The NHS Long Term Plan

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#NHSLongTermPlan

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Overview and summary

The NHS has been marking its 70th anniversary, and the national debate this has unleashed has centred on three big truths. There's been pride in our Health Service's enduring success, and in the shared social commitment it represents. There's been concern – about funding, staffing, increasing inequalities and pressures from a growing and ageing population. But there's also been optimism – about the possibilities for continuing medical advance and better outcomes of care.

In looking ahead to the Health Service's 80th birthday, this NHS Long Term Plan takes all three of these realities as its starting point. So to succeed, we must keep all that's good about our health service and its place in our national life. But we must tackle head-on the pressures our staff face, while making our extra funding go as far as possible. And as we do so, we must accelerate the redesign of patient care to future-proof the NHS for the decade ahead. This Plan sets out how we will do that. We are now able to because:

- first, we now have a secure and improved funding path for the NHS, averaging 3.4% a year over the next five years, compared with 2.2% over the past five years;
- second, because there is wide consensus about the changes now needed. This has been confirmed by patients' groups, professional bodies and frontline NHS leaders who since July have all helped shape this plan – through over 200 separate events, over 2,500 separate responses, through insights offered by 85,000 members of the public and from organisations representing over 3.5 million people;
- and third, because work that kicked-off after the *NHS Five Year Forward View* is now beginning to bear fruit, providing practical experience of how to bring about the changes set out in this Plan. Almost everything in this Plan is already being implemented successfully somewhere in the NHS. Now as this Plan is implemented right across the NHS, here are the big changes it will bring:

Chapter One sets out how the NHS will move to a new service model in which patients get more options, better support, and properly joined-up care at the right time in the optimal care setting. GP practices and hospital outpatients currently provide around 400 million face-to-face appointments each year. Over the next five years, every patient will have the right to online 'digital' GP consultations, and redesigned hospital support will be able to avoid up to a third of outpatient appointments - saving patients 30 million trips to hospital, and saving the NHS over £1 billion a year in new expenditure averted. GP practices - typically covering 30-50,000 people - will be funded to work together to deal with pressures in primary care and extend the range of convenient local services, creating genuinely integrated teams of GPs, community health and social care staff. Now expanded community health teams will be required under new national standards to provide fast support to people in their own homes as an alternative to hospitalisation, and to ramp up NHS support for people living in care homes. Within five years over 2.5 million more people will benefit from 'social prescribing', a personal health budget, and new support for managing their own health in partnership with patients' groups and the voluntary sector.

These reforms will be backed by a new guarantee that over the next five years, investment in primary medical and community services will grow faster than the overall NHS budget. This commitment – an NHS 'first' - creates a ringfenced local fund worth at least an extra £4.5 billion a year in real terms by 2023/24.

We have an emergency care system under real pressure, but also one in the midst of profound change. The Long Term Plan sets out action to ensure patients get the care they need, fast, and to relieve pressure on A&Es. New service channels such as urgent treatment centres are now growing far faster than hospital A&E attendances, and UTCs are being designated across England. For those that do need hospital care, emergency 'admissions' are increasingly being treated through 'same day emergency care' without need for an overnight stay. This model will be rolled out across all acute hospitals, increasing the proportion of acute admissions typically discharged on day of attendance from a fifth to a third. Building on hospitals' success in improving outcomes for major trauma, stroke and other critical illnesses conditions, new clinical standards will ensure patients with the most serious emergencies get the best possible care. And building on recent gains, in partnership with local councils further action to cut delayed hospital discharges will help free up pressure on hospital beds.

Chapter Two sets out new, funded, action the NHS will take to strengthen its contribution to prevention and health inequalities. Wider action on prevention will help people stay healthy and also moderate demand on the NHS. Action by the NHS is a complement to - not a substitute for - the important role of individuals, communities, government, and businesses in shaping the health of the nation. Nevertheless, every 24 hours the NHS comes into contact with more than a million people at moments in their lives that bring home the personal impact of ill health. The Long Term Plan therefore funds specific new evidence-based NHS prevention programmes, including to cut smoking; to reduce obesity, partly by doubling enrolment in the successful Type 2 NHS Diabetes Prevention Programme; to limit alcohol-related A&E admissions; and to lower air pollution.

To help tackle health inequalities, NHS England will base its five year funding allocations to local areas on more accurate assessment of health inequalities and unmet need. As a condition of receiving Long Term Plan funding, all major national programmes and every local area across England will be required to set out specific measurable goals and mechanisms by which they will contribute to narrowing health inequalities over the next five and ten years. The Plan also sets out specific action, for example to: cut smoking in pregnancy, and by people with long term mental health problems; ensure people with learning disability and/or autism get better support; provide outreach services to people experiencing homelessness; help people with severe mental illness find and keep a job; and improve uptake of screening and early cancer diagnosis for people who currently miss out.

Chapter Three sets the NHS's priorities for care quality and outcomes improvement for the decade ahead. For all major conditions, results for patients are now measurably better than a decade ago. Childbirth is the safest it has ever been, cancer survival is at an all-time high, deaths from cardiovascular disease have halved since 1990, and male suicide is at a 31-year low. But for the biggest killers and disablers of our population, we still have unmet need, unexplained local variation, and undoubted opportunities for further medical advance. These facts, together with patients' and the public's views on priorities, mean that the Plan goes further on the NHS Five Year Forward View's focus on cancer, mental health, diabetes, multimorbidity and healthy ageing including dementia. But it also extends its focus to children's health, cardiovascular and respiratory conditions, and learning disability and autism, amongst others.

Some improvements in these areas are necessarily framed as 10 year goals, given the timelines needed to expand capacity and grow the workforce. So by 2028 the Plan commits to dramatically improving cancer survival, partly by increasing the proportion of cancers diagnosed early, from a half to three quarters. Other gains can happen sooner, such as halving maternity-related deaths by 2025. The Plan also allocates sufficient funds on a phased basis over the next five years to increase the number of planned operations and cut long waits. It makes a renewed commitment that mental health services will grow faster than the overall NHS budget, creating a new ringfenced local investment fund worth at least £2.3 billion a year by 2023/24. This will enable further service expansion and faster access to community and crisis mental health services for both adults and particularly children and young people. The Plan also recognises the critical importance of research and innovation to drive future medical advance, with the NHS committing to play its full part in the benefits these bring both to patients and the UK economy.

To enable these changes to the service model, to prevention, and to major clinical improvements, the Long Term Plan sets out how they will be backed by action on workforce, technology, innovation and efficiency, as well as the NHS' overall 'system architecture'.

Chapter Four sets out how current workforce pressures will be tackled, and staff supported. The NHS is the biggest employer in Europe, and the world's largest employer of highly skilled professionals. But our staff are feeling the strain. That's partly because over the past decade workforce growth has not kept up with the increasing demands on the NHS. And it's partly because the NHS hasn't been a sufficiently flexible and responsive employer, especially in the light of changing staff expectations for their working lives and careers. However there are practical opportunities to put this right. University places for entry into nursing and medicine are oversubscribed, education and training places are being expanded, and many of those leaving the NHS would remain if employers can reduce workload pressures and offer improved flexibility and professional development. This Long Term Plan therefore sets out a number of specific workforce actions which will be overseen by NHS Improvement that can have a positive impact now. It also sets out wider reforms which will be finalised in 2019 when the workforce education and training budget for HEE is set by government. These will be included in the comprehensive NHS workforce implementation plan published later this year, overseen by the new cross-sector national workforce group, and underpinned by a new compact between frontline NHS leaders and the national NHS leadership bodies.

In the meantime the Long Term Plan sets out action to expand the number of nursing and other undergraduate places, ensuring that well-qualified candidates are not turned away as happens now. Funding is being guaranteed for an expansion of clinical placements of up to 25% from 2019/20 and up to 50% from 2020/21. New routes into nursing and other disciplines, including apprenticeships, nursing associates, online qualification, and 'earn and learn' support, are all being backed, together with a new post-qualification employment guarantee. International recruitment will be significantly expanded over the next three years, and the workforce implementation plan will also set out new incentives for shortage specialties and hard-to-recruit to geographies.

To support current staff, more flexible rostering will become mandatory across all trusts, funding for continuing professional development will increase each year, and action will be taken to support diversity and a culture of respect and fair treatment. New roles and inter-disciplinary credentialing programmes will enable more workforce flexibility across an individual's NHS career and between individual staff groups. The new primary care networks will provide flexible options for GPs and wider primary care teams. Staff and patients alike will benefit from a doubling of the number of volunteers also helping across the NHS.

Chapter Five sets out a wide-ranging and funded programme to upgrade technology and digitally enabled care across the NHS. These investments enable many of the wider service changes set out in this Long Term Plan. Over the next ten years they will result in an NHS where digital access to services is widespread. Where patients and their carers can better manage their health and condition. Where clinicians can access and interact with patient records and care plans wherever they are, with ready access to decision support and AI, and without the administrative hassle of today. Where predictive techniques support local Integrated Care Systems to plan and optimise care for their populations. And where secure linked clinical, genomic and other data support new medical breakthroughs and consistent quality of care. Chapter Five identifies costed building blocks and milestones for these developments.

Chapter Six sets out how the 3.4% five year NHS funding settlement will help put the NHS back onto a sustainable financial path. In ensuring the affordability of the phased commitments in this Long Term Plan we have taken account of the current financial pressures across the NHS, which are a first call on extra funds. We have also been realistic about inevitable continuing demand growth from our growing and aging population, increasing concern about areas of longstanding unmet need, and the expanding frontiers of medical science and innovation. In the modelling underpinning this Long Term Plan we have therefore not locked-in an assumption that its increased investment in community and primary care will necessarily reduce the need for hospital beds. Instead, taking a prudent approach, we have provided for hospital funding as if trends over the past three years continue. But in practice we expect that if local areas implement the Long Term Plan effectively, they will benefit from a financial and hospital capacity 'dividend'.

In order to deliver for taxpayers, the NHS will continue to drive efficiencies - all of which are then available to local areas to reinvest in frontline care. The Plan lays out major reforms to the NHS' financial architecture, payment systems and incentives. It establishes a new Financial Recovery Fund and 'turnaround' process, so that on a phased basis over the next five years not only the NHS as a whole, but also the trust sector, local systems and individual organisations progressively return to financial balance. And it shows how we will save taxpayers a further £700 million in reduced administrative costs across providers and commissioners both nationally and locally.

Chapter Seven explains next steps in implementing the Long Term Plan. We will build on the open and consultative process used to develop this Plan and strengthen the ability of patients, professionals and the public to contribute by establishing the new NHS Assembly in early 2019. 2019/20 will be a transitional year, as the local NHS and its partners have the opportunity to shape local implementation for their populations, taking account of the Clinical Standards Review and the national implementation framework being published in the spring, as well as their differential local starting points in securing the major national improvements set out in this Long Term Plan. These will be brought together in a detailed national implementation programme by the autumn so that we can also properly take account of Government Spending Review decisions on workforce education and training budgets, social care, councils' public health services and NHS capital investment.

Parliament and the Government have both asked the NHS to make consensus proposals for how primary legislation might be adjusted to better support delivery of the agreed changes set out in this LTP. This Plan does not require changes to the law in order to be implemented. But our view is that amendment to the primary legislation would significantly accelerate progress on service integration, on administrative efficiency, and on public accountability. We recommend changes to: create publicly-accountable integrated care locally; to streamline the national administrative structures of the NHS; and remove the overly rigid competition and procurement regime applied to the NHS.

In the meantime, within the current legal framework, the NHS and our partners will be moving to create Integrated Care Systems everywhere by April 2021, building on the progress already made. ICSs bring together local organisations in a pragmatic and practical way to deliver the 'triple integration' of primary and specialist care, physical and mental health services, and health with social care. They will have a key role in working with Local Authorities at 'place' level, and through ICSs, commissioners will make shared decisions with providers on population health, service redesign and Long Term Plan implementation.

Our National Health Service was founded in 1948 in place of fear - the fear that many people had of being unable to afford care for themselves and their families. And it was founded in a spirit of optimism - at a time of great uncertainty, coming shortly after the sacrifices of war. At its best our National Health Service is the practical expression of a shared commitment by the British people: over the past seven decades, there when we need it, at the most profound moments in our lives. But as medicine advances, health needs change, and society develops, the Health Service continually has to move forward. This Long Term Plan shows how we will do so. So that looking forward to the NHS' 80th Birthday, in a decade's time, we have a service that is fit for the future.

Chapter 1: A new service model for the 21st century

1.1. Compared with many other countries, our health service is already well designed. We have high levels of patient satisfaction, generally improving outcomes, strong overall efficiency, and relatively high levels of care coordination[1]. You're far less likely to be unnecessarily hospitalised for a chronic health condition here than in most other European countries[2]. Indeed, you're more than twice as likely to have your leg amputated in Germany because your diabetes hasn't been well managed than you are on the NHS[3]. An NHS where funding is apportioned to population need; where most care is provided through list-based general practice; where we take a planned approach to local and specialist hospital provision; and with a strong scientific tradition of evidence-based decisions about care – these are all organising principles which have stood the test of time.

1.2. But if we were starting from scratch, there are other aspects of the way the NHS works that we'd now design quite differently. This Plan shows how the NHS is going to be using its new funding to improve staffing and expand needed services. But – critical as they are – they're not the only reason for current pressures in the system. The longstanding aim has been to prevent as much illness as possible. Then illness which cannot be prevented should where possible be treated in community and primary care. If care is required at hospital, its goal is treatment without having to stay in as an inpatient wherever possible. And, when people no longer need to be in a hospital bed, they should then receive good health and social care support to go home. Yet, despite improvements, too often when, where and how care is being delivered is a source of frustration, waste and missed opportunity for patients and the teams looking after them.

1.3. It's frustrating for the ambulance paramedic unable to answer the next 999 call, because she's stuck on a hospital ramp waiting to hand over a patient to the accident and emergency (A&E) team. For the emergency patient in A&E waiting for a bed still occupied by someone stuck in hospital waiting for a social care package at home. For the GP whose time is wasted writing prescriptions that could have been given when their patient was discharged from hospital. For the physiotherapist who – with the right continuing professional development (CPD) – could also have helped her patients with their anxiety and depression. For the child rushed to hospital with an asthma attack because she wasn't helped to use her nebuliser correctly. For the patient with a long-term condition called back for a pointless outpatient appointment every six months. Or for the young man in mental health crisis who ends up at A&E because there isn't a local community crisis team. And, while most people don't experience these problems most of the time, every single one of them occurs every single day across our NHS.

1.4. To respond to these challenges, improve care for patients and reduce pressure on staff, this plan means that **the NHS will increasingly be**:

- **more joined-up and coordinated in its care.** Breaking down traditional barriers between care institutions, teams and funding streams so as to support the increasing number of people with long-term health conditions, rather than viewing each encounter with the health service as a single, unconnected 'episode' of care;
- **more proactive in the services it provides.** The majority of initial medical contacts with the NHS occur when a patient calls NHS 111 or 999, or visits their pharmacist, GP practice, A&E or Urgent Treatment Centre (UTC). At that point the NHS response kicks into action. But increasingly we are supplementing that with the move to 'population health management', using predictive prevention (linked to new opportunities for tailored screening, case finding and early diagnosis) to better support people to stay healthy and avoid illness complications;
- **more differentiated in its support offer to individuals.** This is necessary if the NHS is to make further progress on prevention, on inequalities reduction, and on responsiveness to the diverse people who use and fund our health service. Individual preferences on type and location of care differ quite widely – as for example with end of life choices, or on use of 'multichannel' digital services. More fundamentally, with the right support, people of all ages can and want to take more control of how they manage their physical and mental wellbeing[4]. There is no contradiction between wider collective action on health determinants, and a recognition that different individuals will benefit differently from tailored prevention. Indeed one-size-fits-all statutory services have often failed to engage with the people most in need, leading to inequalities in access and outcome.

This chapter therefore sets out **five major, practical, changes** to the NHS service model to bring this about over the next five years:

1. We will **boost 'out-of-hospital' care**, and finally dissolve the historic divide between primary and community health services.
2. The NHS will **redesign and reduce pressure on emergency hospital services.**
3. People will get more control over their own health, and **more personalised care** when they need it.
4. **Digitally-enabled primary and outpatient care** will go mainstream across the NHS.
5. Local NHS organisations will increasingly **focus on population health** and local partnerships with local authority-funded services, through new Integrated Care Systems (ICSs) everywhere.

