As the interim report of this review set out this has paid off. The NHS has maintained or improved quality of care over the past decade. The same is true of social care, where both self-reported outcomes and CQC ratings show signs of progress. This is testament to what can be achieved if quality is put at the forefront of the policy agenda. However, we must not get complacent. Too often, improvement has been from a low base and is subject to too much variation. Likewise, there is growing evidence that we are reaching a tipping point, with the drivers of improvement coming up short against the pressures on the system.

It is vital that we intervene now to lock in the gains we have made and deliver more progress in the years to come. This means recommitting to quality as the organising principle in the NHS, re-launching the National Quality Board – to be chaired by the secretary of state for health – and tasking this body with authoring

and overseeing the implementation of a new Quality Strategy for England. The quality agenda in the NHS must also be joined up to the quality agenda in social care, which is set out in the Quality Matters programme (DoH and CQC 2017).

RECOMMENDATIONS

Recommit to quality as the organising principle of the health and care system.

Re-launch the National Quality Board, to be chaired by the secretary of state for health and social care.

Task the National Quality Board with authoring and overseeing the implementation of new Quality Strategy for England, with efforts made to join this up with social care.

Policy has principally focused on the 'hard levers' for quality improvement (see figure 7.1) (Ham 2014). These include performance targets, league tables, regulation, competition and structural change. There has been less focus on 'soft levers', such as patient empowerment initiatives and interventions, which look to building capacity in health and care organisations (Molloy et al 2016). We have already set out in this report the need for legislation change and reform in the use of competition and commissioning in the NHS, but reform is also needed across the other levers of change in the system in order to deliver high quality care for all.

FIGURE 7.1: WE NEED A SHIFT FROM 'HARD' LEVERS SUCH AS MARKETS AND REGULATION TO 'SOFT' LEVERS SUCH CAPABILITY AND USER LED DRIVERS OF CHANGE

A framework for thinking about change in the NHS

Source: Adapted from Cabinet Office (2006)

REGULATION

Regulation in England – undertaken primarily by the CQC in England – is a system of provider inspections, with performance measured against national standards and legal requirements. The CQC's ratings and reports are published for transparency, and poor performance can result in an intervention by the CQC. This intervention may be 'informal' (for example, provision of recommendations or support) or 'formal' (for example, putting a hospital into special measures or even closing it down) (Schweppenstedde et al 2014).

It is widely accepted that regulation of this nature has a role to play in quality improvement. There is some evidence to back this up. The CQC's own ratings show improvement in quality on the back of inspection (something confirmed by independent studies), and a majority of providers argue that inspection leads to an improvement in performance (CQC 2017b). Likewise, there is little doubt that the CQC has been crucial in rebuilding public trust in the NHS in the wake of public scandals like Mid Staffs[10]. However, there is also a growing consensus that it is time for regulation in England to evolve.

First, while the larger role for played by the CQC since Mid Staffs has ensured that providers meet a baseline level for quality and safey, this process of intrusive inspection should not be like painting the Forth Bridge: when all trusts have been inspected in great detail, it does not make sense to reapply an identical process to all providers all over again in a never-ending cycle. Instead, we should evolve towards a risk-based and intelligence-led model of regulation. This means much more focused efforts, led by evidence, and directed at reducing risk. This will help to address concerns that the burden of regulation and inspection have become too great.

Second, a number of commentators have highlighted that regulation has become increasingly heavy-handed with too much focus on formal interventions – which have been known to worsen performance (usually because it results in higher staff turnover) and not enough informal support and development (Ham et al 2016). Formal interventions are potentially the right response where patient safety is at risk but in many cases more informal interventions and support are more appropriate and would deliver better results. The 'carrot' and the 'stick' must be more balanced in future.

Third, there has been concern that regulation in England – focused as it is on individual providers rather than systems or place – re-enforces rather than repairs the fragmentations in the system. The CQC has started to address this by piloting place-based regulation (CQC 2016), including through the creation of initiatives like the NHS Success Regime (NHS 2015), which sees national bodies come together with commissioners and providers in local areas facing deep-seated challenges, to put in place a plan for improvement. This is the right approach and must be taken further.

And, finally, it has been noted by many that NHS providers are constantly subject to conflicting and competing priorities from national bodies such as the CCQ, NHSE and others. This stifles local innovation and leadership. The simplification of the national landscape set out in the previous chapter will help to resolve this, but one more change should be put in place. While the CQC should retain the right to intervene directly with organisations where it deems patient safety to be at risk all other guidance and recommendations should be made to the relevant health and care authority, who should have final say on what actions individual providers

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10   Over a period of 50 months between January 2005 and March 2009 a large number of patients Stafford hospital, a small district general hospital in Staffordshire, received poor care which resulted in higher mortality rates.

should be required to undertake. This will serve to consolidate feedback to one organisation which can reconcile it with other demands on the provider.

TARGETS

Targets have been central to the improvement in access to care – and have increasingly been applied to quality improvement too. These minimum performance measures are set nationally, and providers are expected to meet them. These can improve performance through a number of channels, including: a transparency and reputational risk model, an 'explain or comply' or intervention-based model, or through a financial incentive model (often integrated into the payment mechanism) (Molloy et al 2016). Performance targets were applied extensively in the period 2002–10. These largely focused on waiting times but also on some healthcare related infections. The evidence suggests that these measures did improve results (in particular through the transparency and reputation risk model) (Ham 2014).

However, there is evidence that targets have unintended consequences (Bevan and Hood 2006). They are subject to gaming to avoid penalties and sanctions under the performance management regime (ibid). There is also evidence that areas of care not covered by targets – particularly areas in the non-acute sector – may not receive sufficient attention which reinforces particular models of care (ibid). Moreover, there is also a consensus that there are too many targets and that they focus too much on inputs (for example, access) and not enough on outcomes (for example, quality), especially when these are also fed into the payment mechanism (for example, payment by results). The government should review all targets with a view to reducing their number; rebalancing them across all parts of the health and care system, and focusing more on outcomes and less on access.

REFORM FROM 'WITHIN'

There is clearly a role for both regulation and targets as drivers of quality in the future. However, it is widely recognised that achieving high quality care for all requires a mixture of both 'hard' and 'soft' levers – both 'control' and 'improvement' functions. It is also widely recognised that these functions have not been balanced over recent years. For example, a recent review by the Health Foundation found that between 2011 and 2015 there were 179 quality-focused policies or initiatives announced; nearly twice as many of these were focused on regulation than improvement (Molloy et al 2016).

This is problematic because there is a widespread recognition that, while 'control' functions such as regulation and targets can help improve performance from poor to good, it is unlikely to improve it from good to great (Barber 2008), which is precisely what is required in the health and care system today. This is because targets and regulation work by driving compliance rather than driving commitment to innovation and excellence (and in some cases it actively stifles these qualities by disempowering frontline staff and leaders) (Ham 2014).

To help push the quality agenda to the next level we must therefore move away from top-down levers as the main drivers of change and support NHS organisations and staff to lead and deliver improvements from within. This means appealing to the intrinsic motivation of staff and providing them with the skills, knowledge and support to offer high-quality and continually-improving care. This relies on devolved and localised changes, which include the following.

- **Leadership:** There is strong evidence that high-quality organisational leadership and staff engagement leads to improvements in staff morale, which in turn leads to higher patient satisfaction and quality of care (West et al 2011).

- **Staff training and development:** A lack of knowledge and skills among clinicians and managers is a significant barrier to improving quality in healthcare, with too many staff not enabled to meet their full potential (Molloy et al 2016).
- **Culture:** Organisations which develop a 'learning culture', set clear objectives, use data to measure performance against these, and makes time to include the users of health and care as well as staff in understanding what works and how to improve, stand a better chance of succeeding (ibid).

Inevitably, these drivers of quality are less tangible – and harder to achieve (at least from Whitehall) – than 'control' functions. But this does not mean that central government has no role to play. Part of this is to ensure that 'control' functions do not crowd out locally led 'improvement' functions. But it is also to encourage organisations and local leaders to go on this journey and giving them the tools to improve health and care, including a focus on the 'talent' and 'tech' required to create 'learning organisations' that drive change from within.

CASE STUDY: SALFORD ROYAL

There are a number of examples often cited as 'self-improving' organisations. Jönköping County Council in Sweden and Canterbury District Health Board in New Zealand are often seen as examples of quality improvement at work. Closer to home, Salford Royal NHS Foundation Trust (now Northern Care Alliance NHS Group) is often cited as the best example. The trust has one of the highest levels of patient satisfaction and consistently good performance in the annual NHS staff survey.

The trust first developed a quality improvement stategy in 2007, with the key goals being to reduce mortality, improve patient experience, reduce harm, and improve reliability. Staff are expected to be patient- and customer-focused, supportive of continuous improvement, respectful, and accountable. Staff are supported to put these values into practice through training and development, much of which is delivered in-house. The skills developed are then applied in a rolling programme of quality improvement projects.

RECOMMENDATIONS

The CQC should evolve to a risk-based, intelligence-led model of regulation, with a greater focus on system regulation, and a rebalancing of formal and informal interventions.

The CQC should make its 'must do' recommendations to providers, and its 'should do' recommendations to health and care authorities so that providers have a single, reconciled set of actions to complete.

The National Quality Board should review all targets applied to providers, reduce the number, and increase the focus on outcomes rather than inputs.

The National Quality Board should ensure its Quality Strategy re-balances the levers of change towards 'improvement' rather than 'control' functions.

8.
INVEST IN THE TALENT OF THE TEAM

Across the UK, some 4.2 million people are now employed in the health and social care sector. The health and care system depends on the talent and commitment of the whole team, whether social workers or nurses, doctors, porters or cleaners. The evidence that understaffing leads to poorer quality care – and puts safety at risk – is now well established. Likewise, poor leadership and demotivated staff are a pre-cursor to system failure. This makes the workforce trends experienced over the last decade all the more concerning.

The clearest example of the stress the NHS workforce is under is the number and breadth of staffing gaps across the system. One in nine nursing posts are unfilled (double the rate of just four years ago) (Molloy et al 2017). Unfilled vacancies for GPs have soared from 2.1 per cent in 2011 to 12.2 per cent in 2017 (Guardian 2017). And these are not isolated examples; these trends are replicated in most professions across the system (see figure 8.1).

FIGURE 8.1: STAFFING GAPS IN THE NHS ARE LARGE AND GROWING
Selected vacancy rates in the NHS, 2017
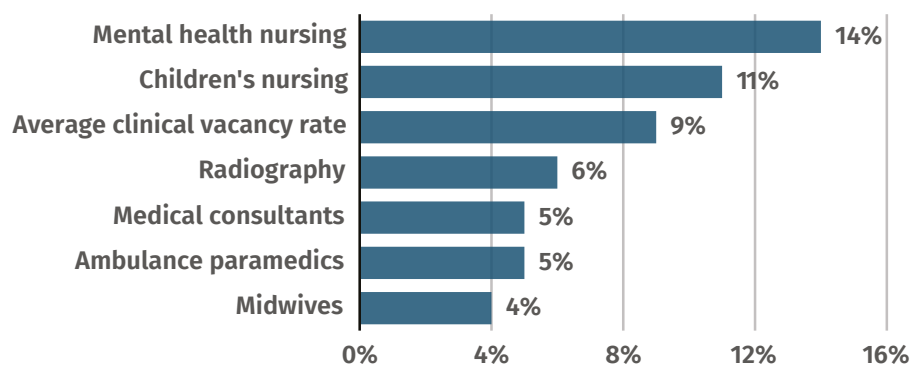
Source: Health Education England Strategy (NHS 2017c)

This problem is no less severe in social care, where the vacancy rate has increased from 5.5 per cent in 2012 to 6.6 per cent today (SfC 2017). This is driven in part by high turnover rates which have leapt from 23.1 per cent to 27.8 per cent over the same period. Such staffing problems are more acute amongst those on lower salaries and zero-hour contracts (ibid). Moreover, the evidence that staffing gaps are a threat to quality is now overwhelming (CQC 2014).

The workforce problem is not just one of numbers, but also of morale. Recent surveys show that almost half of GPs report low morale (Forster 2017) with two-fifths considering leaving the service, while a similar poll of Unison members including cleaners, radiographers, nurses and senior managers found that two-fifths of staff have considered quitting (Unison 2014).

Morale is one of the root causes of the staffing gaps within the service – some 92 per cent of staff think low morale is a cause of high staff turnover and vacancies (Wilmington Healthcare 2017) – but it is not the only one. Another of the main factors contributing to both recruitment and retention problems (as well as poor staff morale) is pay. A lack of progression opportunities, particularly for those on low pay (and in particular in social care), is a challenge. Meanwhile, poor workforce planning – an inability to predict future workforce needs and put adequate training and recruitment policies in place – is yet another one. If the NHS and social care system fails to get on top of these challenges in the coming decade, it will not be able to deliver high quality care for all. This will require a new pay deal and an integrated planning, training and immigration policy.