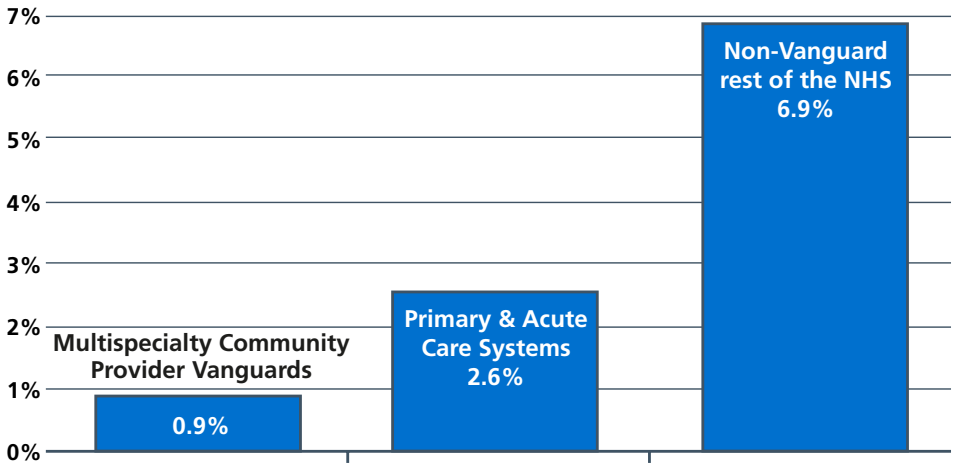
Here's how:

1. We will boost 'out-of-hospital' care, and finally dissolve the historic divide between primary and community health services

1.5. **Community health services and general practice face multiple challenges – with insufficient staff and capacity to meet rising patient need and complexity.** GPs are retiring early and newly-qualified GPs are often working part-time. Reform of the GP contract in 2004 improved the quality and income of primary care practitioners, but relative investment in primary care then fell for the rest of the decade before beginning to recover after the creation of NHS England from 2014/15, and then more substantially in 2017/18 and 2018/19. Use of locum GPs has increased and there is shortage of practice and district nurses. The traditional business model of the partnership is proving increasingly unattractive to early and mid-career GPs. Patient satisfaction with access to primary care has declined, particularly amongst 16-25 year olds.

1.6. **Following three years of testing alternative models in the *Five Year Forward View* through integrated care 'Vanguards' and Integrated Care Systems, we now know enough to commit to a series of community service redesigns everywhere.** The Vanguards received less than one tenth of one percent of NHS funding, but made a positive impact on emergency admissions, and demonstrated the benefits of proactively identifying, assessing and supporting patients at higher risk to help them stay independent for longer.

Figure 1: Growth in emergency admissions per capita 2014/15 to 2017/18: MCP and PACS Vanguards vs. the rest of the NHS.



Note: The MCP and PACS combined emergency growth rate is 1.6% which is statistically significantly lower than the rest of the NHS with 95% CI (the upper limit for a significant value is 3.1%).

Source: NHS England analysis of Secondary Uses Service (SUS) data.

1.7. **In this Long Term Plan we commit to increase investment in primary medical and community health services as a share of the total national NHS revenue spend across the five years from 2019/20 to 2023/24. This means spending on these services will be at least £4.5 billion higher in five year's time. This is the first time in the history of the NHS that real terms funding for primary and community health services is guaranteed to grow faster than the rising NHS budget overall**. And this is a 'floor' level of investment that is being nationally guaranteed, that local clinical commissioning groups (CCGs) and ICSs are likely to supplement further. This investment guarantee will fund demand pressures, workforce expansion, and new services to meet relevant goals set out across this Plan.

A new NHS offer of urgent community response and recovery support

1.8. Over the next five years all parts of the country will be asked to increase the capacity and responsiveness of community and intermediate care services to those who are clinically judged to benefit most. Extra investment and productivity reforms in community health services will mean that within five years all parts of the country will be expected to have **improved the responsiveness of community health crisis response services to deliver the services within two hours of referral in line with NICE guidelines, where clinically judged to be appropriate. In addition, all parts of the country should be delivering reablement care within two days of referral to those patients who are judged to need it.** This will help prevent unnecessary admissions to hospitals and residential care, as well as ensure a timely transfer from hospital to community. More NHS community and intermediate health care packages will be delivered to support timely crisis care, with the ambition of freeing up over one million hospital bed days. Urgent response and recovery support will be delivered by flexible teams working across primary care and local hospitals, developed to meet local needs, including GPs and specialty and associate specialist (SAS) doctors, allied health professionals (AHPs), district nurses, mental health nurses, therapists and reablement teams. Extra recovery, reablement and rehabilitation support will wrap around core services to support people with the highest needs.

Primary care networks of local GP practices and community teams

1.9. **The £4.5 billion of new investment will fund expanded community multidisciplinary teams aligned with new primary care networks based on neighbouring GP practices** that work together typically covering 30-50,000 people. As part of a set of multi-year contract changes individual practices in a local area will enter into a network contract, as an extension of their current contract, and have a designated single fund through which all network resources will flow. Most CCGs have local contracts for enhanced services and these will normally be added to the network contract. Expanded neighbourhood teams will comprise a range of staff such as GPs and SAS doctors, pharmacists, district nurses, community geriatricians, dementia workers and AHPs such as physiotherapists and podiatrists/ chiropodists, joined by social care and the voluntary sector. In many parts of the country, functions such as district nursing are already configured on network footprints and this will now become the required norm.

1.10. **The result will be the creation – for the first time since the NHS was set up in 1948 – of fully integrated community-based health care.** This will be supported through the ongoing training and development of multidisciplinary teams in primary and community hubs. Community hospital hubs will play their full part in many of these integrated multidisciplinary teams. From 2019, NHS 111 will start direct booking into GP practices across the country, as well as refer on to community pharmacies who support urgent care and promote patient self-care and self-management. CCGs will also develop pharmacy connection schemes for patients who don't need primary medical services.

1.11. **To support this new way of working we will agree significant changes to the GP Quality and Outcomes Framework (QOF).** This will include a new Quality Improvement (QI) element, which is being developed jointly by the Royal College of GPs, NICE and the Health Foundation. The least effective indicators will be retired, and the revised QOF will also support more personalised care. In 2019 we will also undertake a fundamental review of GP vaccinations and immunisation standards, funding, and procurement. This will support the goal of improving immunisation coverage, using local coordinators to target variation and improve groups and areas with low vaccines uptake.

1.12. **We will also offer primary care networks a new 'shared savings' scheme** so that they can benefit from actions to reduce avoidable A&E attendances, admissions and delayed discharge, streamlining patient pathways to reduce avoidable outpatient visits and over-medication through pharmacist review.

Guaranteed NHS support to people living in care homes

1.13 One in seven people aged 85 or over permanently live in a care home. People resident in care homes account for 185,000 emergency admissions each year and 1.46 million emergency bed days, with 35-40% of emergency admissions potentially avoidable[5]. Evidence suggests that many people living in care homes are not having their needs assessed and addressed as well as they could be, often resulting in unnecessary, unplanned and avoidable admissions to hospital and sub-optimal medication regimes.

1.14. NHS England's Enhanced Health in Care Homes (EHCH) Vanguards have shown how to improve services and outcomes for people living in care homes and those who require support to live independently in the community. For example, in Nottinghamshire, people resident in care homes within the Vanguard experienced 29% fewer A&E attendances and 23% fewer emergency admissions than a matched control group[6].

1.15. **We will upgrade NHS support to all care home residents who would benefit by 2023/24, with the EHCH model rolled out across the whole country** over the coming decade as staffing and funding grows. This will ensure stronger links between primary care networks and their local care homes, with all care homes supported by a consistent team of healthcare professionals, including named general practice support. As part of this, we will ensure that individuals are supported to have good oral health, stay well hydrated and well-nourished and that they are supported by therapists and other professionals in rehabilitating when they have been unwell. Care home residents will get regular clinical pharmacist-led medicine reviews where needed. Primary care networks will also work with emergency services to provide emergency support, including where advice or support is needed out of hours. We will support easier, secure, sharing of information between care homes and NHS staff. Care home staff will have access to NHSmail, enabling them to communicate effectively and securely with NHS teams involved in the care of their patients.

Supporting people to age well

1.16. People are now living far longer, but extra years of life are not always spent in good health[7], as Table 1 shows. They are more likely to live with multiple long-term conditions, or live into old age with frailty or dementia, so that on average older men now spend 2.4 years and women spend three years with 'substantial' care needs[8].

Table 1: Life expectancy and proportion of life in poor health, from birth and age 65 years, males and females, largest EU countries, 2016.

	Males				Females			
Country	Life expectancy at birth	Proportion (%) in poor health	Life expectancy at age 65	Proportion (%) in poor health	Life expectancy at birth	Proportion (%) in poor health	Life expectancy at age 65	Proportion (%) in poor health
France	79.5	6.4	19.6	16.3	85.7	8.1	23.7	18.6
Germany	78.6	6.4	18.1	14.4	83.5	7.8	21.3	18.3
United Kingdom	79.4	6.9	18.8	13.8	83.0	8.0	21.1	13.7
EU average	78.2	6.5	18.2	17.6	83.6	8.7	21.6	23.1

Note: Poor health is defined as the difference between life expectancy and healthy life expectancy.
Source: European Statistics (EUROSTAT). Healthy life years and life expectancy at age 65 by sex. 2018.

1.17. Extending independence as we age requires a targeted and personalised approach, enabled by digital health records and shared health management tools. **Primary care networks will from 2020/21 assess their local population by risk of unwarranted health outcomes and, working with local community services, make support available to people where it is most needed.** GPs are already using the Electronic Frailty Index to routinely identify people living with severe frailty. Using a proactive population health approach focused on moderate frailty will also enable earlier detection and intervention to treat undiagnosed disorders, such as heart failure. Based on their individual needs and choices, people identified as having the greatest risks and needs will be offered targeted support for both their physical and mental health needs, which will include musculoskeletal conditions, cardiovascular disease, dementia and frailty. Integrated primary and community teams will work with people to maintain their independence: for example, 30% of people aged 65 and over, and 50% of those aged 80 and over, are likely to fall at least once a year[9]. Falls prevention schemes, including exercise classes and strength and balance training, can significantly reduce the likelihood of falls and are cost effective in reducing admissions to hospital[10].

1.18. **The connecting of home-based and wearable monitoring equipment will increasingly enable the NHS to predict and prevent events that would otherwise have led to a hospital admission.** This could include a set of digital scales to monitor the weight of someone post-surgery, a location tracker to provide freedom with security for someone with dementia, and home testing equipment for someone taking blood thinning drugs. Currently available technology can enable earlier discharge from hospital and transform people's lives if it is connected to their Personal Health Record (PHRs) and integrated into the NHS' services. We will support advances in these care models over the next five years. To do so requires major work to digitise community services, as set out in Chapter Five. As well as deploying technology to support community staff, we will expand the scope of the existing Community Dataset to standardise information across the care system and integrate it with Local Health Care Records (LHCRs).

1.19. **Carers will benefit from greater recognition and support.** The latest Census found that 10% of the adult population has an unpaid caring role, equating to approximately 5.5 million people in England – around 1.4 million of whom provide upwards of 50 hours care per week. 17% of respondents to the GP patient survey identified themselves as carers. Many carers are themselves older people living with complex and multiple long-term conditions. We will improve how we identify unpaid carers, and strengthen support for them to address their individual health needs. We will do this through introducing best-practice Quality Markers for primary care that highlight best practice in carer identification and support.

1.20. **We will go further in improving the care we provide to people with dementia and delirium, whether they are in hospital or at home.** One in six people over the age of 80 has dementia and 70% of people in care homes have dementia or severe memory problems. There will be over one million people with dementia in the UK by 2025, and there are over 40,000 people in the UK under 65 living with dementia today[11]. Over the past decade the NHS has successfully doubled the dementia diagnosis rate and halved the prescription of antipsychotic drugs[12]. We have continued to improve public awareness[13] and professional understanding. Research investment is set to double between 2015 and 2020, with £300m of government support[14]. We will provide better support for people with dementia through a more active focus on supporting people in the community through our enhanced community multidisciplinary teams and the application of the NHS Comprehensive

Model of Personal Care. We will continue working closely with the voluntary sector, including supporting the Alzheimer's Society to extend its *Dementia Connect* programme which offers a range of advice and support for people following a dementia diagnosis.

2. The NHS will reduce pressure on emergency hospital services

1.21. Boosting 'out-of-hospital' care in the way set out above makes sense in its own right. But there are also very substantial pressures across the NHS in looking after emergency patients. The greater efficiency and lower costs to taxpayers of the NHS mean that it has a lower level of hospital beds than other major European countries. To the credit of NHS staff **over the past five years, on a like-for-like-basis, a patient's chance of having to be admitted to hospital as an emergency has fallen by 12%[15].** There have also been substantial reductions in the proportion of people with medium and high dependency who live in care homes[16]. This implies that sicker patients are being successfully looked after without hospitalisation by GPs, community health and social care services, none of whom have seen their expenditure grow at the same rate as acute services.

1.22. **Since publication of *Next Steps on the Forward View*, the NHS over the past two years has:**

- Rolled out evening and weekend GP appointments nationally, ahead of schedule, so that accessing primary care is easier and more convenient for all patients;
- Enhanced NHS 111, so over 50% of people calling the service now receive a clinical assessment and can be offered immediate advice or referred to the right clinician for a face-to-face consultation;
- Achieved 100% of the population now able to access urgent and emergency care advice through the NHS 111 online service;
- Begun rolling out UTCs across the country, offering a consistent service to patients at 110 locations and introducing the ability to book appointments in UTCs through NHS 111;
- Introduced new standards for ambulance services to ensure that the sickest patients receive the fastest response, and that all patients get the response they need first time and in a clinically appropriate timeframe;
- Introduced comprehensive clinical streaming at the front door of A&E departments, so patients are directed to the service best suited to their needs on arrival;
- Begun implementing Same Day Emergency Care (SDEC), (also known as ambulatory emergency care), increasing the proportion of people who are not admitted overnight in an emergency;
- Reduced the number of people delayed in hospital – reducing the length of stay of patients who remain in hospital for more than 21 days, and freeing up nearly 2,000 beds;
- As a result, in the first half of this year hospitals have used fewer, not more, inpatient bed days for their non-elective patients;
- Continued rapid growth in the number of whole time equivalent A&E consultants, which are up by 30% over the past five years – the fastest growth of any consultant specialty in the NHS;
- Rolled out the Emergency Care Data Set (ECDS) to all major A&E departments to enable better tracking of the quality and timeliness of care.

1.23. **However we have an emergency care system under real pressure,** in the midst of profound change. The number of A&E patients successfully treated within four hours is 100,000 per month higher than five years ago. New ways of delivering urgent care such as UTCs are growing far faster than hospital A&E attendances, which are up by around 1.5% year-to-date. For those that do need hospital care, emergency admissions requiring an inpatient stay (up by 2.7% year-to-date) are increasingly being replaced by Same Day Emergency Care (up by 10.5%). That, plus good results from action to cut delayed hospital discharges, means inpatient emergency bed days are now actually falling.

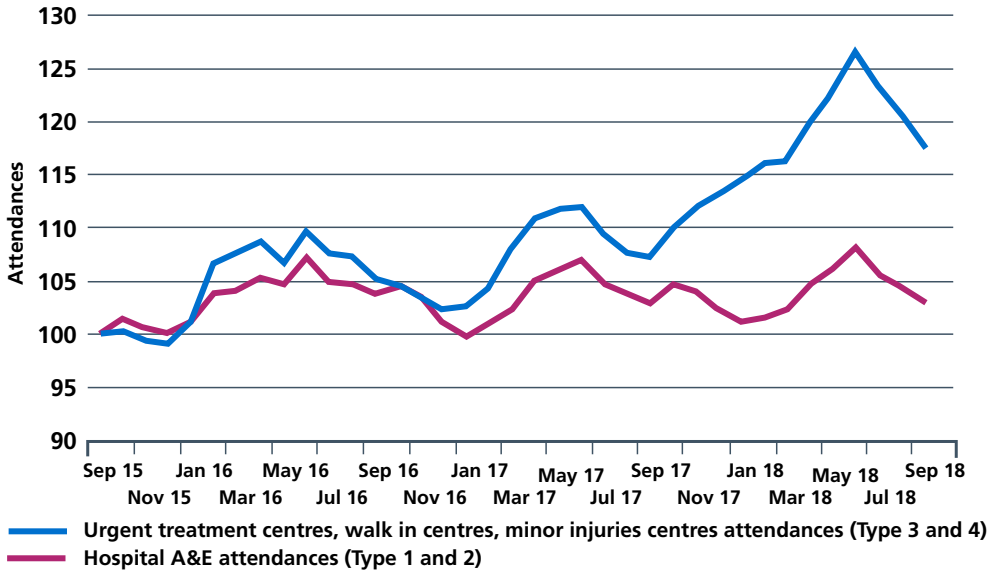
1.24. **Over the period of this Long Term Plan, by expanding and reforming urgent and emergency care services the practical goal is to ensure patients get the care they need fast, relieve pressure on A&E departments, and better offset winter demand spikes.** In looking forward to the next five years, the balance of need for hospital beds will be a product of continuing pressures from an ageing population partially balanced against further gains from changing the model of care, as set out in this chapter. In the 'base case' funding, activity and staffing model underpinning this Long Term Plan, we have not built-in as a core assumption potential offsets in hospital beds from increased investment in community health and primary care. Instead we have provided both for the hospital funding and the staffing as if trends over the past three years continue. So to the extent that local areas are able to do better than recent emergency hospitalisation trends – which if the reforms set out in this chapter are implemented effectively should be possible – that will deliver for them an additional local financial, hospital capacity and staffing upside 'dividend'.