SCRAPPING THE CAP

NHS workers have experienced an unprecedented seven-year pay squeeze, with pay frozen for two years from 2011, then capped at 1 per cent for five years thereafter (Dromey and Stirling 2017). This has significantly eroded the value of pay in the NHS; pay for a band 5 nurse at the top of the scale is £2,880 less, or 9.1 per cent lower today than pay for the same role in 2010/11. Given this, it is unsurprising that net satisfaction with pay has plummeted, falling by 23 percentage points since 2011 (see figure 8.2).

FIGURE 8.2: NET SATISFACTION WITH PAY HAS FALLEN SIGNIFICANTLY OVER RECENT YEARS

Net satisfaction with pay 2010–2017, all NHS trusts in England
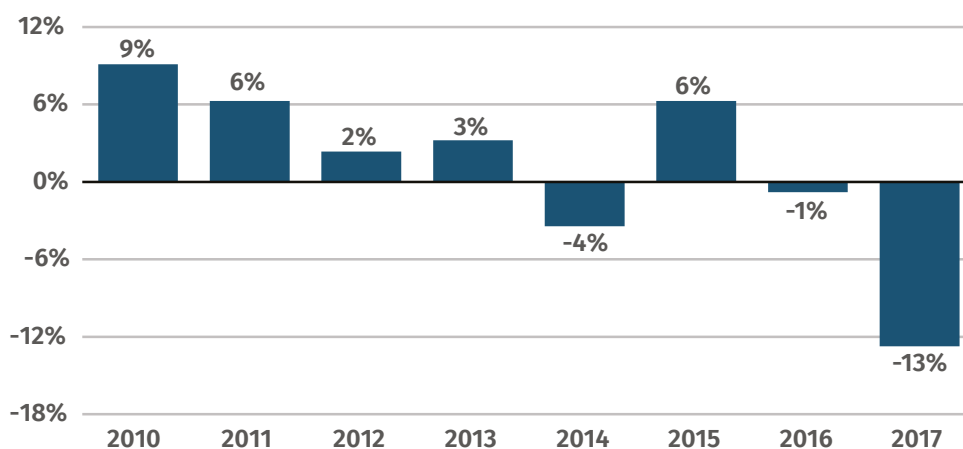
Source: NHS Staff Survey 2017 (NHS 2017d)

The government has finally recognised the injustice – and self-defeating nature – of this policy and agreed to lift the NHS pay cap, with a promise of a 6.5 per cent increase over the next three years. Those on the lowest band will see higher increases so that they earn above the living wage. However, this means that the majority who receive just the 6.5 per cent pay growth would be behind private sector growth, and only just above forecast inflation. Aside from workers on the lowest band (1), pay on every band would be far lower in real terms in 2020/21 than it was a decade before (see table 8.1).

Scrapping the cap was the right move, but the deal that replaces it will not resolve the problem. The Five Year Forward View argued that: "as the economy returns to growth, NHS pay will need to stay broadly in line with private sector wages in

order to recruit and retain frontline staff" (NHS 2014). However, since 2012/13, NHS pay has been increasing at a rate slower than private sector earnings (Dromey and Stirling 2017), and for the majority this will continue. This will potentially exacerbate the workforce crisis. The government should therefore keep this commitment going forward.

TABLE 8.1: PAY IN THE NHS FOR MOST WILL STILL LAG BEHIND WHERE IT WAS IN 2010/11 BY THE END OF THE DECADE

Change in NHS pay bands between 2010/11 and 2020/21

Band	Pay in 2017/18 (£)	Change in pay 2010/11–2017/18 (£, 2017/17 prices)	Change in pay 2010/11–2020/21 (£, 2017/18 prices)	Change in pay 2010/11–2020/21 (per cent)
1	15,671	-879.961	413.9	2.5
2	18,157	-1,146.69	-1,083.8	-5.6
3	19,852	-1,553.4	-1,484.7	-6.9
4	22,683	-2,433.81	-2,355.3	-9.4
5	28,746	-2,980.13	-2,879.7	-9.1
6	35,577	-3,817.38	-3,693.2	-9.4
7	41,787	-4,484.02	-4,338.9	-9.4
8a	48,514	-5,205.18	-5,036.0	-9.4
8b	58,217	-6,245.79	-6,043.5	-9.4
8c	69,168	-8,187.35	-7,946.8	-10.3

Source: IPPR analysis of NHS Employers 2011, NHS Employers 2017, www.nhspay.org 2018, OBR 2018

The challenge is perhaps even greater in social care where wages are considerably lower (see table 8.2). Some 90 per cent of the social care workforce are in the bottom quartile of workers in the economy in terms of pay. At least 30 per cent of care workers are paid at, or below, the national living wage (NAO 2018b). When additional work-related costs are factored in (on-call hours, travel costs) some studies suggest that up to one in 10 social care workers earn less that the minimum wage (NAO 2018c). As set out in chapter 3, sectoral bargaining should be introduced for social care. But we should go further. We should grant new powers to CQC to ensure the terms of the sectoral bargaining collective agreement are fully adopted by providers, and empower them to refer social care providers to HMRC for enforcement purposes if they are failing to comply with the minimum wage.

TABLE 8.2: PAY IN THE SOCIAL CARE SECTOR IS CONSIDERABLY WORSE THAN IN THE NHS

Median pay and growth in pay since 2011 in adult social care sector by job role

Job role	Median pay (£)	Change since 2011
Residential day and domiciliary care managers and proprietors	£29,987	-1.4
Senior care workers and home carers	£16,955	-3.7
Care workers and home carers	£13,703	0.7

Source: IPPR analysis of ASHE 2011 and ASHE 2017

WORKFORCE PLANNING, TRAINING AND DEVELOPMENT

At the heart of the problem of staff shortages is a failure to train and recruit enough people into the sector. There have been some attempts to address this, with the creation of new roles such as physician associates and nurse associates, as well as policy pledges to increase the number of nurses and GPs in training. However, while these policies are welcome, they are only part of the solution. The scale and breadth of the staffing gaps in the service needs a bolder and more systematic response.

The NHS has over 40 organisations with a direct role in workforce planning, but no one organisation coordinates these efforts into a coherent workforce strategy. The closest we have to a system leader is Health Education England (HEE), but there is a growing consensus that it does not have the ability or the firepower to coordinate what is a very strong set of representative organisations into a joined-up approach bold enough to address the scale of the challenge (HoL 2017). Its planning functions are also too divorced from the the overall reform strategy of the NHS and too distant from the local needs of NHS providers.

The task in social care – where workforce planning is overseen by Skills for Care – is even more challenging, as the sector is even more fragmented, and most provision is private rather than public. Moreover, the lack of a single organisation overseeing NHS and social workforce strategy has hindered integration and joint working across these interconnected sectors. This must be addressed if the health and care workforce is to be fit for the future.

HEE should be merged into the new NHS Headquarters and given a role in workforce planning for social care as well. HCAs should be given a significant workforce planning function to ensure that workforce stategy is rooted in a genuine understanding of, and partnership with, local health and care providers. NHS Headquarters and HCAs should lead a new workforce strategy for health and social care with a focus on planning for the future (for example, more focus on technology and a shift towards care out of hospital). This strategy should aim to ensure that England is self-sufficient in the education and training of doctors, nurses and allied health professionals by 2030. In time, it should even go further: our higher education sector as well as the NHS can allow the UK to become a global hub for medical education and training. Not only could this become a major export activity for the UK post-Brexit, it is also an opportunity to expand our 'soft power' around the world.

Achieving this will require significant investment in traditional roles such as doctors and nurses, but it should also look embrace new ways of working. New roles such as care coordinators, physician associates and nursing associates should be embraced. There should be a focus on investing in the workforce outside of the acute sector which has been neglected in recent years. And we must seize the opportunity of apprenticeships. Boosting the number of apprenticeships

could both widen access to high quality careers in the NHS, and ensure the NHS has the skills it needs for the future.

The apprenticeship levy, which came into force in 2017, will raise £200 million for the NHS. To recoup the total funding raised each year, the NHS would need to recruit 27,500 apprentices every year – far more than are recruited at present (HEE 2017). The growth of apprenticeships in the NHS has been slow because levy funds can only be used to cover off-the-job training costs, leaving NHS trusts to cover both wage costs and the cost of back-filling roles for the 20 per cent of time apprenticeships are doing off-the-job training. Going forward, apprenticeship levy funds raised within the NHS should be ring-fenced for the sector, with unspent levy funds available to re-invest in training in the NHS. NHS trusts should be given flexibility to use levy funds to pay-in a proportion of apprentice wage costs in key shortage areas, such as nursing, in order to boost apprenticeship recruitment. An apprenticeship pay rate – equivalent to at least the living wage – should be collectively agreed and included in agenda for change payscales.

RECOMMENDATIONS

Aim to be self-sufficient in the education and training of doctors, nurses and allied health professionals by 2030.

Establish the UK as a global hub for medical education and training by 2030, training more medical staff than the NHS needs each year.

Merge HEE into NHS Headquarters.

Create a new workforce strategy with a focus on planning for the future.

Apprenticeship levy funds raised within the NHS should be ring-fenced for the sector, with unspent levy funds available to re-invest in training in the NHS.

An apprenticeship pay rate – equivalent to at least the living wage – should be collectively agreed and included in agenda for change payscales.

IMMIGRATION

While the goal should be for the NHS to become self-sufficient in health and care workers by increasing training and development opportunities over time, the immediate workforce shortages must be addressed through immigration. This is because it takes at least 10 years to train a doctor and three years to train a nurse (while training for social care roles tends to be much shorter and less formalised). This has been one of the main policy responses to staff shortages over the last decade or so: while the UK has long been more dependent on doctors and nurses trained internationally than other countries (see figures 8.3 and 8.4) this dependency has grown of late (Molloy et al 2017).

FIGURES 8.3 AND 8.4: THE UK IS DEPENDENT ON IMMIGRATION TO STAFF THE NHS

Percentage of foreign trained nurses and doctors, 2016
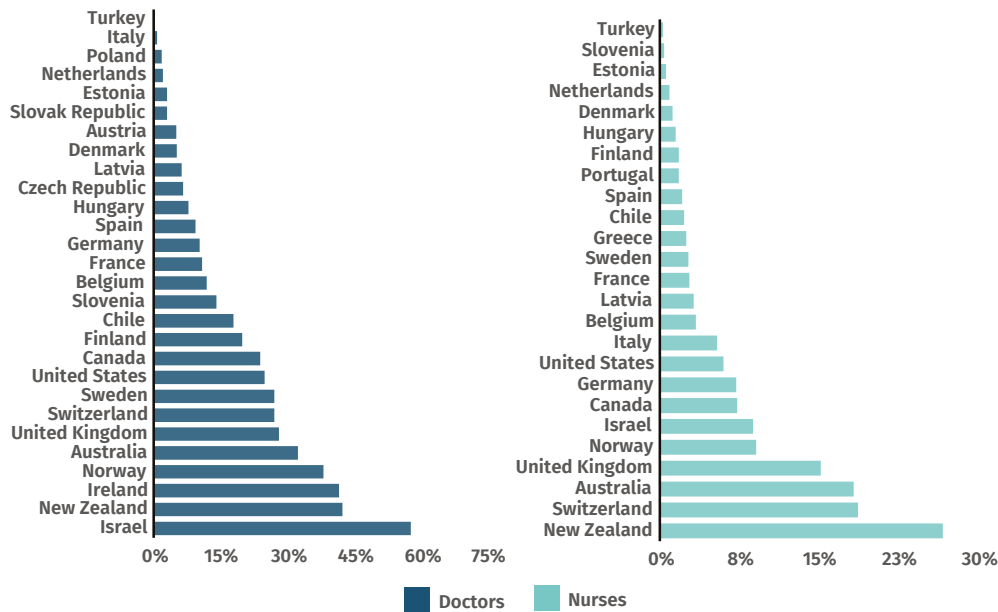
Source: OECD

The EU in particular has become an increasingly important source of human capital for the health and care sector in recent years, making up 5.6 per cent and 7 per cent of NHS and social care workforce respectively (McKenna 2017). An end to the freedom of movement as a result of Brexit – without a corresponding increase in immigration from outside the EU – could significantly exacerbate staffing shortages. Indeed, there is some evidence that the vote is already having an impact on recruitment: for example, the number of EU nationals registering as nurses in the UK has fallen by 96 per cent since the referendum according to the Nursery and Midwifery Council (NMC 2017).