Pre-hospital urgent care

1.25. **To support patients to navigate the optimal service 'channel', we will embed a single multidisciplinary Clinical Assessment Service (CAS) within integrated NHS 111, ambulance dispatch and GP out of hours services from 2019/20.** This will provide specialist advice, treatment and referral from a wide array of healthcare professionals, encompassing both physical and mental health supported by collaboration plans with all secondary care providers. Access to medical records will enable better care. The CAS will also support health professionals working outside hospital settings, staff within care homes, paramedics at the scene of an incident and other community-based clinicians to make the best possible decision about how to support patients closer to home and potentially avoid unnecessary trips to A&E. This includes using the CAS to simplify the process for GPs, ambulance services, community teams and social care to make referrals via a single point of access for an urgent response from community health services using the new model described at paragraph 1.8 above.

1.26. **We will fully implement the Urgent Treatment Centre model by autumn 2020 so that all localities have a consistent offer for out-of-hospital urgent care, with the option of appointments booked through a call to NHS 111.** UTCs will work alongside other parts of the urgent care network including primary care, community pharmacists, ambulance and other community-based services to provide a locally accessible and convenient alternative to A&E for patients who do not need to attend hospital.

Figure 2: In recent years, acute hospital A&E attendances have been growing at a much slower rate than other urgent care services.



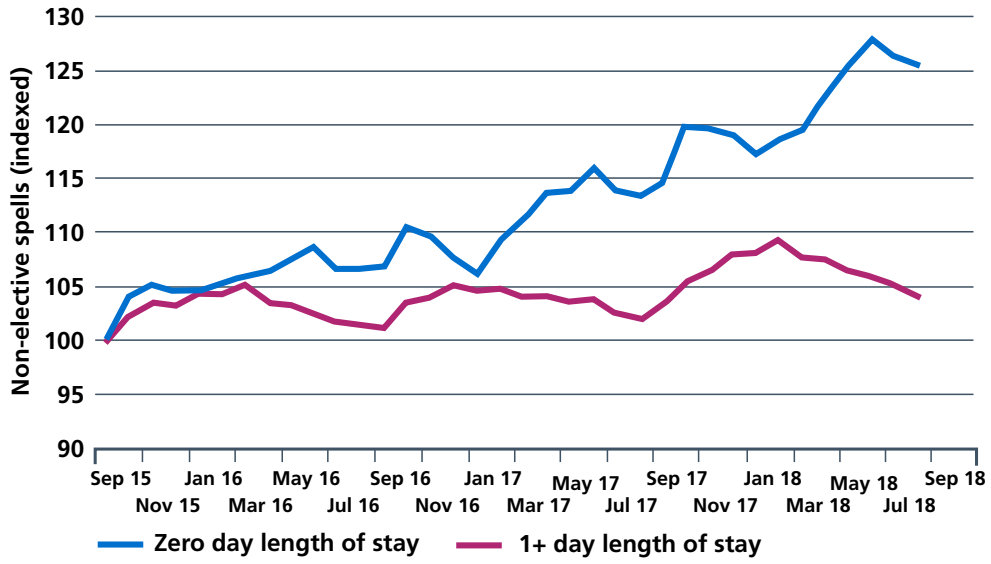
Source: NHS Digital. Secondary Uses Service (SUS) data. 2018.

1.27. Ambulance services are at the heart of the urgent and emergency care system. We will work with commissioners to put in place timely responses so patients can be treated by skilled paramedics at home or in a more appropriate setting outside of hospital. We will implement the recommendations from Lord Carter's recent report on operational productivity and performance in ambulance trusts, ensuring that **ambulance services** are able to offer the most clinically and operationally effective response. We will continue to work with ambulance services to eliminate hospital handover delays. We will also increase specialist ambulance capability to respond to terrorism. Capital investment will continue to be targeted at fleet upgrades, and NHS England will set out a new national framework to overcome the fragmentation that ambulance services have experienced in how they are locally commissioned.

Reforms to hospital emergency care – Same Day Emergency Care

1.28. New diagnostic and treatment practices allow patients to spend just hours in hospital rather than being admitted to a ward. This also helps relieve pressure elsewhere in the hospital and frees up beds for patients who need quick admission either for emergency care, or for a planned operation. This is a model co-developed by the Royal College of Physicians and the Society of Acute Medicine, which is being successfully deployed in an increasing number of hospitals. As a result, reported growth in non-elective hospital 'admissions' are now disproportionately being driven by so-called 'zero day admissions' (patients who are not actually admitted to an inpatient overnight acute bed).

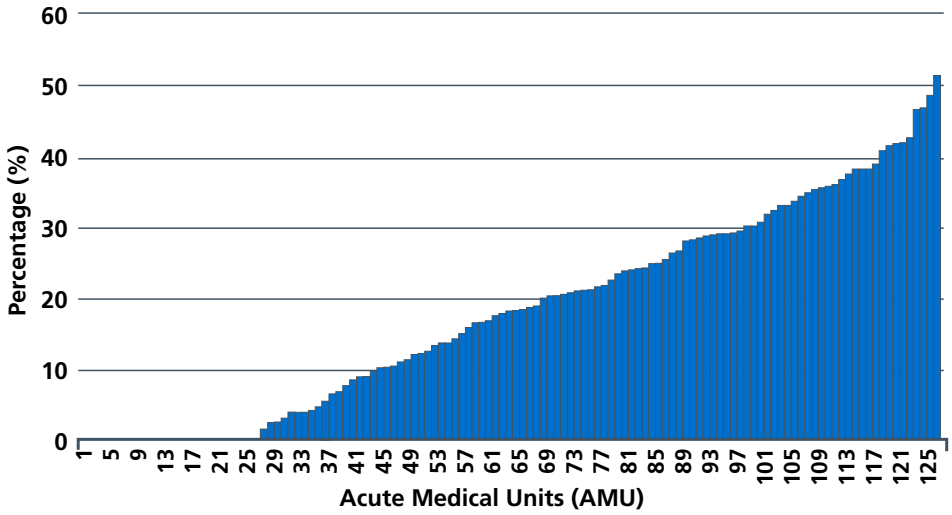
Figure 3: Relative growth in emergency admissions: zero day and 1+ day length of inpatient stay.



Data source: NHS Digital. Secondary Uses Service (SUS) data. 2018.

1.29. There are however large differences in the extent to which SDEC has so far been adopted by individual hospitals:

Figure 4: Variation in percentage of initial medical assessments undertaken in ambulatory emergency care.



Source: The Society for Acute Medicine. Society for Acute Medicine Benchmarking Audit. SAMBA18 Interim Report. September 2018

1.30. **Under this Long Term Plan, every acute hospital with a type 1 A&E department will move to a comprehensive model of Same Day Emergency Care. This will increase the proportion of acute admissions discharged on the day of attendance from a fifth to a third.** At the same time we should not see the proportion of non-SDEC zero length of stay admissions rise. Hospitals will also reduce avoidable admissions through the establishment of acute frailty services, so that such patients can be assessed, treated and supported by skilled multidisciplinary teams delivering comprehensive geriatric assessments in A&E and acute receiving units. The SDEC model should be embedded in every hospital, in both medical and surgical specialties during 2019/20.

1.31. **We will also, as part of the NHS Clinical Standards Review being published in the spring, develop new ways to look after patients with the most serious illness and injury, ensuring that they receive the best possible care in the shortest possible timeframe.** For people who arrive in A&E following a stroke, heart attack, major trauma, severe asthma attack or with sepsis, we will further improve patient pathways to ensure timely assessment and treatment that reduces the risk of death and disability. As set out in Chapters Three and Six, we are working with clinical experts and patient groups nationally to ensure that these pathways deliver improvements in patient outcomes, so that the NHS continues to lead the world in the quality of care that it provides for those with the greatest need.

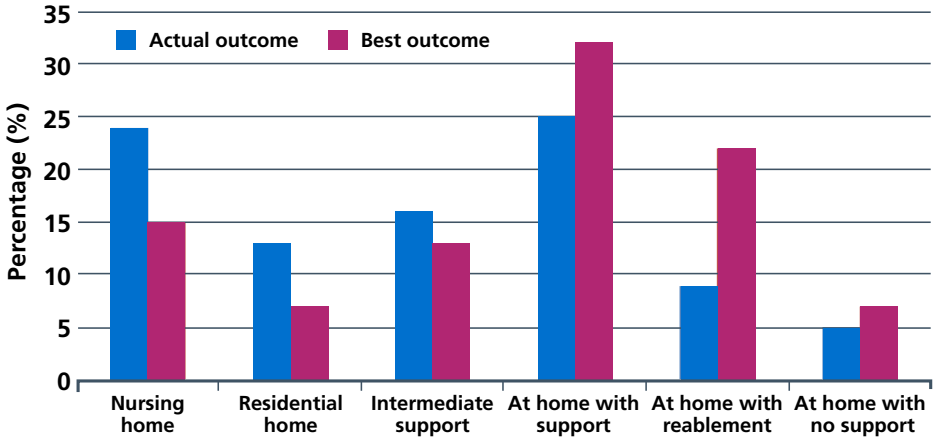
1.32. We will develop a **standard model of delivery in smaller acute hospitals who serve rural populations.** Smaller hospitals have significant challenges around a number of areas including workforce and many of the national standards and policies were not appropriately tailored to meet their needs. We will work with trusts to develop a new operating model for these sorts of organisations, and how they work more effectively with other parts of the local healthcare system.

1.33. Without access to timely and accurate data we cannot maximise the opportunities to improve care for all patients. The new ECDS is enabling us to better understand the needs of patients accessing A&E departments. We will embed this into UTCs and SDEC services from 2020. We will develop an equivalent ambulance data set that will, for the first time, bring together data from all ambulance services nationally in order to follow and understand patient journeys from the ambulance service into other urgent and emergency healthcare settings.

Cutting delays in patients being able to go home

1.34. **The NHS and social care will continue to improve performance at getting people home without unnecessary delay when they are ready to leave hospital,** reducing risk of harm to patients from physical and cognitive deconditioning complications. The goal over the next two years is to achieve and maintain an average Delayed Transfer of Care (DTOC) figure of 4,000 or fewer delays, and over the next five years to reduce them further. As well as the enhanced primary and community services response set out earlier in this Chapter, we will achieve this through measures such as placing therapy and social work teams at the beginning of the acute hospital pathway, setting an expectation that patients will have an agreed clinical care plan within 14 hours of admission which includes an expected date of discharge, implementation of the SAFER patient flow bundle and multidisciplinary team reviews on all hospital wards every morning.

Figure 5: Differences in where people are discharged compared to where would be best for them.



Source: Newton Europe.

Milestones for urgent and emergency care

- **In 2019 England will be covered by a 24/7 Integrated Urgent Care Service, accessible via NHS 111 or online.**
- **All hospitals with a major A&E department will:**
  - **Provide SDEC services at least 12 hours a day, 7 days a week by the end of 2019/20**
  - **Provide an acute frailty service for at least 70 hours a week. They will work towards achieving clinical frailty assessment within 30 minutes of arrival;**
  - **Aim to record 100% of patient activity in A&E, UTCs and SDEC via ECDS by March 2020**
  - **Test and begin implementing the new emergency and urgent care standards arising from the Clinical Standards Review, by October 2019**
  - **Further reduce DTOC, in partnership with local authorities.**
- **By 2023, CAS will typically act as the single point of access for patients, carers and health professionals for integrated urgent care and discharge from hospital care.**

3. People will get more control over their own health and more personalised care when they need it

1.35. When the NHS was set up seventy years ago, the first choice patients were offered was which GP practice to register with, and that choice continues today. In the intervening seven decades, informed consent and changing social attitudes have significantly **expanded the choices and control that people have over their own care** – from maternity to end-of-life. And in the 2000s the NHS successfully extended patient choice to elective care, so that people could choose where and when to have their outpatient appointment or planned operation. As set out in Chapter Three, as part of a renewed focus on short waits for routine operations, patients will continue to have choice at point of referral and anyone who has been waiting for six months will be specifically contacted and given the option of faster treatment at an alternative provider, with the NHS money following the patient to fund their care.

1.36. Advances in precision medicine also mean treatment itself will become increasingly tailored to individuals, and patients will be offered **more personalised therapeutic options**. For example, this summer new research showed that, based on their tumour genetics, thousands of women with breast cancer could now avoid chemotherapy. And this autumn the NHS became the first national health system in Europe to give the go ahead to a breakthrough cancer treatment based on modifying a patient's own CAR-T cells. Chapters Three and Six set out how the NHS is going to be capitalising on further opportunities like these.

1.37. But the NHS also needs a more fundamental shift in how we work alongside patients and individuals to deliver more **person-centred care**, recognising – as National Voices has championed – the importance of 'what matters to someone' is not just 'what's the matter with someone'. Since individuals' values and preferences differ, ensuring choice and sharing control can meaningfully improve care outcomes. Creating genuine partnerships requires professionals

to work differently, as well as a systematic approach to engaging patients in decisions about their health and wellbeing. We will support and help train staff to have the conversations which help patients make the decisions that are right for them.

1.38. For many health conditions, people are already taking control themselves supplemented with expert advice and peer support in the community and online. As part of wider move to what The King's Fund has called **'shared responsibility for health'**, over the next five years **the NHS will ramp up support for people to manage their own health[17].** This will start with diabetes prevention and management, asthma and respiratory conditions, maternity and parenting support, and online therapies for common mental health problems.

1.39. *The NHS Comprehensive Model of Personalised Care*, developed in partnership with over 50 stakeholder groups, is now being implemented across a third of England. By September 2018, over 200,000 people had already joined the personalised care programme and over 32,000 people had Personal Health Budgets (PHBs) – nearly a quarter of which were jointly funded with social care. **We will roll out the NHS Personalised Care model across the country, reaching 2.5 million people by 2023/24 and then aiming to double that again within a decade**.

1.40. As part of this work, through **social prescribing** the range of support available to people will widen, diversify and become accessible across the country. Link workers within primary care networks will work with people to develop tailored plans and connect them to local groups and support services. Over 1,000 trained social prescribing link workers will be in place by the end of 2020/21 rising further by 2023/24, with the aim that over 900,000 people are able to be referred to social prescribing schemes by then.

1.41. **We will accelerate the roll out of Personal Health Budgets to give people greater choice and control over how care is planned and delivered.** Up to 200,000 people will benefit from a PHB by 2023/24. This will include provision of bespoke wheelchairs and community-based packages of personal and domestic support. We will also expand our offer in mental health services, for people with a learning disability, people receiving social care support and those receiving specialist end of life care.

1.42. **With patients, families, local authorities and our voluntary sector partners at both a national and local level, including specialist hospices, the NHS will personalise care, to improve end of life care.** By rolling out training to help staff identify and support relevant patients, we will introduce proactive and personalised care planning for everyone identified as being in their last year of life. A consequence of better quality care will be a reduction in avoidable emergency admissions and more people being able to die in a place they have chosen.

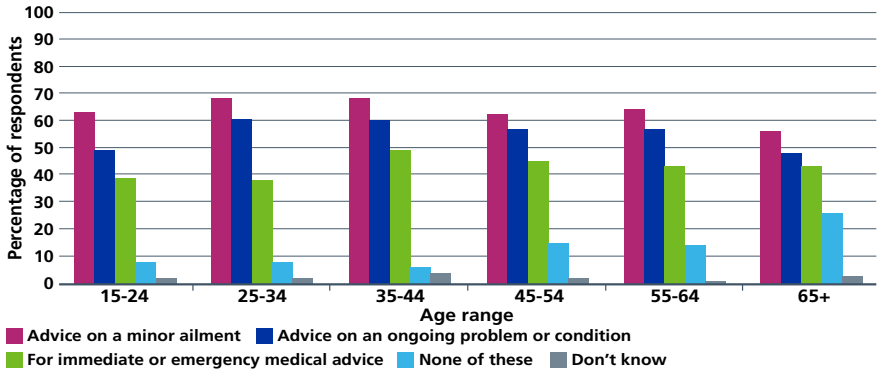
4. Digitally-enabled primary and outpatient care will go mainstream across the NHS

1.43. **Digital technology will provide convenient ways for patients to access advice and care.** For patients and staff the starting point is interoperability of data and systems, as set out in Chapter Five. Then, building on progress already made on digitising appointments and prescriptions, a digital NHS 'front door' through the NHS App will provide advice, check symptoms and connect people with healthcare professionals – including through telephone

and video consultations. Patients will be able to access virtual services alongside face-to-face services via a computer or smart phone. We will continue to invest in the nhs.uk platform so that everyone can find helpful advice and information regarding their conditions. As technology advances, we will also trial the use of innovative devices such as smart inhalers for better patient care and remote monitoring of conditions. We will also continue to support the development of apps and online resources to support good mental health and enable recovery.

1.44. **Under this Long Term Plan, digital-first primary care will become a new option for every patient improving fast access to convenient primary care.** There are about 307 million patient consultations at GP surgeries each year. Some GPs are now offering their patients the choice of quick telephone or online consultations, saving time waiting and travelling. **Over the next five years every patient in England will have a new right to choose this option – usually from their own practice or, if they prefer, from one of the new digital GP providers.** In other walks of life, mobile phones and apps have already transformed services. New digital-first primary care is proving convenient and popular, and is bound to grow. There is also emerging experience that digital GP models can help expand the GP workforce participation rate by offering flexible opportunities to part-time GPs. The NHS will deliver on this new commitment through three approaches. First, we will create a new framework for digital suppliers to offer their platforms to primary care networks on standard NHS terms. Second, and in parallel, we will ensure that new 'digital first' practices are safe and create benefit to the whole NHS. This means reviewing current out-of-area arrangements and adjusting the GP payment formulae to ensure fair funding without inequitably favouring one type of GP provider over another. Third, we will review GP regulation and terms and conditions to better support the return to practice and increased participation rates by GPs wanting to work in this way.