It will therefore be crucial – at least in the short term, though probably beyond that as well – for the UK to have an immigration policy that is favourable to health and care staff. What we need is an immigration policy that is integrated with the health and care systems workforce planning and training strategy. This could be achieved by obtaining a Brexit deal that retains free-movement of labour. However, given the current government's stance on Brexit, it seems more likely that we will have to prioritise a post-Brexit immigration system that gives preference to people with the skills required to fill gaps in both health and social care. As a minimum, this should include exempting NHS workers and senior care workers from the Tier 2 cap,[14] including senior care workers in the shortage occupation list, agreeing an extended transition period for EU freedom of movement for health workers (six years) and social care workers (three years), and offering British citizenship to all EU citizens currently working in the NHS.

RECOMMENDATIONS

Integrate the UK's immigration policy with workforce planning and training in health and care.

Exclude NHS workers and senior care workers from the Tier 2 cap.[11]

Include senior care workers in the shortage occupation list.

Agree an extended transition period for EU freedom of movement for health workers (six years) and social care workers (three years).

Offer British citizenship to all EU citizens currently working in the NHS, waiving all fees and charges.

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11 The immigration system currently operates very differently for EU and non-EU nationals. As it stands, EU citizens have a right to live and work in the UK with few restrictions, and so can be hired in the health and social care sector with no more bureaucracy than for UK workers. Non-EU citizens, on the other hand, typically have to be recruited through the Tier 2 system for skilled workers, which has become increasingly restrictive over the past decade. It requires employers to sponsor their prospective migrant employee, meet certain salary and skills thresholds, and pay a range of additional visa fees and charges. Tier 2 migrants are also subject to an annual and monthly cap.

9.
TIME AND RESOURCE TO TRANSFORM HEALTH AND CARE

The scale of the change set out in this document – and in the Five Year Forward View – is significant. It is a much bigger and more fundamental task than the reorganisations which have characterised NHS policy over recent decades. This is because it goes beyond administrative re-organisation and changes in structure to fundamental changes in the way in which care is delivered at all levels of the service.

Many commentators have argued that the Five Year Forward View – while setting the right overall vision – is yet to deliver the scale of change required on the ground. This is partly an inevitability: the evidence is clear that change programmes at scale take time. Similar examples – such as the de-institutionalisation of mental health in the 80s and 90s, or the London Challenge, which focused on inner city schools under the New Labour government – took a decade or more to bear fruit (Charlesworth et al 2015).

However, there is also evidence that change in the NHS is being held back, not just by some of the challenges set out in earlier chapters and a lack of day-to-day funding, but also by a paucity of investment in the process of transformation itself. Evidence from the examples of change programmes set out above but also similar examples in Denmark and Canada demonstrate that change costs money (ibid). Four types of cost in particular can be identified.

1. **Programme infrastructure:** Specific members of staff and functions designed to lead and manage change within and across organisations.
2. **Staff time:** Funded time for frontline and commissioning staff to spend away from the 'day job' to build relationships and develop new ways of working.
3. **Physical infrastructure:** Changes in physical infrastructure, predominantly focused on improving IT.
4. **Double-running costs:** Concurrent running of new and old services to ensure people received adequate care while new services bed in.

There has been some recognition of the need for this investment so far. The Five Year Forward View specifically spoke of the need for "a model to help pump-prime and 'fast track'… new care models" (NHSE 2014). In response, the government set up a small transformation fund of £200 million for 2015/16, alongside other small funds, such as the Prime Minister's Challenge Fund and the Nursing Technology Fund.

However, even these meagre sources of transformation funding often failed to provide funding of the kind needed for system-wide changes such as those set out in this paper. For example, they rarely, if ever, provide funding across organisational boundaries; they often only provide short-term funding and will not fund transition costs (such as double running).

There were signs that the system leaders understood this when these smaller funds were supplemented by a much larger Sustainability and Transformation Fund for the whole system, which partly aimed to enable the changes set out in the Five Year Forward View. However, in reality the evidence is clear that the majority of this funding has been put into acute providers to reduce deficits (NAO 2018) and the fund has recently been renamed the Provider Sustainability Fund.

A TRANSFORMATION FUND

It is clear that, without access to transformation funding, the health and care system will struggle to achieve the changes required in the years to come. The service needs a sizeable investment in order to achieve change. Recent analysis by the Health Foundation and King's Fund suggests that the system requires between £1.5 and £2.1 billion per year (about 2 per cent of current NHS spend) to properly enable change across the system (Charlesworth et al 2015).

Such a fund would have three major strands.
1. **Efficiency:** To support implementation of plans to achieve higher rates of efficiency growth across all services and organisations in the NHS and ensure that current services are delivered cost-effectively.
2. **Innovation:** To invest in a range of new models of care that can test the optimal scale and nature of transformation required to redress the balance in how services are delivered in order to meet the needs of the future population.
3. **Roll-out:** To seek to roll out the successful models of care in order to improve system efficiency and quality and, therefore, value for money across the whole of the health and care system in England.

Funding during the first few years would focus on the first two strands, but as the evidence of what works builds up it would shift across to rolling out successful models of care.

RECOMMENDATION
Establish a Transformation Fund for Health and Care in England of 2 per cent of NHS spend – on top of the core funding settlement for the NHS and social care.

CAPITAL FUNDING

There are also additional needs for investment in non-revenue funding in the NHS. The most pressing of these is capital. The NHS estate is creaking after a number of years in which funding allocated to capital has been switched to plug deficits in the revenue funding of NHS organisations. This has resulted in a 'maintenance backlog' of £5.5 billion in 2017, £1 billion of which is considered 'high risk' (more than double the amount just two years ago) (NHS 2017b). This is not sustainable.

Likewise, there are significant funding requirements needed to transform the NHS estate to ensure it is fit for purpose. This is especially true in primary and community care, where existing premises are not set up to deliver care at scale as set out earlier in this paper. There are 7,962 GP practices in England, and BMA research shows over half of these are too small to deliver the increased level of service provision that NHS England would like to see GPs provide. Replacing these with larger, modern surgeries offering a broader range of services requires the development of approximately 1,300 new buildings potentially resulting in an additional £5 billion in capital costs (BMA 2014).

Some of the additional funding required for maintenance and transformation can be raised by making more efficient use of the existing estate. Monitor recently estimated that the potential value released if all trusts managed their assets as efficiently as the top performing quartile could be up to £7.5 billion (Monitor 2013).[12] However, realistically it will be challenging to achieve this, especially in the short term. The Health Foundation and The King's Fund calculate that a more realistic figure in the short term would be around £1.5 billion (Charlesworth et al 2015). Moreover, as it stands there is often limited incentive for trusts to unlock this potential. Going forward, we should overcome this by passing ownership of NHS buildings over to HCAs, with a revenue sharing deal agreed between the HCA, trust and national government.