Figure 6: Public willingness to use video consultations with their own GP.

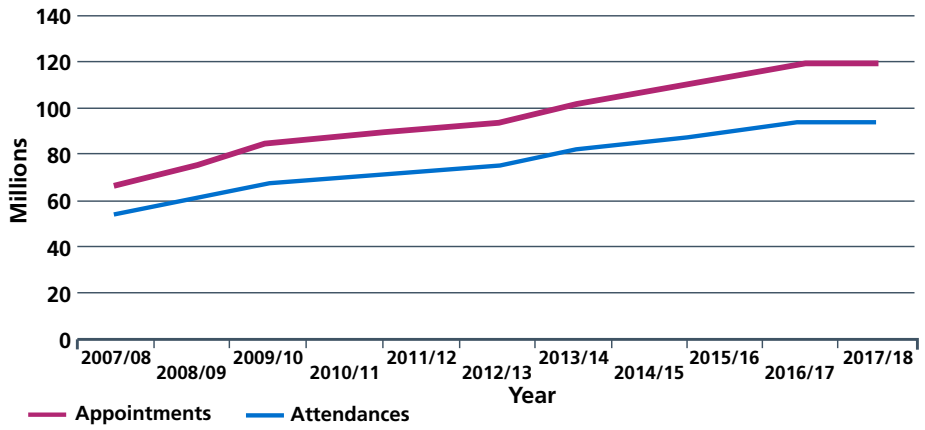


"In which, if any, of the following circumstances would you be willing to use a video consultation with your GP." n=2,083 UK adults aged 15 and over.

Source: Castle-Clarke S. What will new technology mean for the NHS and its patients? Four big technological trends. The Health Foundation, the Institute for Fiscal Studies, The King's Fund and the Nuffield Trust, 2018.

1.45. **Outpatient services will be fundamentally redesigned.** While GPs have been highly successful in constraining referral growth for new outpatients over the past two years (with referral growth flat), hospital outpatient visits have nearly doubled over the past decade from 54 to 94 million, at a cost of £8 billion a year.

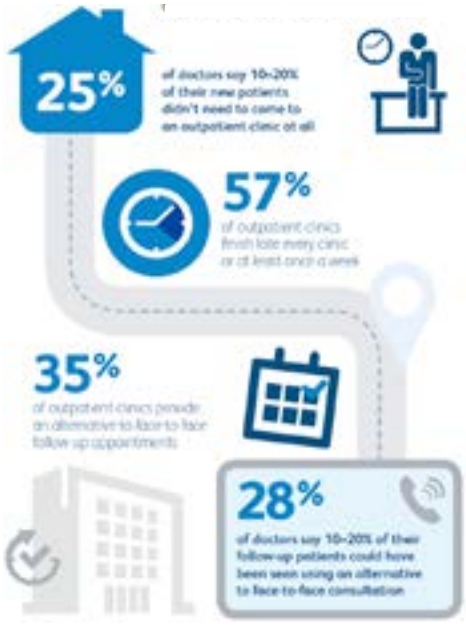
Figure 7: Outpatient appointments and attendances, England, 2007/08 to 2017/18.



Source: NHS Digital. Hospital Outpatient Activity, 2017-18. October 2018.

1.46. Outpatients traditionally serve at least three purposes, and in each case there are opportunities for redesign. An outpatient appointment can provide: advice and diagnosis for a patient and their GP; follow-up review after a hospital procedure; and ongoing specialist input into a long-term condition. Technology means an outpatient appointment is often no longer the fastest or most accurate way of providing specialist advice on diagnosis or ongoing patient care. The Royal College of Physicians has rightly argued that outpatients needs a radical overhaul[18].

Figure 8: Outpatient services: Experiences of doctors.



Source: Royal College of Physicians. Outpatients: The future. Adding value through sustainability. 2018.

1.47. In some hospitals patients are already benefitting from the redesign of outpatient services. These include better support to GPs to avoid the need for a hospital referral, online booking systems, appointments closer to home, alternatives to traditional appointments where appropriate including digital appointments and avoiding patients having to travel to unnecessary appointments. This is better for patients, supports more productive use of consultant time and enables the capacity of outpatient clinics to be used more efficiently.

CASE STUDY:

Tower Hamlets Chronic Kidney Disease e-Clinics

Tower Hamlets CCG, working with City and Hackney and Newham CCGs, established e-Clinics to improve management of Chronic Kidney Disease and reduce End Stage Renal Disease. The new service supports timely provision of advice from the hospital specialist to the GP, to enable better management of the patient either in the community or with more specialist care where needed. A single pathway from primary to secondary care with rapid access to specialist advice provided by consultant led e-clinics have transformed the way the outpatient service is delivered. Since the e-Clinic began in December 2015, 50% of referrals are managed without the need for a hospital appointment. The average waiting time for a renal clinic appointment has fallen to five days, from 64 days in 2015.

1.48. In short, the traditional model of outpatients is outdated and unsustainable. **We will therefore redesign services so that over the next five years patients will be able to avoid up to a third of face-to-face outpatient visits, removing the need for up to 30 million outpatient visits a year.** This will save patients time and inconvenience, will free up significant medical and nursing time, will allow current outpatient teams to work differently, and will avoid spending an extra £1.1 billion a year on additional outpatient visits were current trends simply to continue. These resources will instead be used to invest in faster, modern diagnostics and other needed capacity.

1.49. It's easy to be cynical about the achievability of these big technology-driven shifts in outpatient care. But there are now at least four reasons not to be. They are already happening in parts of the NHS, so this is clearly 'the art of the possible'. There is strong patient 'pull' for these new ways of accessing services, freeing-up staff time for those people who can't or prefer not to. The hardware to support 'mobile health' is already in most people's pockets – in the form of their smart phone – and the connection software is increasingly available for the NHS to credential from third party providers. And the Long Term Plan provides dedicated funding to capitalise on these opportunities, as detailed in Chapter Five.

5. Local NHS organisations will increasingly focus on population health – moving to Integrated Care Systems everywhere

1.50. ICSs are central to the delivery of the Long Term Plan. An ICS brings together local organisations to redesign care and improve population health, creating shared leadership and action. They are a pragmatic and practical way of delivering the 'triple integration' of primary and specialist care, physical and mental health services, and health with social care, consistent with what doctors report is needed:

Table 2: Doctors' views on the need for integration of primary and secondary care. Percentage of doctors agreeing with the following statements:

Collaboration between primary and secondary care doctors will improve the quality of patient services and experience	**94%**
GPs and hospital doctors should work together more directly in a collaborated and coordinated manner	**93%**
There should be shared pathways across primary and secondary care, with resources fairly directed to where care is delivered	**92%**

Source: British Medical Association. Caring, supportive, collaborative? Doctors' views on working in the NHS. November 2018.

1.51. **We will continue to develop ICSs, building on the progress the NHS has already made. By April 2021 ICSs will cover the whole country**, growing out of the current network of Sustainability and Transformation Partnerships (STPs). ICSs will have a key role in working with Local Authorities at 'place' level and through ICSs, commissioners will make shared decisions with providers on how to use resources, design services and improve population health (other than for a limited number of decisions that commissioners will need to continue to make independently, for example in relation to procurement and contract award). Every ICS will need streamlined commissioning arrangements to enable a single set of commissioning decisions at system level. This will typically involve a single CCG for each ICS area. CCGs will become leaner, more strategic organisations that support providers to partner with local government and other community organisations on population health, service redesign and Long Term Plan implementation.

1.52. Every ICS will have:

- a partnership board, drawn from and representing commissioners, trusts, primary care networks, and – with the clear expectation that they will wish to participate - local authorities, the voluntary and community sector and other partners;
- a non-executive chair (locally appointed, but subject to approval by NHS England and NHS Improvement) and arrangements for involving non-executive members of boards/ governing bodies;
- sufficient clinical and management capacity drawn from across their constituent organisations to enable them to implement agreed system-wide changes;
- full engagement with primary care, including through a named accountable Clinical Director of each primary care network;
- a greater emphasis by the Care Quality Commission (CQC) on partnership working and system-wide quality in its regulatory activity, so that providers are held to account for what they are doing to improve quality across their local area;
- all providers within an ICS will be required to contribute to ICS goals and performance, backed up by a) potential new licence conditions (subject to consultation) supporting NHS providers to take responsibility, with system partners, for wider objectives in relation to use of NHS resources and population health; and b) longer-term NHS contracts with all providers, that include clear requirements to collaborate in support of system objectives;
- clinical leadership aligned around ICSs to create clear accountability to the ICS. Cancer Alliances will be made coterminous with one or more ICS, as will Clinical Senates and other clinical advisory bodies. ICSs and Health and Wellbeing Boards will also work closely together.

1.53. **NHS Improvement will take a more proactive role in supporting collaborative approaches between trusts.** We will support trusts that wish to explore formal mergers to embed these benefits, supported by a new fast-track approach to assessing proposed transactions involving trusts that have been accredited as 'group' leaders. Each ICS will be required to implement integral services that prevent avoidable hospitalisation and tackle the wider determinants of mental and physical ill-health.

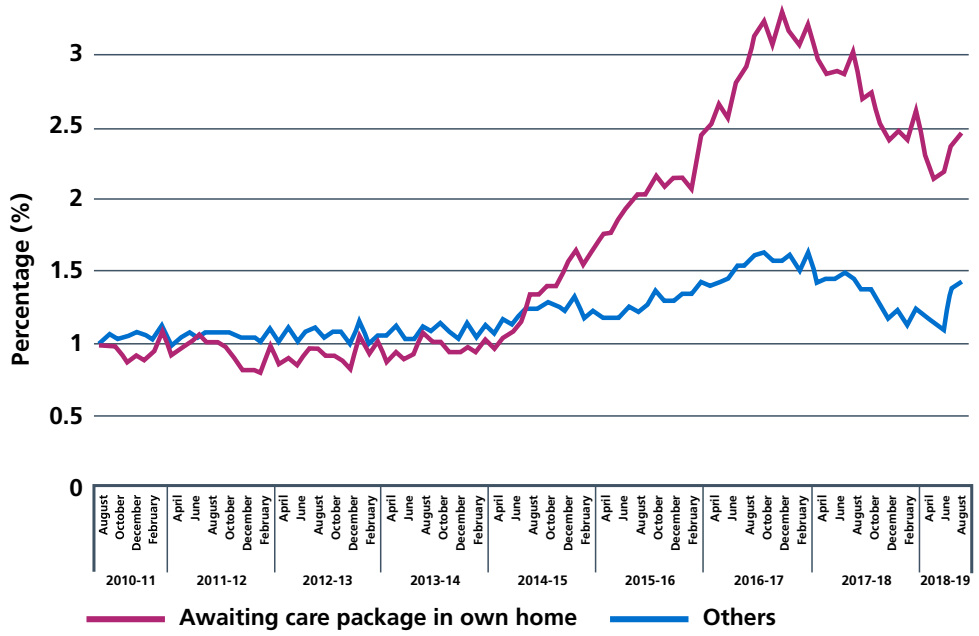
1.54. **Funding flows and contract reform will support the move to ICSs** as set out in Chapters Six and Seven. Service integration can be delivered locally through collaborative arrangements between different providers, including local 'alliance' contracts. Another option is to give one lead provider responsibility for the integration of services for a population. A new Integrated Care Provider (ICP) contract will be made available for use from 2019, following public and provider consultation. It allows for the first time the contractual integration of primary medical services with other services, and creates greater flexibility to achieve full integration of care. We expect that ICP contracts would be held by public statutory providers.

1.55. **A new ICS accountability and performance framework will consolidate the current amalgam of local accountability arrangements and provide a consistent and comparable set of performance measures.** It will include a new 'integration index' developed jointly with patients groups and the voluntary sector which will measure from patient's, carer's and the public's point of view, the extent to which the local health service and its partners are genuinely providing joined up, personalised and anticipatory care.

1.56. **ICSs will agree system-wide objectives with the relevant NHS England/NHS Improvement regional director and be accountable for their performance against these objectives.** This will be a combination of national and local priorities for care quality and health outcomes, reductions in inequalities, implementation of integrated care models and improvements in financial and operational performance. ICSs will then have the opportunity to earn greater authority as they develop and perform.

1.57. Both the wellbeing of older people and the pressures on the NHS are also linked to how well **social care** is functioning. When agreeing the NHS' funding settlement the government therefore committed to ensure that adult social care funding is such that it does not impose any additional pressure on the NHS over the coming five years. That is basis on which the demand, activity and funding in this Long Term Plan have been assessed.

Figure 9: Growth in Delayed Transfers of Care from hospital due to waiting for packages in the home.



Source: NHS England. Delayed Transfers of Care: Monthly Situation Reports.

1.58. **We will continue to support local approaches to blending health and social care budgets where councils and CCGs agree this makes sense.** Consistent with emerging good practice across the country, there are four optional models that have been shown to work individually or in combination when supported by local partners:

- voluntary budget pooling between a council and CCG for some or all of their responsibilities;
- individual service user budget pooling through personal health and social care budgets;
- the Salford model where the local authority has asked the NHS to oversee a pooled budget for all adult health and care services with a joint commissioning team; or
- the model where the CCG and local authority ask the chief executive of NHS England to designate the council chief executive or director of adult social care as the CCG accountable officer.

The government will set out further proposals for social care and health integration in the forthcoming Green Paper on adult social care.

1.59. **In the meantime, the Better Care Fund (BCF) has provided an opportunity for councils and the NHS to work together to reduce delays, but is now in need of review.** The BCF is regarded as a success in many areas, with local authorities and CCGs contributing more than their minimum required investment to support integration. However the National Audit Office has reported that the funding mechanism is overly complex, and there is a lack of clarity on the return from investment. The funding has also sometimes been used to replace core council funding rather than add to investment at the interface between health and care services. The Department of Health and Social Care and the Ministry of Housing, Communities and Local Government with NHS England are therefore reviewing the BCF to ensure it meets its goals. The review will conclude in early 2019, and 2019/20 will continue to include clear requirements to continue to reduce DTOCs and improve the availability of care packages for patients ready to leave hospital.

1.60. Chapter Two now sets out the action we – the NHS, will be taking specifically on prevention and inequalities.

Chapter 2: More NHS action on prevention and health inequalities

2.1. Demand for NHS services continues to grow, for at least five separate reasons. The first three are either desirable or unavoidable:

- **our growing and ageing population**, inevitably increasing the number of people needing NHS care and the intensity of support they require;
- growing visibility and concern about areas of longstanding **unmet health need** (for example in young people's mental health services);
- **expanding frontiers of medical science and innovation**, introducing new treatment possibilities that a modern health service should rightly be providing (for example, new cell and gene therapies).

2.2. But the second set of demand drivers are potentially modifiable by:

- action set out in the previous chapter to redesign healthcare so that people get the right care at the right time in the **optimal care setting** (for example, providing better support to people living in care homes to avoid emergency hospital admissions; providing better social care and community support to slow the development of older people's frailty; and fundamentally redesigning outpatient services so that both patients' time and specialists' expertise are used more appropriately);
- improving **upstream prevention** of avoidable illness and its exacerbations. So for example, smoking cessation, diabetes prevention through obesity reduction, and reduced respiratory hospitalisations from lower air pollution. This can also be achieved through better support for patients, carers and volunteers to enhance 'supported self-management' particularly of long-term health conditions.

2.3. **This Long Term Plan sets out new commitments for action that the NHS itself will take to improve prevention.** It does so while recognising that a comprehensive approach to preventing ill-health also depends on action that only individuals, companies, communities and national government can take to tackle wider threats to health, and ensure health is hardwired into social and economic policy. Indeed, the extra costs to the NHS of socioeconomic inequality have been calculated as £4.8 billion a year in greater hospitalisations alone[19].

2.4. **Action by the NHS is a complement to, but cannot be a substitute for, the important role for local government.** In addition to its wider responsibilities for planning, education, housing, social care and economic development, in recent years it has also become responsible for funding and commissioning preventive health services, including smoking cessation, drug and alcohol services, sexual health, and early years support for children such as school nursing and health visitors. These services are funded by central government from the public health grant, and funding and availability of these services over the next five years which will be decided in the next Spending Review directly affects demand for NHS services[20]. As many of these services are closely linked to NHS care, and in many case provided by NHS trusts, the Government and the NHS will consider whether there is a stronger role for the NHS in commissioning sexual health services, health visitors, and school nurses, and what best future commissioning arrangements might therefore be.