However, even if this revenue is unlocked – and considering the additional £10 bilion of capital funding recently announced (Williams 2017) – it is unlikely to be enough to fill the maintenance backlog and support the transformation that is needed across the system. The government should therefore increase the capital intensity of the health and care system to promote greater productivity and delegate it to HCAs to drive local priorities (but guarantee that it will be spent on capital investment).

PFI AND COST OF CAPITAL

More investment could be achieved if the existing capital funding arrangements in the NHS were fairer and more sustainable. The most obvious challenge facing a large number of NHS providers is the legacy of private finance initiative (PFI) contracts. PFI is a way of funding public capital projects – such as NHS hospitals – using private sources of money to pay for the upfront costs of their design, build and maintenance. The costs of this borrowing are repaid annually over many years, giving the private sector a profit and the NHS a new hospital. Across England, there are 127 schemes – mainly in the NHS but also in social care. Their total capital value now adds up to nearly £13 billion (Appleby 2017b), but the NHS is set to pay some £82 billion over the life of these PFI contracts.

There is significant variation in the cost of capital between trusts. While PFI payments are just a few percentage points of total income for some trusts, they average 5 per cent overall and some trusts are paying 16 per cent of their total income (ibid). This is a serious legacy problem. It makes no sense to hold current management teams accountable for the decisions of their predecessors; nor is it fair for people in different parts of the country to have differential resources available for frontline care due to past decisions. For that reason, the government should now act to equalise the cost of capital across the NHS so that no one trust is burdened with disproportionate capital costs. Total capital costs would be pooled, with each trust charged a uniform rate as a percentage of capital employed.

Moreover, as interest rates have fallen in the wake of the financial crisis, it has become increasingly obvious that PFI contracts are a bad deal for the taxpayer and for the hospitals concerned. This is because the gap between the rate at which government can borrow and the interest rate charged for PFI contracts has widened to up to 5 percentage points (NAO 2018d). Going forward, the government should buy out any PFI deals where it is cost-effective to do so.

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12   However, it should be noted that it would be difficult to fully realise these savings in practice for several reasons, including the challenge of selling portions of assets.

RECOMMENDATIONS

Increase the capital intensity of the health and care system to promote greater productivity.

Delegate capital spending to HCAs and guarantee that it will be spent on capital investment.

Pass ownership of NHS buildings over to HCAs with a revenue sharing deal agreed between the HCA, trust and national government.

Equalise the cost of capital across the NHS to eliminate anomalies resulting from the private finance initiative.

10.
A LONG-TERM FUNDING SETTLEMENT FOR HEALTH AND CARE

The last decade has been a challenging one for health and care. Spending on the NHS has grown, but it has still been the most austere decade in its history. Meanwhile, the crunch has been even tougher for social care, where funding has fallen in real and cash terms over the same period. In this context, both the NHS and social care have done well to find ways to deliver 'more for less', with productivity in the NHS well above its historic trend.

The main sources of higher productivity in recent years have been pay restraint and reductions in the tariff. These are no longer sustainable, and future productivity improvements will need to come from more fundamental changes, such as the uptake of automation and simplification of the system, as proposed in this report. Some productivity gains have been fictitious, achieved through accounting measures such as draining balance sheets, switching capital to revenue, or banking exchange rate movements on expenditure on patients treated abroad. These devices have now been exhausted. As a result, there is an emerging consensus that the health and care system needs more investment.

The need for a long-term settlement is compounded by the challenges of the decade ahead. We will reach a demographic tipping point in the 2020s with a 30 per cent increase in the number of people over 65, compared to just 2 per cent in the working age population. Financial pressures will also come from the onward march of science and technology and from the growing expectations of that track to developments in wider society. As our interim report showed, if they remain unchecked, these underlying cost pressures will push healthcare expenditure from £123 billion today to £200 billion by 2030.

However, a new financial settlement for the health and care system is not just about the quantity of money. It is also about how that money is provided to the system. Historically, NHS funding has followed a 'feast and famine' pattern. Across the cycle as a whole, the UK ends up spending a similar share of GDP to many other advanced nations. Yet it arrives at this destination in a wholly inefficient way. The lack of certainty created by the 'feast and famine' cycle means the NHS takes short-term spending decisions, rather than making long-term investments.

In the feast years, there is more money than the NHS can efficiently absorb. Funding growth exceeds output growth and so real productivity falls. Conversely, in famine years, the gap between demand and funding cannot be wholly addressed by productivity improvements, and so vital services are cut and care is rationed. The 'feast and famine' cycle renders both left and right-wing critiques of the NHS simultaneously right and wrong. Money is indeed wasted in the feast years and essential services are cut in the famine years. This is not the right way to finance a vital and cherished public service.

AN END TO 'FEAST AND FAMINE'

New analysis undertaken for the interim report of this review showed that overall funding pressures on the NHS will increase from £123 billion today to £200 billion by 2030 (Darzi et al 2018). These increases are significant and will require funding to grow over the years to come. In recognition of this, we should put the NHS back on its long-run funding trajectory of funding growth of 1.54 per cent above whole economy GDP growth (the rate of NHS funding from 1960 to 2015). Over the parliament this will result in average growth of 3.5 per cent per annum, with total spending rising from £123 billion to £139 billion when transformation funding is factored in. By 2030, this will have increased further to £183 billion including transformation funding (see annex 1). Assuming the NHS budget was set to rise in line with increases in the tax base (GDP) anyway, this would mean finding an additional £10 billion in funding by the end of the parliament, and an additional £32 billion by 2030. Even then, the NHS would be required to deliver productivity growth to fill the remaining gap – meaning it would have to match or exceed its long run trend of 0.8 per cent.