2.5. **The Global Burden of Disease (GBD) study quantifies and ranks the contribution of various risk factors that cause premature deaths in England[21].** The top five are: smoking, poor diet, high blood pressure, obesity, and alcohol and drug use. Air pollution and lack of exercise are also significant[22]. **These priorities guide our renewed NHS prevention programme.**

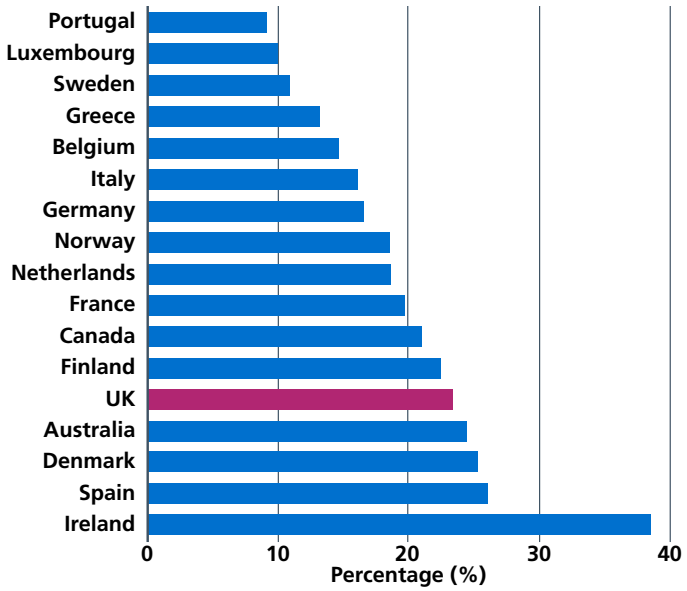
2.6. As described in Chapter One, our new integrated care systems (ICSs) will help deliver these programmes as the NHS continues to move from reactive care towards a model embodying active population health management. ICSs – including the devolved health and care systems in Greater Manchester and Surrey Heartlands – will also provide stronger foundations for working with local government and voluntary sector partners on the broader agenda of prevention and health inequalities. They will in turn be supported by expanded teams across groups of neighbouring GP practices who work together under the primary care network contract and with local NHS, social care and voluntary services, funded by the new Long Term Plan investment guarantee for primary and community services.

2.7. The role of the NHS includes secondary prevention, by detecting disease early, preventing deterioration of health and reducing symptoms to improve quality of life. **Every 24 hours, the NHS comes into contact with over a million people at moments in their lives that bring home the personal impact of ill health. This Long Term Plan sets out practical action to do more to use these contacts as positive opportunities to help people improve their health.** This will contribute to the government's ambition of five years of extra healthy life expectancy by 2035.

Smoking

2.8. Smoking rates have fallen significantly, but smoking still accounts for more years of life lost than any other modifiable risk factor. Around 6.1 million people in England still smoke[23]. Smokers see their GP over a third more often than non-smokers, and smoking is linked to nearly half a million hospital admissions each year[24]. Current estimates are that nearly a quarter of women in the UK smoke during pregnancy[25].

Figure 10: Smoking at any time during pregnancy in the UK and EU15+, 2015.



Source: Royal College of Paediatrics and Child Health. Child Health in 2030: Comparisons with other wealthy countries. October 2018.

Table 3: Impact of smoking in pregnancy.

	Maternal smoking	Second-hand smoke exposure
Low birth weight	Average 250g lighter	Average 30-40g lighter
Stillbirth	Double the likelihood	Increased risk
Miscarriage	24-32% more likely	Possible risk
Preterm birth	27% more likely	Increased risk
Heart defects	50% more likely	Increased risk
Sudden infant death	3 times more likely	45% more likely

Source: Action on Smoking and Health. Smoking in pregnancy challenge group. Review of the Challenge 2018. July 2018.

2.9. First, the NHS will therefore make a significant new contribution to making England a smoke-free society, by supporting people in contact with NHS services to quit based on a proven model implemented in Canada and Manchester[26]. **By 2023/24, all people admitted to hospital who smoke will be offered NHS-funded tobacco treatment services.**

2.10. **Second, the model will also be adapted for expectant mothers, and their partners, with a new smoke-free pregnancy pathway including focused sessions and treatments.**

2.11. **Third, a new universal smoking cessation offer will also be available as part of specialist mental health services for long-term users of specialist mental health, and in learning disability services.** On the advice of PHE, this will include the option to switch to e-cigarettes while in inpatient settings.

CASE STUDY:

The Ottawa Model for Smoking Cessation

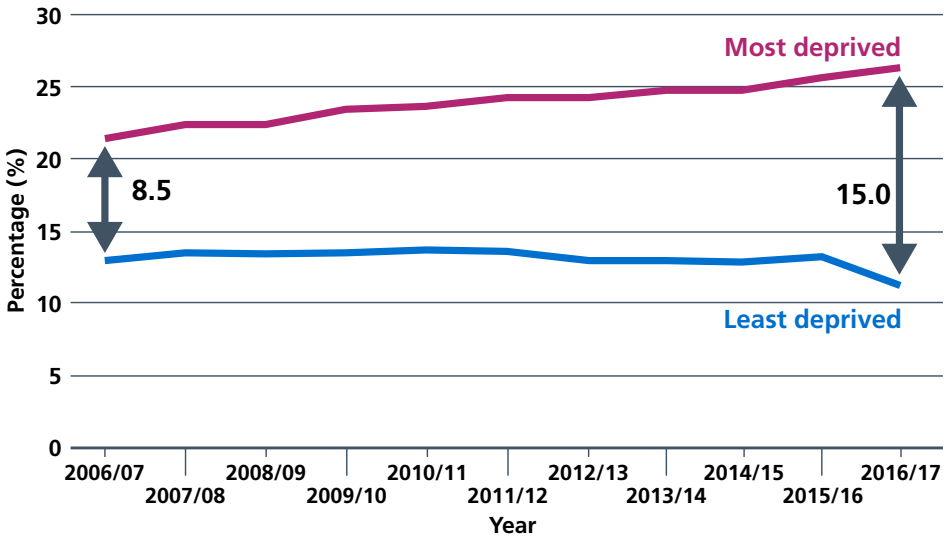
The Ottawa Model for Smoking Cessation in 120 hospitals across Canada identifies the smoking status of all admitted patients, followed by brief advice, personalised bedside counselling, timely nicotine replacement therapy and/or pharmacotherapy, and follow-up after discharge[27]. It improves long-term quit rates by 11%[28]. The Royal College of Physicians has modelled the impact of implementing the Ottawa Model for Smoking Cessation intervention within the NHS[29], which this Long Term Plan will now be adopting.

Obesity

2.12. Global obesity rates have tripled since 1975, and the UK ranks among the worst in Europe[30]. Obesity and poor diet are linked with type 2 diabetes, high blood pressure, high cholesterol and increased risk of respiratory, musculoskeletal and liver diseases. Obese people are also at increased risk of certain cancers, including being three times more likely to develop colon cancer.

2.13. Nearly two-thirds of adults in England are overweight or obese. In 2016/17, 617,000 admissions to NHS hospitals recorded obesity as a primary or secondary diagnosis[31,32]. A third of children leaving primary school are overweight or obese and, on average, consume up to 500 extra calories per day. Children are heavily exposed to television advertising for food and drinks high in salt, fat or sugar[33]; fast food shops are a growing presence on high streets[34] and increasingly cluster around schools[35]. The government has pledged to halve childhood obesity and significantly reduce the gap in obesity between children from the most and least deprived areas by 2030.

Figure 11: The widening socio-economic inequality in childhood obesity at year 6 of primary school.



Source: NHS Digital. Statistics on Obesity, Physical Activity and Diet. April 2018.

2.14. The burden of obesity isn't experienced equally across society[36]. The NHS will therefore provide a targeted support offer and **access to weight management services in primary care for people with a diagnosis of type 2 diabetes or hypertension with a BMI of 30+** (adjusted appropriately for ethnicity), where we know we can have a significant impact on improving health, reducing health inequalities and reducing costs. By 2022/23, we also expect to treat up to a further 1,000 children a year for severe complications related to their obesity, such as diabetes, cardiovascular conditions, sleep apnoea and poor mental health. These services will prevent children needing more invasive treatment.

2.15. The NHS Diabetes Prevention Programme supports those at high risk of type 2 diabetes to reduce their risk. A joint commitment by NHS England, Public Health England (PHE) and Diabetes UK, the programme is the largest undertaking of its kind in the world and over 100,000 people have already benefited since its introduction in 2016. In many areas demand has outstripped supply, and it has proven highly effective. **We are now committing to fund a doubling of the NHS Diabetes Prevention Programme over the next five years, including a new digital option** to widen patient choice and target inequality.

2.16. The risk of developing type 2 diabetes is up to six times higher in certain Black, Asian and Minority Ethnic (BAME) groups. Expanding the Diabetes Prevention Programme is a key vehicle for tackling health inequalities, with a significantly higher take up from BAME groups than the general population. We will also continue to support local health systems to address inequality of access to multidisciplinary foot care teams and specialist nursing support for people who have diabetes.

2.17. Medical research has shown that some people with type 2 diabetes can achieve remission through adoption of a very low calorie diet. This allowed nearly half of patients to stop taking anti-diabetic drugs and still achieve non-diabetic range glucose levels[37]. **We will therefore test an NHS programme supporting very low calorie diets for obese people with type 2 diabetes.**

2.18. **The NHS will continue to take action on healthy NHS premises.** In 2016, NHS England introduced a financial incentive for hospitals to encourage healthier food options to be available for staff, limiting the proportion, placement and promotion of foods high in fat, salt and sugar (HFSS). Our action has also reduced the sale of sugar-sweetened beverages across the NHS, from 15.6% in July 2017, to 7.4% in June 2018. The next version of hospital food standards will be published in 2019, strengthening these requirements and pushing further in securing healthy food for our staff and patients. They will include substantial restrictions on HFSS foods and beverages. All trusts will be required by the NHS standard contract to deliver against these standards.

2.19. **Nutrition training, and an understanding of what is involved in achieving and maintaining a healthy weight, varies between medical schools.** Some courses have just eight hours, at most, over a five- or six-year degree. This is not about doctors becoming nutritionists or dieticians. It is about making sure staff on the frontline who are in contact with thousands of patients a year feel equipped to talk to them about nutrition and achieving a healthy weight in an informed and sensitive way. They should feel able to refer patients appropriately in cases where a nutrition support could help, if they are overweight, and have type 2 diabetes, or high blood pressure for example. Together with the professional bodies and universities we will ensure nutrition has a greater place in professional education training.

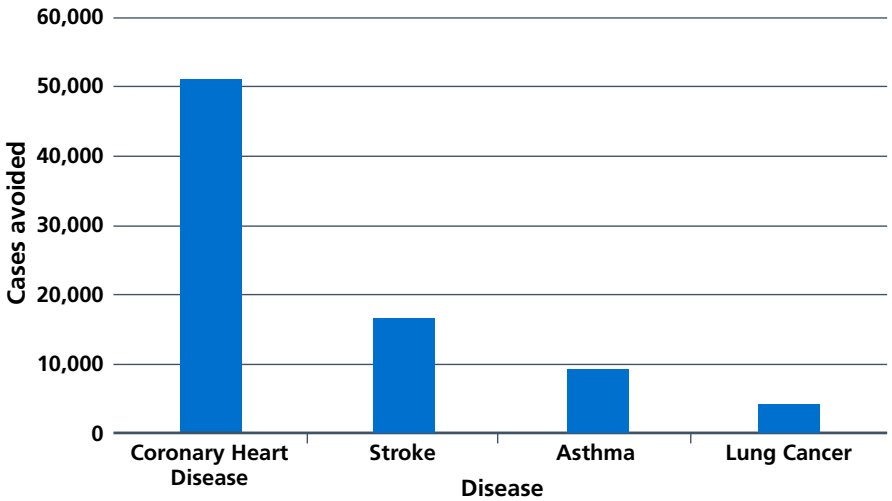
Alcohol

2.20. Alcohol contributes to conditions including cardiovascular disease, cancer and liver disease, harm from accidents, violence and self-harm[38], and puts substantial pressure on the NHS[39]. Hospitals in Bolton, Salford, Nottingham, Liverpool, London and Portsmouth have improved the quality of alcohol-related care, by establishing specialist Alcohol Care Teams (ACTs). ACTs significantly reduced accident and emergency (A&E) attendances, bed days, readmissions and ambulance call-outs[40]. Over the next five years, those **hospitals with the highest rate of alcohol dependence-related admissions will be supported to fully establish ACTs** using funding from their clinical commissioning groups (CCGs) health inequalities funding supplement, working in partnership with local authority commissioners of drug and alcohol services. Delivered in the 25% of worst affected hospitals, this could prevent 50,000 admissions over five years[41].

Air pollution

2.21. **While wider action on air pollution is for government to lead, the NHS will work to reduce air pollution from all sources. Specifically, we will cut business mileages and fleet air pollutant emissions by 20% by 2023/24.** Almost 30% of preventable deaths in England are due to non-communicable diseases specifically attributed to air pollution. More than 2,000 GP practices and 200 hospitals are in areas affected by toxic air[42]. In 2017, 3.5% (9.5 billion miles) of all road travel in England was related to patients, visitors, staff and suppliers to the NHS[43]. At least 90% of the NHS fleet will use low-emissions engines (including 25% Ultra Low Emissions) by 2028, and primary heating from coal and oil fuel in NHS sites will be fully phased out. Redesigned care and greater use of 'virtual' appointments as set out in Chapter One will also reduce the need for patient and staff travel.

Figure 12: Opportunity cost of air pollution: Cumulative new cases of disease avoided by 2035 for 1 µg/m³ reduction in $PM_{2.5}$, England.



Source: Public Health England. Estimation of costs to the NHS and social care due to the health impacts of air pollution. May 2018.

Antimicrobial resistance

2.22. Although the number of antibiotic prescriptions dispensed in primary care has reduced by 13.2% in five years (between 2013 and 2017), further progress is required. **The health service will continue to support implementation and delivery of the government's new five-year action plan on Antimicrobial Resistance.** We will continue to optimise use, reduce the need for and unintentional exposure to antibiotics, as well as supporting the development of new antimicrobials. We will ensure access to old and new treatments, preventative measures (including vaccines) and appropriate tools (including diagnostics and electronic prescribing in both hospitals and community settings). And we will continue to support system-wide improvement, surveillance, infection prevention and control practice, and antimicrobial stewardship, ensuring resources are available for clinical expertise and senior leadership at all levels.

Stronger NHS action on health inequalities

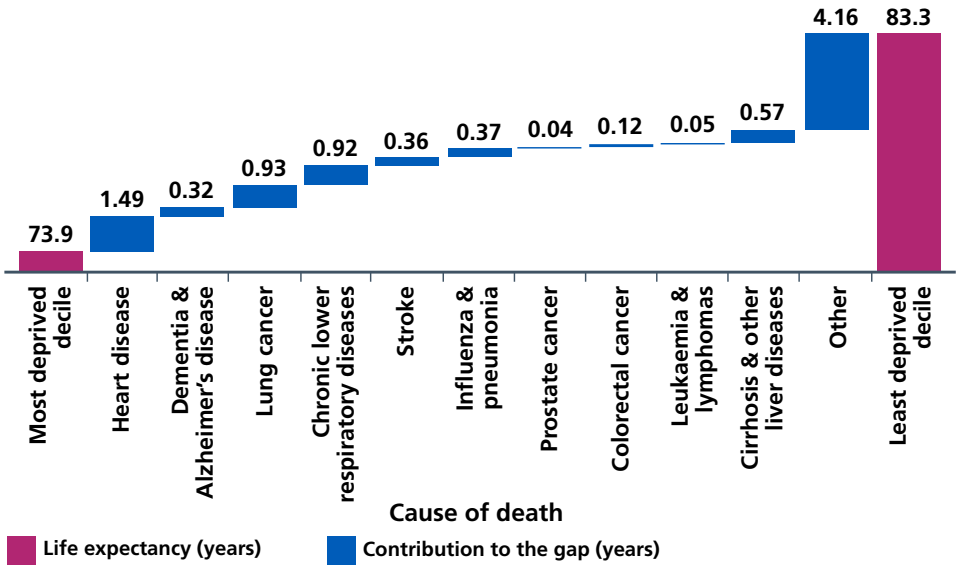
2.23. The NHS was founded to provide universal access to healthcare, though healthcare is only one of many factors that influence our health. The social and economic environment in which we are born, grow up, live, work and age, as well as the decisions we make for ourselves and our families collectively have a bigger impact on our health than health care alone. While life expectancy continues to improve for the most affluent 10% of our population, it has either stalled or fallen for the most deprived 10%. Premature mortality in Blackpool, the most deprived part of the country, is twice as high as in the most affluent areas[44]. Women in the most deprived parts of England spend 34% of their lives in poor health, compared to 17% in the wealthiest areas[45]. Multimorbidity is more common in deprived areas[46], and some parts of our population including BAME communities are at substantially higher risk of poor health and early death. On average, adults with a learning disability die 16 years earlier than the general population – 13 years for men, 20 years for women[47]. People with severe mental health illnesses tend to die 15-20 years earlier than those without[48].

2.24. **For reasons both of fairness and of overall outcomes improvement, the NHS Long Term Plan therefore takes a more concerted and systematic approach to reducing health inequalities and addressing unwarranted variation in care. In order to do so and reflecting our Public Sector Equality Duties and other public duties:**

2.25. **NHS England will continue to target a higher share of funding towards geographies with high health inequalities** than would have been allocated using solely the core needs formulae. This funding is estimated to be worth over £1 billion by 2023/24. For the five-year CCG allocations that underpin this Long Term Plan, NHS England will introduce from April 2019 more accurate assessment of need for community health and mental health services, as well as ensuring the allocations formulae are more responsive to the greatest health inequalities and unmet need in areas such as Blackpool. Furthermore, no area will be more than 5% below its new target funding share effective from April 2019, with additional funding growth going to areas between 5% and 2.5% below their target share. NHS England will also commission the Advisory Committee on Resource Allocation to conduct and publish a review of the inequalities adjustment to the funding formulae.