FIGURE 10.1: PRESSURES ON THE NHS ARE SET TO GROW

Demand pressure and funding, 2017-2030 (£bn) real (2017/2018 prices) and propsed growth in NHS spending
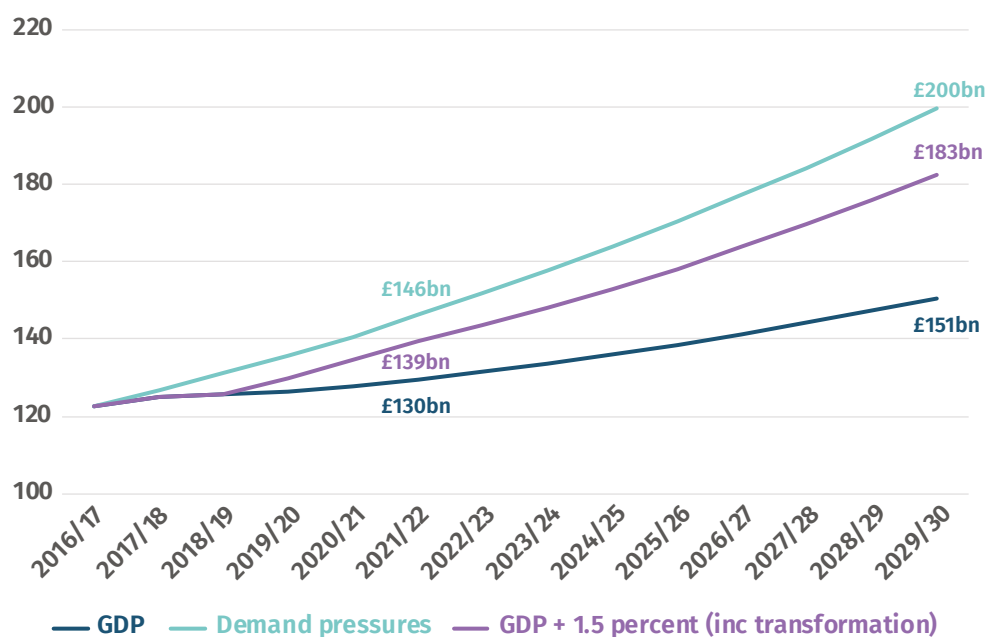
Source: Carnall Farrar Analysis

The required increases in social care spending as a percentage of current expenditure are even greater. As we set out earlier in the report, maintaining our existing system would require around an additional £11 billion per annum by 2030. The incremental cost of moving to free personal and nursing care would be £7.6 billion by 2030 on top of that (Bottery et al 2018). Assuming spending on social care was set to rise in line with the increases in the tax base anyway (GDP), properly funding the existing system and providing the funding needed for free personal care would mean finding an additional £7.8 billion per year in funding by the end of the parliament and £13.5 billion a year by 2030.

FINDING THE FUNDING

There is a significant fiscal challenge to find the funding required by the health and care system. Under the scenario set out above – fully funding the NHS at its historic growth rate and the introduction of free personal care – the health and care system will require an extra £17.6 billion per year in spending by the end of the parliament and £45.5 billion by 2030. There are three possible sources of additional revenue:

1. redirect spending from other government spending
2. raise additional revenue through out-of-pocket user charges
3. raise additional revenue through taxation.

Since 2010, increases in funding for the NHS have largely been met by cutting government spending in other areas (Appleby 2017). Only health, transport and international development are due to see increases in the period 2010/11–2019/20 under existing government plans. Given the scale of the pressures facing health and care in the years to come, this path would seem increasingly unsustainable as it would require the government to cut ever deeper into the budgets of other public services – many of which are already at breaking point already – to keep up with the demands of system.

Moving to a system of private financing for health is not desirable in England, as it generally leads to increased health and care costs to society as a whole (OECD 2010). A number of reviews have concluded that no one funding model or particular mix of funding mechanisms is systematically superior to others across all domains of quality (HoL 2017). Specially on efficiency, the evidence is clear that Beveridge systems are less expensive than both private insurance systems and social insurance models (OECD 2010). It is a fundamental error of logic to say that something is unaffordable, so we should move to something more expensive. Moreover, all the international evidence shows that co-payments are effective at influencing patient behaviours but poor methods of revenue raising since the costs of collection are significant.

This means that, if we want a health and care system that delivers high quality care for all, the majority of the additional revenue required would need to come from tax rises. Politicians are usually reluctant to propose this. But, unlike most tax rises, an increase in tax to fund the NHS commands significant public support: recent polling undertaken by the The King's Fund and the Nuffield Trust found 61 per cent of the public are in favour of paying more tax to properly fund the NHS (Robertson et al, 2018). This support is strongest when the funding is hypothecated for the NHS and derived from National Insurance (as many think that this is what already happens).

THIS PARLIAMENT: FINDING THE FUNDING

Using IPPR's tax and benefit model, we can set out how the additional funding requirement for the NHS and social care – a cumulative total of £36.1 billion this parliament – can be found. This shows that the majority of this funding can be achieved through a 1 percentage point increase on employers', employees' and

self-employed rates of national insurance, as well as as introducing National Insurance Contributions charged on the employment income of pensioners. If introduced in 2019/20, this would raise an additional £35.6 billion over the remainder of the parliament. We propose that this is channelled into health and care via a 'soft' or 'partial' hypothecation mechanism, where the tax rise is used to fund health and care but is not formally ringfenced from wider general taxation.

Some commentators have argued that 'soft' hypothecation is disingenuous because in reality it forms part of general taxation with no means of proving that it has permanently increased funding to health and care. However, full hypothecation is widely considered bad fiscal policy (as it restricts the flexibility of government to manage spending) and is complex to design and administer for the NHS (Murray 2018). Meanwhile, the alternative – no hypothecation – is even more challenging as the public only supports tax rises when they know how the additional funding is going to be spent. 'Soft' hypothecation seems to be the best compromise.

Beyond this parliament, the NHS should primarily be funded through further increases in the tax rate (discussed in the next section) but additional social care funding should be achieved through a 'new social contract' between the citizen and the state. This would mean changing the package of benefits for older people (especially for those with lower care needs) in return for free personal and nursing care when they need it most. This could be achieved by means testing Winter Fuel Payments by restricting it to people eligible for Pension Credit, as well as Attendance Allowance and Carer's Allowance[1314] (DWP 2017). These changes would not need to be introduced until 2021/2.

TABLE 10.1: TAX RISES ARE NEEDED TO FUND THE NHS IN THE SHORT AND LONG TERM
Revenue raised (£bn) by various changes to tax and spend policies

	Additional revenue raised in England (£bn)		
Tax or spend change	19/20	20/21	21/22
1 percentage point (1pp) rise in employer NICs rate	4.8	4.9	5.0
1pp rise in employee NICs rate	4.5	4.6	4.8
1pp rise in self-employed rate	0.9	0.9	1.0
Bring pensioners into NICs on employment income, at higher rates	1.3	1.3	1.1
Means test Winter Fuel Payments	-	-	1.5
Total	**11.4**	**11.7**	**13.4**
Total over parliament			**36.6**

Source: IPPR Analysis using the IPPR tax and benefit model based on Family Resources Survey 2015/16 and 2016/17, DWP (2017)

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13   There is a precedent for this, with people in Scotland ineligible for Attendence Allowance if they take free personal and nursing care.