2.26. **To support local planning and ensure national programmes are focused on health inequality reduction, the NHS will set out specific, measurable goals for narrowing inequalities, including those relating to poverty, through the service improvements set out in this Long Term Plan.** All local health systems will be expected to set out during 2019 how they will specifically reduce health inequalities by 2023/24 and 2028/29. These plans will also, for the first time, clearly set out how those CCGs benefiting from the health inequalities adjustment are targeting that funding to improve the equity of access and outcomes. NHS England, working with PHE and our partners in the voluntary and community sector and local government, will develop and publish a 'menu' of evidence-based interventions that if adopted locally would contribute to this goal. We will expect CCGs to ensure that all screening and vaccination programmes are designed to support a narrowing of health inequalities.

Figure 13: Breakdown of the life expectancy inequality gap between the most and least deprived deciles, males, England, 2014 to 2016.



Source: Public Health England. Health Profile for England: 2018. September 2018.

2.27. While we cannot treat our way out of inequalities, the NHS can ensure that action to drive down health inequalities is central to everything we do. For example:

2.28. **In maternity services, we will implement an enhanced and targeted continuity of carer model to help improve outcomes for the most vulnerable mothers and babies.** By 2024, 75% of women from BAME communities and a similar percentage of women from the most deprived groups will receive continuity of care from their midwife throughout pregnancy, labour and the postnatal period. This will help reduce pre-term births, hospital admissions, the need for intervention during labour, and women's experience of care.

2.29. Women from the most deprived communities are 12 times more likely to smoke during pregnancy than women from more affluent areas. In addition to the enhanced midwife model, **we will offer all women who smoke during their pregnancy, specialist smoking cessation support to help them quit.**

2.30. People with severe mental illnesses are at higher risk of poor physical health. Compared with the general patient population, patients with severe mental illnesses are at substantially higher risk of obesity, asthma, diabetes, chronic obstructive pulmonary disease (COPD) and cardiovascular disease[49] and make more use of urgent and emergency care[50]. People with a long-standing mental health problem are twice as likely to smoke, with the highest rates among people with psychosis or bipolar disorder. By 2020/21, the NHS will ensure that at least 280,000 people living with severe mental health problems have their physical health needs met. **By 2023/24, we will further increase the number of people receiving physical health checks to an additional 110,000 people per year,** bringing the total to 390,000 checks delivered each year including the ambition in the *Five Year Forward View for Mental Health*.

2.31. Over 1.2 million people in England have a learning disability and face significant health inequalities compared with the rest of the population[51,52]. Autism is a lifelong condition and a part of daily life for around 600,000 people in England. It is estimated that 20-30% of people with a learning disability also have autism[53]. Despite suffering greater ill-health, people with a learning disability, autism or both often experience poorer access to healthcare[54]. In 2017, the Learning Disabilities Mortality Review Programme (LeDeR) found that 31% of deaths in people with a learning disability were due to respiratory conditions and 18% were due to diseases of the circulatory system. **Across the NHS, we will do more to ensure that all people with a learning disability, autism, or both can live happier, healthier, longer lives.** This means that we will provide timely support to children and young people and their families. We will do more to keep people well with proactive care in the community. We will ensure that reasonable adjustments are made so that wider NHS services can support, listen to, and help improve the health and wellbeing of people with learning disabilities and autism, and their families. Over the next five years, we will invest to ensure that children with learning disabilities have their needs met by eyesight, hearing and dental services, are included in reviews as part of general screening services and are supported by easily accessible, ongoing care. For people with the most complex needs, we will continue to improve access to care in the community, so that more people can live in or near to their own homes and families. Finally, we will accelerate the LeDeR initiative to identify common themes and learning points and provide targeted support to local areas. Further action on top of this is also set out in Chapter Three.

2.32. The number of people sleeping rough has been increasing in recent years. People affected by homelessness die, on average, around 30 years earlier than the general population[55]. Outside London, where people are more likely to sleep rough for longer, support needs may be higher. 31% of people affected by homelessness have complex needs, and additional financial, interpersonal and emotional needs that make engagement with mainstream services difficult. 50% of people sleeping rough have mental health needs, but many parts of the country with large numbers of rough sleepers do not have specialist mental health support and access to mainstream services is challenging. **We will invest up to £30 million extra on meeting the needs of rough sleepers, to ensure that the parts of England most affected by rough sleeping will have better access to specialist homelessness NHS mental health support, integrated with existing outreach services.**

CASE STUDY:

UCLH Pathway Programme

University College London Hospitals has developed the Pathway Programme for homeless patients admitted to hospital. It involves in-hospital GPs and dedicated Pathway nurses working with others to address the housing, financial and social issues of patients. Following its introduction, A&E attendances by supported individuals fell by 38% with a 78% reduction in bed days[56]. Pathway, now a charity, helps the NHS to create hospital teams to support homeless patients and ten hospitals in London, Leeds, Bradford, Manchester and Brighton have since adopted the model[57].

2.33. **We will continue to identify and support carers, particularly those from vulnerable communities.** Carers are twice as likely to suffer from poor health compared to the general population, primarily due to a lack of information and support, finance concerns, stress and social isolation. Quality marks for carer-friendly GP practices, developed with the Care Quality Commission (CQC), will help carers identify GP services that can accommodate their needs. We will encourage the national adoption of carer's passports, which identify someone as a carer and enable staff to involve them in a patient's care, and set out guidelines for their use based on trials in Manchester and Bristol. These will be complemented by developments to electronic health records that allow people to share their caring status with healthcare professionals wherever they present.

2.34. Carers should not have to deal with emergencies on their own. **We will ensure that more carers understand the out-of-hours options that are available to them and have appropriate back-up support in place for when they need it.** Up to 100,000 carers will benefit from 'contingency planning' conversations and have their plans included in Summary Care Records, so that professionals know when and how to call those plans into action when they are needed.

2.35. Young carers feel say they feel invisible and often in distress, with up to 40% reporting mental health problems arising from their experience of caring. Young Carers should not feel they are struggling to cope on their own. **The NHS will roll out 'top tips' for general practice which have been developed by Young Carers, which include access to preventive health and social prescribing, and timely referral to local support services.** Up to 20,000 Young Carers will benefit from this more proactive approach by 23/24.

2.36. **We will invest in expanding NHS specialist clinics to help more people with serious gambling problems.** Over 400,000 people in England are problem gamblers and two million people are at risk, but current treatment only reaches a small number through one national clinic. We will therefore expand geographical coverage of NHS services for people with serious gambling problems, and work with partners to tackle the problem at source.

2.37. **The NHS will continue to commission, partner with and champion local charities, social enterprises and community interest companies providing services and support to vulnerable and at-risk groups.** These organisations are often leading innovators in their field. Many provide a range of essential health, care and wellbeing services to groups that mainstream services struggle to reach. Of 100,000 social enterprises in the UK, 31% work in the 20% most deprived communities[58], creating jobs and filling gaps in support as well as addressing wider determinants of health and wellbeing such as debt and housing. For example, Bevan Healthcare, a social enterprise in Bradford, provides NHS GP services alongside wider support to meet the needs of people who are homeless[59]. Community Catalysts, a community interest company, works with people with long term health and care needs to help them develop and run their own micro community enterprises with over 1,800 enterprises being launched across the country[60]. This kind of innovation will need to be encouraged and supported by ICSs to address health inequalities in their populations.

2.38. A major factor in maintaining good mental health is stable employment. This Plan sets out how the NHS is improving access to mental health support for people in work and our commitment to supporting people with severe mental illnesses to seek and retain employment. As the largest employer in England, we are also taking action to improve the mental health and wellbeing of our workforce and setting an example to other employers.

2.39. **As well as moderating growth in demand for healthcare, NHS action on health and health inequalities relieves pressure on other essential public services. Detail of some of these actions supported by this Long Term Plan are set out in the Appendix.**

Chapter 3: Further progress on care quality and outcomes

3.1. **For all major conditions, the quality of care and the outcomes for patients are now measurably better than a decade ago. Childbirth is the safest it has ever been, cancer survival is at an all-time high, deaths from cardiovascular disease have halved since 1990, and male suicide is at a 31-year low.** But there is good evidence to suggest that over the next decade the NHS should be doing even better. Partly that's because there's currently too much variation in service quality between clinical teams and between different parts of the country. Partly we'll need to improve by tackling previously unmet need – for example in young people's mental health services. And partly we'll be able to do better because the worldwide frontier of medical possibility will continue to advance.

3.2. **This Long Term Plan therefore sets out clear and costed improvement priorities for the biggest killers and disablers of our population.** It largely does so using the latest epidemiological evidence from the Global Burden of Disease[61] (GBD) study for England, supplemented by the views of patients and the public on their priorities for improvement[62]. These confirm that the Plan needs to stick with and make further advances on our current improvement agenda for cancer, mental health, multimorbidity and healthy ageing including dementia, while intensifying the NHS' focus on children's health, cardiovascular and respiratory conditions, and learning disability and autism, amongst others. It also affirms the importance of therapies and planned surgical services for conditions that limit independence and affect quality of life.

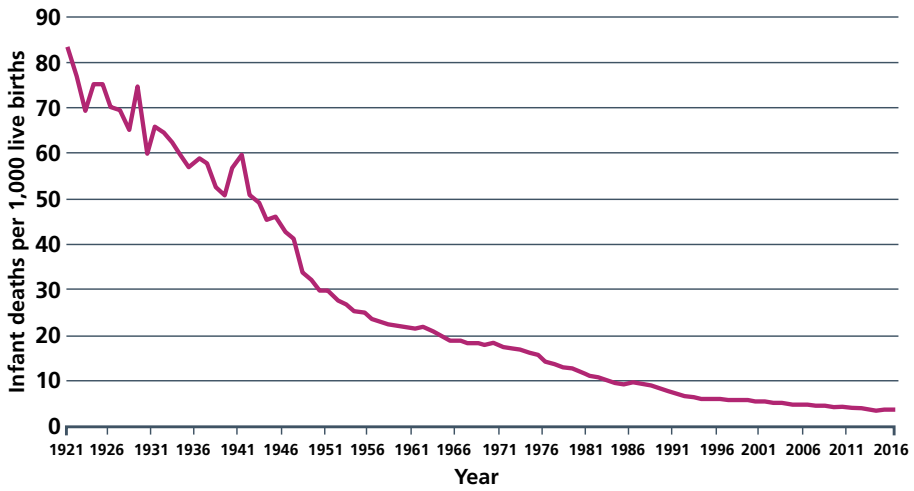
3.3. The Plan sets out work programmes in these areas, which will be further detailed over the coming year. Some are necessarily framed as 10-year goals given the timelines needed to expand capacity and grow the workforce. So by 2028 the Plan commits to dramatically improving our cancer survival, by increasing the proportion of cancers diagnosed early, from a half to three quarters. Other goals will happen sooner, such as halving maternity-related deaths by 2025. And some are set to happen over the next two years, including significant improvements in mental health and primary care. This chapter sets out the detail, though it does not, of course, describe everything the NHS will do in these and other improvement areas over the coming five and ten years.

A strong start in life for children and young people

3.4. Children and young people represent a third of our country. Their health and wellbeing will determine our future. **Recent years have seen improvements in certain services which have been singled out for action, but a mixed picture overall. Now, over the next five and ten years we need to build on that and broaden our focus.**

3.5. The last decade has seen sustained reductions in stillbirths and neonatal deaths, alongside significant improvements in women's experience of care[63]. Community-based mental health services for children and young people are now expanding, and the number of children and young people with well-controlled diabetes has improved substantially over the last five years[64]. However, 1.7 million children have longstanding illnesses, including asthma, epilepsy and diabetes, and England lags behind international comparators in some important aspects of child health[65,66,67,68]. And our young people are increasingly exposed to two new childhood epidemics – obesity and mental distress.

Figure 14: Infant mortality, England and Wales, 1921-2016.

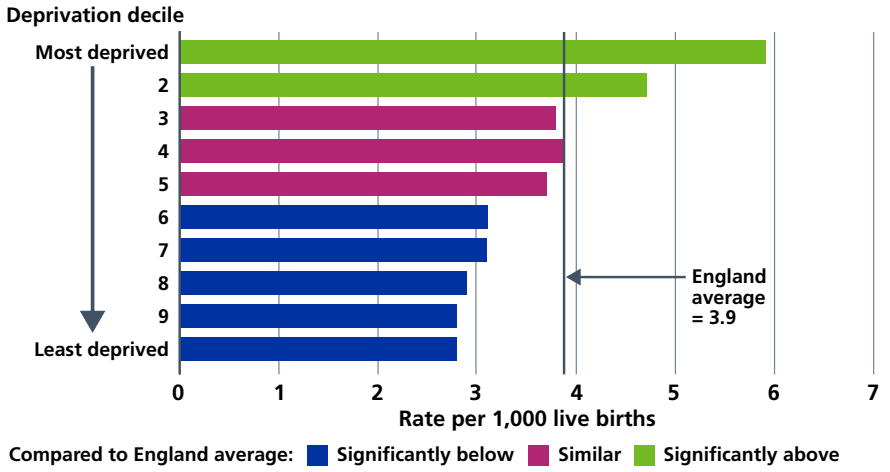


Note: Infant mortality under 1 year.

Source: Office for National Statistics. Child Mortality in England and Wales. March 2018.

3.6. The health of children and young people is determined by far more than healthcare. Household income, education, housing, stable and loving family life and a healthy environment all significantly influence young people's health and life chances. By itself, better healthcare can never fully compensate for the health impact of wider social and economic influences.

Figure 15: Infant mortality rate by deprivation decile, England, 2014 to 2016.



Note: Deprivation deciles based on groups of lower super output areas in England.

Source: Analysis by Public Health England based on mortality, births and population data from ONS and the index of Multiple Deprivation 2015 (DCLG).

3.7. Nevertheless, the NHS plays a crucial role in improving the health of children and young people: from pregnancy, birth and the early weeks of life; through supporting essential physical and cognitive development before starting school; to help in navigating the demanding transition to adulthood. Working closely with local government and other public services, the NHS can also play an important role in tackling obesity and improving mental health. **The first part of this chapter sets out new action to improve the health and wellbeing of children and young people.**

Maternity and neonatal services

3.8. Having a baby is now safer than 10 years ago. Since 2010, despite increases in some risk factors such as age and comorbidities of mothers, there has been an 18.8% reduction in stillbirths[69], a 5.8% reduction in neonatal mortality[70] and an 8% reduction in maternal mortality[71]. Maternal mortality occurs in fewer than 1 in 10,000 pregnancies. But we can do even better. Significant regional variation in extended perinatal mortality still exists[72]. Of the term babies who died in 2016, different care might have led to a different outcome for 71%[73]. Women from the poorest backgrounds and mothers from Black, Asian and Minority Ethnic (BAME) groups are at higher risk of their baby dying in the womb or soon after birth[74]. Approximately 700-900 pregnancies a year are affected by neural tube defects – in early 2019, the government will consult on the mandatory fortification of flour with folic acid to prevent foetal abnormalities[75]. As foetal and neonatal care has developed, pre-term birth is more common and the survival rate of sick newborn babies is continuing to improve. Neonatal critical care capacity needs to keep pace with these advances to improve short and long-term outcomes for these children.

3.9. **Through the Long Term Plan, the NHS will accelerate action to achieve 50% reductions in stillbirth, maternal mortality, neonatal mortality and serious brain injury by 2025.** In order to do so:

3.10. An independent evaluation of the **Saving Babies Lives Care Bundle (SBLCB)**, which supports the ambitions set out in Better Births, has shown a 20% reduction in the stillbirth rate at maternity units where it was implemented. We aim to **roll out the care bundle across every maternity unit in England in 2019**. We will also support the establishment of Maternal Medicine Networks, which will further ensure women with acute and chronic medical problems have timely access to specialist advice and care at all stages of pregnancy. And the Maternity Incentive Scheme will, for the second year running, reward the delivery of 10 key maternity safety actions through a Clinical Negligence Scheme for Trusts (CNST) rebate.

3.11. However, the prevalence of pre-term birth is increasing[76], and more focus on pre-term mortality is needed to achieve substantial reductions in overall perinatal mortality rates and meet our national ambition[77]. An expansion to the SBLCB will be published in 2019. This will include a focus on **preventing pre-term birth**, which will minimise unnecessary intervention and define a more holistic approach to risk assessment during labour, alongside further improvements to cardiotocography monitoring, and reductions in smoking during pregnancy. To care for women with heightened risk of pre-term birth, including younger mothers and those from deprived backgrounds, we will encourage development of **specialist pre-term birth clinics** across England. The SBLCB will also encourage clinically appropriate use of magnesium sulphate – estimated to help reduce the number of pre-term babies born with cerebral palsy by up to 700 per year. We will support maternity services to fully implement the expanded SBLCB in 2020.

3.12. Recommendations from the *National Maternity Review*: *Better Births* are being implemented through Local Maternity Systems. These systems bring together the NHS, local authorities and other local partners with the aim of ensuring women and their families receive seamless care, including when moving between maternity or neonatal services or to other services such as primary care or health visiting. **By spring 2019, every trust in England with a maternity and neonatal service will be part of the National Maternal and Neonatal Health Safety Collaborative.** Every national, regional and local NHS organisation involved in providing safe maternity and neonatal care has a named Maternity Safety Champion. Through the Collaborative and Maternity Safety Champions, the NHS is supporting a culture of multidisciplinary team working and learning, vital for safe, high-quality maternity care. Twenty Community Hubs have been established, focusing on areas with greatest need, and acting as 'one stop shops' for women and their families. These hubs work closely with local authorities, bringing together antenatal care, birth facilities, postnatal care, mental health services, specialist services and health visiting services.

3.13. Continuity of carer teams are being developed and launched across the country – with the aim that in 2019, 20% of pregnant women will be offered the opportunity to have the same midwife caring for them throughout their pregnancy, during birth and postnatally. These teams will deliver more personalised care plans for pregnancy. **We will continue to work with midwives, mothers and their families to implement continuity of carer so that, by March 2021, most women receive continuity of the person caring for them during pregnancy, during birth and postnatally.** Women who receive continuity of carer are 16% less likely to lose their baby, 19% less likely to lose their baby before 24 weeks and 24% less likely to experience pre-term birth[78]. This will be targeted towards women from BAME groups and those living in deprived areas, for whom midwifery-led continuity of carer is linked to significant improvements in clinical outcomes[79].

3.14. **The NHS will continue to improve how it learns lessons when things go wrong and minimise the chances of them happening again.** The Healthcare Safety Investigation Branch reviews all term stillbirths, early neonatal deaths and cases of severe brain injury in babies, as well as all maternal deaths. A Perinatal Mortality Review Tool is now used by all maternity providers, supporting high quality reviews of the circumstances and care leading up to and surrounding each stillbirth and neonatal death.

3.15. **Maternity digital care records are being offered to 20,000 eligible women in 20 accelerator sites across England, rising to 100,000 by the end of 2019/20.** We will continue to expand the roll-out of maternity digital care records. **By 2023/24, all women will be able to access their maternity notes and information through their smart phones or other devices.** Maternity Pioneers have commissioned and rolled out apps to help women to make choices about their care and access services and information in a more convenient and efficient way. Women's experiences of maternity care are also improving, with improvements across almost every question in the latest Care Quality Commission (CQC) survey[80]. Involving service users has been at the heart of these improvements with over 100 Maternity Voice Partnerships in place across England to ensure that maternity services are rooted in, and responding to, what women and their families need and want.

3.16. Around one in four women experience mental health problems in pregnancy and during the 24 months after giving birth[81]. The consequences of not accessing **high-quality perinatal mental health care** are estimated to cost the NHS and social care £1.2 billion per year[82]. The Long Term Plan will improve access to and the quality of perinatal mental health care for mothers, their partners and children by:

- Increasing access to evidence-based care for women with moderate to severe perinatal mental health difficulties and a personality disorder diagnosis, to benefit an additional 24,000 women per year by 2023/24, in addition to the extra 30,000 women getting specialist help by 2020/21. Care provided by specialist perinatal mental health services will be available **from preconception to 24 months after birth** (care is currently provided from preconception to 12 months after birth), in line with the cross-government ambition for women and children focusing on the first 1,001 critical days of a child's life[83];

- Expanding access to evidence-based psychological therapies within specialist perinatal mental health services so that they also include parent-infant, couple, co-parenting and family interventions;
- Offering fathers/partners of women accessing specialist perinatal mental health services and maternity outreach clinics evidence-based assessment for their mental health and signposting to support as required. This will contribute to helping to care for the 5-10% of **fathers who experience mental health difficulties** during the perinatal period[84];
- Increasing access to evidence-based psychological support and therapy, including digital options, in a maternity setting. **Maternity outreach clinics** will integrate maternity, reproductive health and psychological therapy for women experiencing mental health difficulties directly arising from, or related to, the maternity experience.

3.17. **We will improve access to postnatal physiotherapy to support women who need it to recover from birth.** About one in three women will experience urinary incontinence after childbirth[85], one in ten faecal incontinence[86], and one in twelve pelvic organ prolapse. Physiotherapy is by far the most cost-effective intervention for preventing and treating mild to moderate incontinence and prolapse[87]. We will ensure that women have access to multidisciplinary pelvic health clinics and pathways across England via referral. Clinics can also provide training and support for local clinicians working with women, such as GPs and midwives.

3.18. **All maternity services that do not deliver an accredited, evidence-based infant feeding programme, such as the UNICEF Baby Friendly Initiative, will begin the accreditation process in 2019/20.** Only 57% of babies in England are currently born in an accredited 'baby friendly' environment. Our breastfeeding rates compare unfavourably with other countries in Europe[88]. There is substantial variation between parts of England, with over 80% of babies breastfed at 6-8 weeks in some parts of London compared with 32% in parts of the North East[89].

3.19. **We will redesign and expand neonatal critical care services to improve the safety and effectiveness of services and experience of families.** In particular, we will address the shortage of neonatal capacity through the introduction of more Neonatal Intensive Care Cots where the Neonatal Critical Care Review has identified under capacity. We will improve triage within expert maternity and neonatal centres so that the right level of care is available to babies as close to the family home as possible. This will improve survival, safety and the quality of outcomes for babies.

3.20. **We will develop our expert neonatal nursing workforce.** This will mean extra neonatal nurses and expanded roles for some allied health professionals to support neonatal nurses.

3.21. **We will enhance the experience of families during the worrying period of neonatal critical care.** From 2021/22, care coordinators will work with families within each of the clinical neonatal networks across England to support families to become more involved in the care of their baby and invest in improved parental accommodation.

Children and young people's mental health services

3.22. Mental health problems often develop early and, between the ages of 5-15, one in every nine children has a mental disorder[90]. Half of all mental health problems are established by the age of 14, with three quarters established by 24 years of age[91]. Prompt access to appropriate support enables children and young people experiencing difficulties to maximise their prospects for a healthy and happy life. While the latest prevalence survey has shown only a modest increase in diagnosable problems since 2004 – from 10.1% to 11.2% – this overall figure includes concerning rates of mental distress particularly amongst late teenage girls[92].

3.23. **We are delivering on our commitments to expand mental health services for children and young people.** The *Five Year Forward View for Mental Health* set out plans for improving mental health services so 70,000 more children and young people will access treatment each year by 2020/21. Access is rising in line with our plans and, in 2017/18, around 30.5% of children and young people then estimated to have a mental health condition were able to benefit from treatment and support, up from an estimated 25% two years earlier.

3.24. **Under this Long Term Plan, the NHS is making a new commitment that funding for children and young people's mental health services will grow faster than both overall NHS funding and total mental health spending.** This means that children and young people's mental health services will for the first time grow as a proportion of all mental health services, which will themselves also be growing faster than the NHS overall.

3.25. **Over the next five years, the NHS will therefore continue to invest in expanding access to community-based mental health services to meet the needs of more children and young people.** By 2023/24, at least an additional 345,000 children and young people aged 0-25 will be able to access support via NHS funded mental health services and school or college-based Mental Health Support Teams. Over the coming decade the goal is to ensure that 100% of children and young people who need specialist care can access it.

3.26. **Over the next five years, we will also boost investment in children and young people's eating disorder services.** The NHS is on track to deliver the new waiting time standards for eating disorder services by 2020/21. Four fifths of children and young people with an eating disorder now receive treatment within one week in urgent cases and four weeks for non-urgent cases. As need continues to rise, extra investment will allow us to maintain delivery of the 95% standard beyond 2020/21.

3.27. **Children and young people experiencing a mental health crisis will be able to access the support they need.** Expanding timely, age-appropriate crisis services will improve the experience of children and young people and reduce pressures on accident and emergency (A&E) departments, paediatric wards and ambulance services. Evaluations of urgent and emergency care services for children and young people in Vanguard sites found that, on average, 83% of children and young people referred to crisis and liaison services were seen within four hours. Children and young people who received intensive community follow-on support subsequently made less use of crisis services compared to less integrated services. With a single point of access through NHS 111, all children and young people experiencing crisis will be able to access crisis care 24 hours a day, seven days a week.

3.28. **Mental health support for children and young people will be embedded in schools and colleges.** The Children and Young People's Mental Health Green Paper set out proposals to improve mental health support in schools and colleges. Over the next five years the NHS will fund new Mental Health Support Teams working in schools and colleges, building on the support already available, which will be rolled out to between one-fifth and a quarter of the country by the end of 2023. These school and college-based services will be supervised by NHS children and young people mental health staff and will provide specific extra capacity for early intervention and ongoing help. Teams will receive information and training to help them support young people more likely to face mental health issues – such as Lesbian, Gay, Bisexual, Transgender (LGBT+) individuals or children in care, and as they are rolled out, we will test approaches to support children and young people outside of education settings. The NHS work with schools, parents and local councils will reveal whether more upstream preventative support, including better information sharing and the use of digital interventions, helps moderate the need for specialist child and adolescent mental health services. It will thereby test approaches that could feasibly deliver four week waiting times for access to NHS support, ahead of introducing new national waiting time standards for **all** children and young people who need specialist mental health services.

3.29. In selected areas, we will also develop new services for children who have complex needs that are not currently being met, including a number of children who have been subject to sexual assault but who are not reaching the attention of Sexual Assault Referral Services. For 6,000 highly vulnerable children with complex trauma, this will provide consultation, advice, assessment, treatment and transition into integrated services.

3.30. **A new approach to young adult mental health services for people aged 18-25 will support the transition to adulthood.** Between the ages of 16-18, young people are more susceptible to mental illness, undergoing physiological change and making important transitions in their lives. The structure of mental health services often creates gaps for young people undergoing the transition from children and young people's mental health services to appropriate support including adult mental health services. We will extend current service models to create a comprehensive offer for 0-25 year olds that reaches across mental health services for children, young people and adults. The new model will deliver an integrated approach across health, social care, education and the voluntary sector, such as the evidenced-based 'iThrive' operating model which currently covers around 47% of the 0-18 population and can be expanded to 25 year olds. In addition, NHS England is working closely with Universities UK via the Mental Health in Higher Education programme to build the capability and capacity of universities to improve student welfare services and improve access to mental health services for the student population, including focusing on suicide reduction, improving access to psychological therapies and groups of students with particular vulnerabilities.

Learning disability and autism

3.31. **Action will be taken to tackle the causes of morbidity and preventable deaths in people with a learning disability and for autistic people.** To help do so, we will improve uptake of the existing annual health check in primary care for people aged over 14 years with a learning disability, so that at least 75% of those eligible have a health check each year. We will also pilot the introduction of a specific health check for people with autism, and if successful, extend it more widely. Psychotropic medicine is more likely to be inappropriately prescribed to people with a learning disability or autism[93]. We will expand the Stopping over medication of people with a learning disability autism or both and Supporting Treatment and Appropriate Medication in Paediatrics (STOMP-STAMP) programmes to stop the overmedication of people with a learning disability, autism or both. And we will continue to fund the Learning Disabilities Mortality Review Programme (LeDeR), the first national programme aiming to make improvements to the lives of people with learning disabilities.

3.32. **The whole NHS will improve its understanding of the needs of people with learning disabilities and autism, and work together to improve their health and wellbeing.** Following a consultation on the options for delivering awareness training[94], NHS staff will receive information and training on supporting people with a learning disability and/or autism. Sustainability and Transformation Partnerships (STPs) and integrated care systems ICSs will be expected to make sure all local healthcare providers are making reasonable adjustments to support people with a learning disability or autism. Over the next five years, national learning disability improvement standards will be implemented and will apply to all services funded by the NHS. These standards will promote greater consistency, addressing themes such as rights, the workforce, specialist care and working more effectively with people and their families. By 2023/24, a 'digital flag' in the patient record will ensure staff know a patient has a learning disability or autism. We will work with the Department for Education and local authorities to improve their awareness of, and support for, children and young people with learning disabilities, autism or both. And we will work with partners to bring hearing, sight and dental checks to children and young people with a learning disability, autism or both in special residential schools.

3.33. Children and young people with suspected autism wait too long before being provided with a diagnostic assessment[95]. Over the next three years, autism diagnosis will be included alongside work with children and young people's mental health services to test and implement the most effective ways to **reduce waiting times for specialist services**. This will be a step towards achieving timely diagnostic assessments in line with best practice guidelines. Together with local authority children's social care and education services as well as expert charities, we will jointly develop packages to support children with autism or other neurodevelopmental disorders including attention deficit hyperactivity disorder (ADHD) and their families, throughout the diagnostic process. By 2023/24 children and young people with a learning disability, autism or both with the most complex needs will have a designated keyworker, implementing the recommendation made by Dame Christine Lenehan[96]. Initially, keyworker support will be provided to children and young people who are inpatients or at risk of being admitted to hospital. Keyworker support will also be extended to the most vulnerable children with a learning disability and/or autism, including those who face multiple vulnerabilities such as looked after and adopted children, and children and young people in transition between services.

3.34. Children, young people and adults with a learning disability, autism or both, with the most complex needs, have the same rights to live fulfilling lives. **Since 2015, the number of people in inpatient care has reduced by almost a fifth**[97] and around 635[98] people who had been in hospital for over five years were supported to move to the community. However the welcome focus on doing so has also led to greater identification of individuals receiving inpatient care with a learning disability and/or autism diagnosis, so increasing the baseline against which reductions are tracked. To move more care to the community, we will support local systems to take greater control over how budgets are managed. Drawing on learning from the New Care Models in tertiary mental health services[99], **local providers will be able to take control of budgets** to reduce avoidable admissions, enable shorter lengths of stay and end out of area placements. Where possible, people with a learning disability, autism or both will be enabled to have **a personal health budget (PHBs).** By March 2023/24, inpatient provision will have reduced to less than half of 2015 levels (on a like for like basis and taking into account population growth) and, for every one million adults, there will be no more than 30 people with a learning disability and/or autism cared for in an inpatient unit. For children and young people, no more than 12 to 15 children with a learning disability, autism or both per million, will be cared for in an inpatient facility.

3.35. **Increased investment in intensive, crisis and forensic community support** will also enable more people to receive personalised care in the community, closer to home, and reduce preventable admissions to inpatient services. Every local health system will be expected to use some of this growing community health services investment to have a seven-day specialist multidisciplinary service and crisis care. We will continue to work with partners to develop specialist community teams for children and young people, such as the Ealing Model, which has evidenced that an intensive support approach prevents children being admitted into institutional care[100,101].

3.36. **We will focus on improving the quality of inpatient care across the NHS and independent sector.** By 2023/24, all care commissioned by the NHS will need to meet the Learning Disability Improvement Standards[102]. We will work with the CQC to implement recommendations on restricting the use of seclusion, long-term segregation and restraint for all patients in inpatient settings, particularly for children and young people. As well as focusing on the number of people in inpatient settings, we will closely monitor and – over the coming years – bring down the length of time people stay in inpatient care settings and support earlier transfers of care from inpatient settings. All areas of the country will implement and be monitored against a '12-point discharge plan' to ensure discharges are timely and effective. We will review and look to strengthen the existing Care, Education and Treatment Review (CETR) and Care and Treatment Review (CTR) policies, in partnership with people with a learning disability, autism or both, families and clinicians to assess their effectiveness in preventing and supporting discharge planning.

Children and young people with cancer

3.37. Survival rates for children with cancer have doubled over the past 40 years, but because mortality has fallen for other conditions, cancer is now the biggest cause of premature death among children and young people aged 5-14 years. We will therefore develop and implement networked care to improve outcomes for children and young people with cancer, simplifying pathways and transitions between services and ensuring every patient has access to specialist expertise.

3.38. From 2019, we will begin to **offer all children with cancer whole genome sequencing** to enable more comprehensive and precise diagnosis, and access to more personalised treatments. This will reduce the use of harmful medications and interventions, support increased access to clinical trials and reduce the number of young patients who experience lifelong health problems caused by high doses of chemotherapy and radiotherapy. **Children and young people in England will also be amongst the very first in Europe to benefit from a new generation of CAR-T cancer therapies.** And children who need proton beam therapy are now for the first time beginning to be able to access the most sophisticated modern precision treatment in the world here in the NHS without needing to travel abroad.

3.39. **We will actively support children and young people to take part in clinical trials, so that participation among children remains high, and among teenagers and young adults rises to 50% by 2025.** More effective consent processes for using data and tissue samples in research will contribute to improving survival outcomes. We will seek the views of patients aged under 16 to ensure the NHS continues to offer the very best services for children and young people. This will be used, alongside other cancer data, to inform service design and transformation.

3.40. **From September 2019, all boys aged 12 and 13 will be offered vaccination against HPV-related diseases, such as oral, throat and anal cancer.** This will build on the success of the girls' programme, which has already reduced the prevalence of human papilloma virus (HPV) 16 and 18, the main cancer-causing types, by over 80%. This will reduce cervical and other cancers in both men and women in the future.

3.41. Children's palliative and end of life care is an important priority for the NHS. But local NHS funding has not kept pace with growth in clinical care costs or inflation, and NHS England's **children's hospice grant** programme currently provides an annual contribution of £11m. Over the next five years NHS England will increase its contribution by match-funding clinical commissioning groups (CCGs) who commit to increase their investment in local children's palliative and end of life care services including children's hospices. This should more than double the NHS support, from £11 million up to a combined total of £25 million a year by 2023/24.