14   Means testing Winter Fuel Payments using Pension Credit as a 'gateway benefit' would save £1.8 billion per year. Attendance Allowance currently costs £5.8 billion per year and Carer's Allowance costs £3.2 billion per year. There are no recent estimates of how much means testing would save.

TABLE 10.2: NATIONAL INSURANCE IS OFTEN SEEN AS AN 'NHS TAX'

Current and proposed rates of national insurance on various groups

Type of rate	Current %	Proposed %
Employee rate above primary threshold, below UEL	12	13
Employee rate above UEL	2	3
Employer rate above lower profits limit, below upper	13.8	14.8
Self-employed rate above Upper Profits Limit	9	10
Self-employed rate above upper profits limit	2	3

Source: HMRC (2018)

A LONG-TERM SETTLEMENT

Beyond this parliament, funding pressures continue to grow as we have set out in this chapter. Though it is clear that additional tax revenue will be required, establishing the exact funding requirements of the NHS and social care and the implications of this for tax policy into the future is challenging. This is because the total additional tax requirement required for health and social care is very sensitive to growth and productivity in the economy. If growth is higher, taxes will have to rise less to fund the settlement set out above; if it weak they will have to rise more. The modelling we have set out in this review is indicative.

Over the longer term, we therefore recommend the creation of an independent body with a statutory responsibility to set out the funding requirement on health and care system (in order to meet the obligations set out in the NHS constitution and legislation on social care), the additional tax requirements needed to meet these demands, and potential changes to taxes (with a focus on 'partial' ringfencing of national insurance). This body would be similar in remit and design to the Low Pay Commission or the Office for Budget Responsibility (OBR). This should be established as a non-departmental public body, reporting to parliament rather than to government. A similar proposal was recently put forward by the House of Lords Select Committee on the Long Term Sustainability of the NHS and Adult Social Care and by the The King's Fund (Murray 2018).

RECOMMENDATIONS

Fully fund the NHS for the rest of the parliament by raising national insurance on employers, employees and the self employed by 1 percentage point and 'hypothecating' this for the health and care.

Introduce a 'new social contract' between the citizen and the state, with the introduction of free personal social care funded by means testing Winter Fuel Payments, Attendence Allowance and the Carer's Allowance.

Create an 'OBR for Health' as a non-departmental public body reporting to parliament on the additional tax requirements needed to fully fund health and social care and propose future increases in national insurance.

PART III:
CONCLUSIONS

Now is the time for a bold action to secure the NHS and social care for the decade ahead.

After the most austere decade in the NHS's history and even harsher cuts in social care its time to call time on austerity. The health and care system needs a long term funding deal. But it also needs bold reform to go along with this. High quality care is a constantly moving target: to stand still is to fall back. We must not let that happen.

The plan put forward in this report sets out how we can ensure this doesn't happen. It is ambitious; implementation will be tough. But it has the potential to deliver a first class health and care system for the 2020s. It sets out a comprehensive road map for both funding and reform, which, when taken together, amounts to a significant improvement in care – and a major boost to the economy.

The changes set out in the report are necessarily quite technical. 21st century health and care is not simple. This is fine: our main audience is undoubtedly policymakers and health and care staff. But to secure the funding the system needs we need to bring the public with us.

We therefore conclude with what all these changes would mean for people up and down the country. We set out what extra investment can deliver, namely, better health and care for all for the 2020s. Together, these improvements make up a 10-point offer to the public, in return for their ongoing support for the NHS. We believe this vision demostates that investing more funding – and effort in reform – in health and care services is worth it.

OUR 10-POINT OFFER TO CITIZENS

1. Free personal and nursing care for everyone who needs it, regardless of your ability to pay – just like the NHS. Growing old shouldn't mean getting poor.
2. Fast and convenient access to primary care for working families, open during the evenings and over the weekend.
3. A digital NHS. The ability to access your medical records, order your prescription and have your consulation with the GP online.
4. A single named GP, a joint care plan, a personal budget and regular check-ups for people with long term conditions.
5. Shorter waiting times and better access to care. No waiting on trolleys. No delays in hospital beds. No cancelled operations.
6. Quality of care in England for people with poor mental health and cancer on par with best practice abroad.
7. Never knowingly under-staffed. Enough nurses and doctors in every hospital and GP practice across the country, with time to care and not just to treat.

8. Elimination of the postcode lottery in treatment. Access to the best treatments, approved by NICE, no matter where you live.

9. A reduction in health inequalities. Where you live should not determine how long you live.

10. An NHS that helps to create good jobs at home and increase our earnings from exports abroad – generating prosperity that's good for everyone.

After all, the NHS is not just a great institution, but the expression of an ideal: that healthcare is not a privilege to be purchased but a moral right secured for all. Now is the time to re-invest in that ideal and extend it to social care, too, and to secure the entire health and care system for future generations.

ANNEX 1

TABLE A.1: INCREASE IN HEALTH AND CARE SPENDING BROKEN BY COMPONENT UNDER PROPOSED FUNDING SETTLEMENT

Component	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
IPPR NHS Spending Projections	125,575	129,977	134,551	139,332	143,509	148,065	152,940	158,183	163,780	169,731	176,046	182,651
Annual year-on-year growth rate		3.51	3.52	3.55	3.00	3.17	3.29	3.43	3.54	3.63	3.72	3.75
Incremental NHS funding required from tax rises		3,502	6,801	9,815	12,104	14,512	17,046	19,723	22,553	25,548	28,719	32,065
Social Care Demand Pressure Projections (from Health Foundation)	19,517	19,971	20,724	21,436	22,171	22,933	23,720	24,535	25,428	26,353	27,312	28,306
Incremental social care funding required from tax rises to maintain existing system		1,127	1,635	2,082	2,536	2,976	3,414	3,845	4,324	4,808	5,297	5,804
Incremental social care funding required from tax rises to provide free personal social care	0	0	5,506	5,708	5,971	6.134	6,359	6,592	6,842	7,102	7,372	7,651
Total NHS and social care incremental funding required from tax rises		4,630	13,943	17,606	20,558	23,623	26,820	30,161	33,721	37,459	41,388	45,522

Source: IPPR analysis, Carnall Farrar analysis, PSSRU (2015), Bottery et al (2018)

TABLE A.2: NHS FUNDING GROWTH RATES

Period	Average year-on-year growth, %
2019/20 to 2021/22	3.5
2022/23 to 2026/27	3.3
2027/28 to 2029/30	3.7
2019/20 to 2029/30	3.5

Source: IPPR analysis, Carnall Farrar analysis

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