Redesigning other health services for children and young people

3.42. A key message from stakeholders during the development of the Long Term Plan was that the needs of children are diverse, complex and need a higher profile at a national level. We will therefore create a Children and Young People's Transformation Programme which will, in conjunction with the Maternity Transformation Programme, oversee the delivery of the children and young people's commitments in this Plan.

3.43. We will prioritise improvements in **childhood immunisation** to reach at least the base level standards in the NHS public health function agreement. The programme will also work closely with other areas of government and key programmes such as the *Healthy Child Programme*.

3.44. **Children and young people account for 25% of emergency department attendances[103] and are the most likely age group to attend A&E unnecessarily[104].** Many of these attendances could be managed effectively in primary care or community settings[105]. As set out in Chapter One, local areas will design and implement models of care that are age appropriate, closer to home and bring together physical and mental health services. These models will support health development by providing holistic care across local authority and NHS services, including primary care, community services, speech and language therapy, school nursing, oral health, acute and specialised services. The Starting Well Core initiative is supporting 24,000 dentists across England to see more children from a young age to form good oral health habits, preventing tooth decay experienced by a quarter of England's five year olds.

3.45. **From 2019/20 clinical networks will be rolled out to ensure we improve the quality of care for children with long-term conditions such as asthma, epilepsy and diabetes.** This will be achieved though sharing best clinical practice, supporting the integration of paediatric skills across services and bespoke quality improvement projects.

3.46. **Over the next five years, paediatric critical care and surgical services will evolve to meet the changing needs of patients, ensuring that children and young people are able to access high quality services as close to home as possible.** Paediatric networks, which will involve hospitals, NHS staff and patients and their families, will ensure that there is a coordinated approach to critical care and surgical services, enabling children and young people to access specialised and non-specialised services in times of urgent, emergency and planned need.

3.47. **Selectively moving to a '0-25 years' service will improve children's experience of care, outcomes and continuity of care.** Currently children can 'transition' to adult services from as young as 12 years old. Failure to achieve a safe transition can lead to disengagement, failure to take responsibility for their condition and ultimately poorer health outcomes. By 2028 we aim to move towards service models for young people that offer person-centred and age appropriate care for mental and physical health needs, rather than an arbitrary transition to adult services based on age not need.

Better care for major health conditions

3.48. **In the seventy years since the founding of the NHS, life expectancy has increased by around 13 years[106]. But different types of diseases are becoming more common.** More people are living with cancer or dementia largely due to increases in life expectancy and falls in the rate of premature death[107]. With advances in prevention and medical care the UK mortality rate from heart and circulatory diseases has declined by more than three quarters in the last 40 years[108]. But cardiovascular disease remains the biggest cause of premature mortality and the rate of improvement has slowed[109].

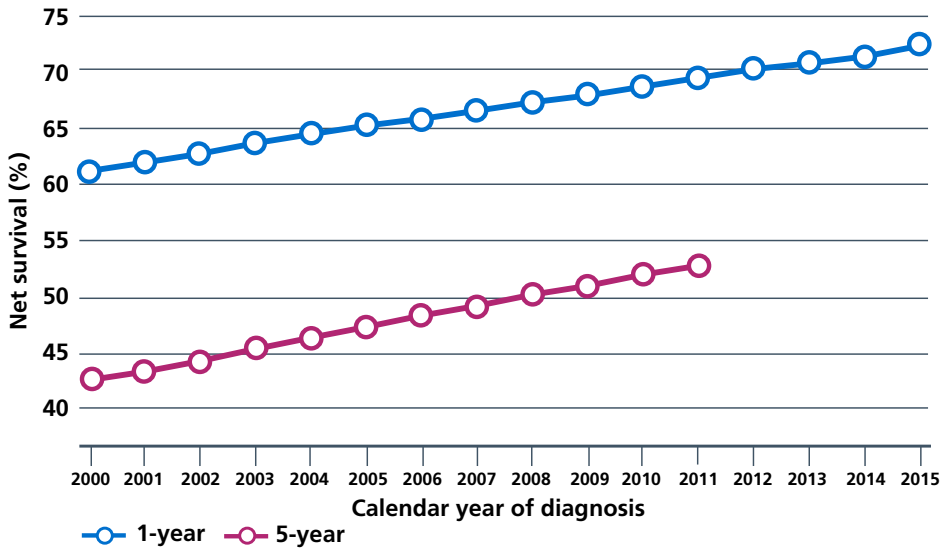
3.49. Longer-term health conditions also make an increasing contribution to the overall burden of disease[110]. Mental health, respiratory and musculoskeletal conditions are responsible for a substantial amount of poor health, and place a substantial burden on the NHS and other care services[111].

3.50. **The latest Global Burden of Disease study shows that the top five causes of early death for the people of England are: heart disease and stroke, cancer, respiratory conditions, dementias, and self-harm[112].** It also reveals that the slower improvement since 2010 in years-of-life-lost is "mainly driven by distinct condition-specific trends, predominantly in cardiovascular diseases and some cancers". **We have therefore used these GBD findings to help frame the improvement priorities in the Long Term Plan. Here is the action the NHS will now take:**

Cancer

3.51. **Cancer survival is the highest it's ever been and thousands more people now survive cancer every year. For patients diagnosed in 2015, one year survival was 72% – over 11 percentage points higher than in 2000.** Despite this progress, one of the biggest actions the NHS can take to improve cancer survival is to diagnose cancer earlier. Patients diagnosed early, at stages 1 and 2, have the best chance of curative treatment and long-term survival.

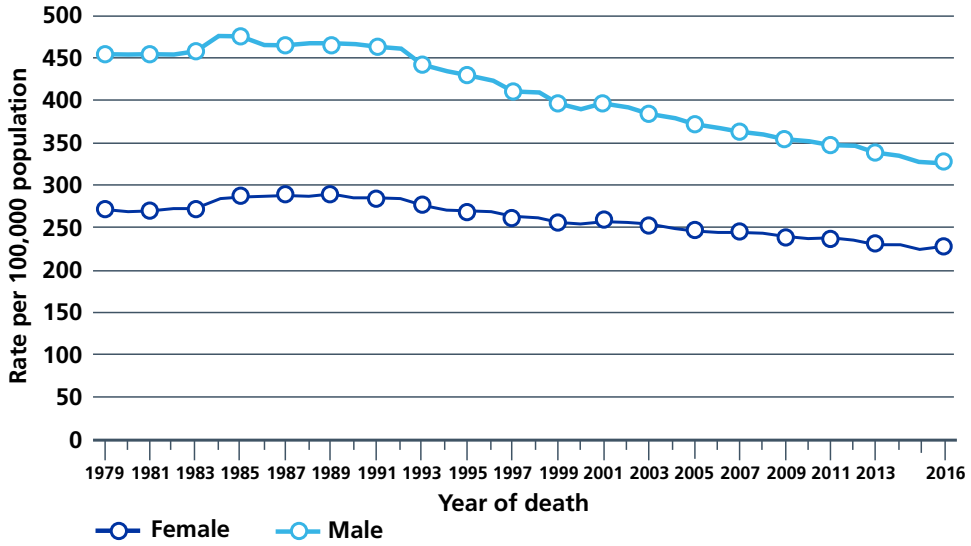
Figure 16: 1- and 5-year net survival for all adult cancers (15 to 99 years), England, 2000 to 2015 (age, sex and cancer-type standardised).



Source: Figure adapted from Health Foundation. Unfinished Business. November 2018.

3.52. **This Long Term Plan sets a new ambition that, by 2028, the proportion of cancers diagnosed at stages 1 and 2 will rise from around half now to three-quarters of cancer patients.** Achieving this will mean that, from 2028, 55,000 more people each year will survive their cancer for at least five years after diagnosis. We will build on work to raise greater awareness of symptoms of cancer, lower the threshold for referral by GPs, accelerate access to diagnosis and treatment and maximise the number of cancers that we identify through screening. This includes the use of personalised and risk stratified screening and beginning to test the family members of cancer patients where they are at increased risk of cancer.

Figure 17: Age-standardised mortality rates for all cancers combined, England, 1979 to 2016.



Source: Health Foundation. Unfinished Business. November 2018.

3.53. **We will modernise the Bowel Cancer Screening Programme to detect more cancers, earlier.** The Faecal Immunochemical Test for haemoglobin will be easier to use for patients. In trials it has been shown to improve take up rates by 7%, including among groups with low participation rates such as men, people from ethnic minority backgrounds and people in more deprived areas. We will lower the starting age for screening from 60 currently to 50.

3.54. **We will implement HPV primary screening for cervical cancer across England by 2020.** This method of testing is more sensitive and more reliable than liquid-based cytology so will detect more women at risk of cervical cancer and facilitate their treatment to prevent cancer developing.

3.55. **NHS England has asked Sir Mike Richards to lead a review of the current cancer screening programmes and diagnostic capacity.** This will make initial recommendations by Easter 2019 and be finalised in the summer 2019, to further improve the delivery of the screening programmes, increase uptake and learn the lessons from the recent issues around breast and cervical screening, and modernise and expand diagnostic capacity. We will take forward the findings of the review as part of this Plan.

3.56. **Over the next two years, we will extend the lung health checks that have already produced strong results in Liverpool and Manchester.** Patients will have a breath test and a discussion to assess their individual lung cancer risk. Any patient assessed as being at high risk of lung cancer will have an immediate low-dose CT scan. During the Manchester trial, 65% of lung cancers were diagnosed at stage 1 and 13% at stage 4, compared to 18% at stage 1 and 48% at stage 4 before the trial. From 2019, we will deploy more mobile lung

CT scanners – taking the support to people in supermarket car parks – starting in parts of the country with the lowest lung cancer survival rates. This will identify more cancers quickly, pick up a range of other health conditions, including chronic obstructive pulmonary disease (COPD), and help reduce inequalities in cancer outcomes.

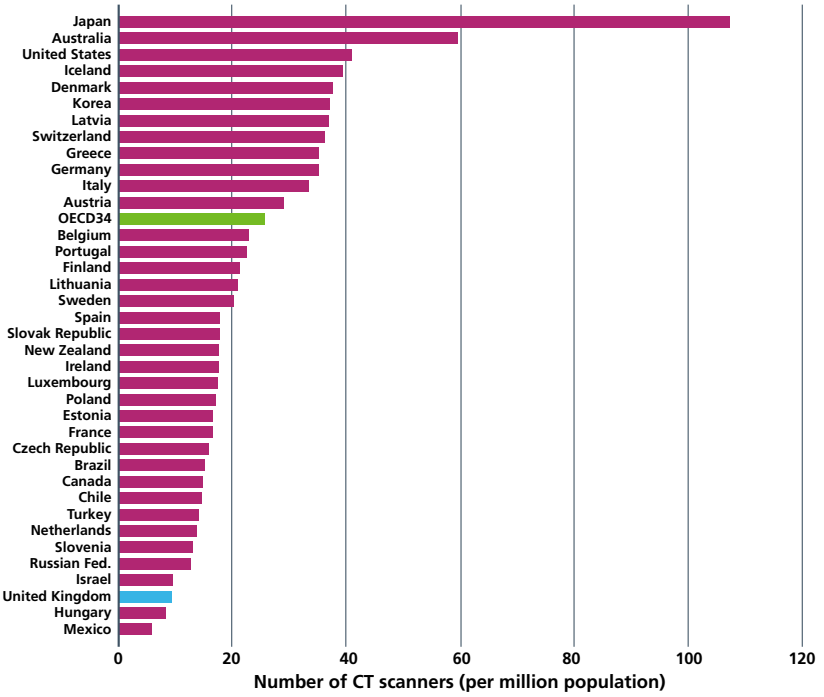
3.57. For fast growing cancers, shortening intervals between referral to treatment saves lives. For every person with suspected cancer, shortening the anxious wait between suspicion and exclusion or confirmation of cancer will deliver a far better experience of care. More cancers are being diagnosed following a GP referral or from screening, with reductions in diagnosis through emergency presentation[113]. We want to ensure that all GPs are using the latest evidence-based guidance from NICE to identify children, young people and adults at risk of cancer[114]. Primary care networks will be required to help improve early diagnosis of patients in their own neighbourhoods by 2023/24.

3.58. **We will begin introducing a new faster diagnosis standard from 2020 to ensure most patients receive a definitive diagnosis or ruling out of cancer within 28 days of referral from a GP or from screening.** For people diagnosed with cancer, it will mean they can begin their treatment earlier. For those who aren't, this will put their minds at rest more quickly at a very stressful time. To support the delivery of the new standard, we will align our Cancer Alliances with STP and ICS footprints and NHS England and NHS Improvement regions. They will implement a new timed diagnostic pathway for specific cancers, building on the timed pathways already being introduced in lung, colorectal and prostate cancer. Data collection for all patients will start in 2019, with full monitoring against the standard beginning in April 2020, and performance ramping up as additional diagnostic capacity comes online.

3.59. **The new faster diagnosis standard will be underpinned by a radical overhaul of the way diagnostic services are delivered for patients with suspected cancer.** From 2019, we will start the roll-out of new Rapid Diagnostic Centres (RDCs) across the country to upgrade and bring together the latest diagnostic equipment and expertise, building on ten models piloted with Cancer Research UK, which have focused on diagnosing cancers where patients often present with non-specific symptoms and may go to their GP many times before being sent for tests, such as blood and stomach cancers. In time, RDCs will play a role in the diagnosis of all patients with suspected cancer, including self-referral for people with red-flag symptoms. For patients with cancer, this will mean they can get quicker access to an accurate diagnosis and begin their treatment. The majority of patients who do not have cancer, but may have other conditions, will be referred on quickly to get the right support.

3.60. **The NHS will use its capital settlement to be negotiated in the 2019 Spending Review in part to invest in new equipment, including CT and MRI scanners, which can deliver faster and safer tests.** Broader reforms of the way that diagnostic services are organised – including pathology and imaging networks – will also mean test results can be turned around quickly and staff time and skills will be used most effectively, so that patients can have multiple successive tests in one visit. As set out in Chapter Six, this will improve quality of care (including patient experience) and efficiency, while reducing variation in clinical outcomes.

Figure 18: International comparison of the number of CT scanners per million population in 2015 (or nearest year).



Note: The OECD average is calculated for the 34 OECD countries for which data were available. The UK data used in this comparison are from 2014.

Source: Health Foundation. Unfinished Business. November 2018.

3.61. **We will speed up the path from innovation to business-as-usual, spreading proven new techniques and technologies and reducing variation.** As part of the NHS' contribution to the Tessa Jowell Brain Cancer Mission, 5-ALA – which enables more accurate surgery on brain tumours – will be available in every neurosurgical centre in England. New investment will ensure the next generation of treatments are implemented rapidly across the NHS.

3.62. **Safer and more precise treatments including advanced radiotherapy techniques and immunotherapies will continue to support improvements in survival rates.** We will complete the £130 million upgrade of radiotherapy machines across England and commission the NHS new state-of-the-art Proton Beam facilities in London and Manchester. Reforms to the specialised commissioning payments for radiotherapy hypofractionation will be introduced to support further equipment upgrades. Faster, smarter and effective radiotherapy, supported by greater networking of specialised expertise, will mean more patients are offered curative treatment, with fewer side effects and shorter treatment times. Starting with ovarian cancer, we will ensure greater access to specialist expertise and knowledge in the treatment of cancers where there are fewer or more risky treatment options.

3.63. **We will extend the use of molecular diagnostics and, over the next ten years, the NHS will routinely offer genomic testing to all people with cancer for whom it would be of clinical benefit, and expand participation in research.** The NHS will begin from 2020/21 to offer more extensive genomic testing to patients who are newly diagnosed with cancers so that by 2023 over 100,000 people a year can access these tests.

3.64. **By 2021, where appropriate every person diagnosed with cancer will have access to personalised care, including needs assessment, a care plan and health and wellbeing information and support.** This will be delivered in line with the NHS Comprehensive Model for Personalised Care. This will empower people to manage their care and the impact of their cancer, and maximise the potential of digital and community-based support. Over the next three years every patient with cancer will get a full assessment of their needs, an individual care plan and information and support for their wider health and wellbeing. All patients, including those with secondary cancers, will have access to the right expertise and support, including a Clinical Nurse Specialist or other support worker.

3.65. **After treatment, patients will move to a follow-up pathway that suits their needs, and ensures they can get rapid access to clinical support where they are worried that their cancer may have recurred.** This stratified follow-up approach will be established in all trusts for breast cancer in 2019, for prostate and colorectal cancers in 2020 and for other cancers where clinically appropriate by 2023. From 2019, we will begin to introduce an innovative quality of life metric – the first on this scale in the world – to track and respond to the long-term impact of cancer.

Milestones for cancer

- **From 2019 we will start to roll out new Rapid Diagnostic Centres across the country.**
- **In 2020 a new faster diagnosis standard for cancer will begin to be introduced so that patients receive a definitive diagnosis or ruling out of cancer within 28 days.**
- **By 2020 HPV primary screening for cervical cancer will be in place across England.**
- **By 2021, where appropriate every person diagnosed with cancer will have access to personalised care, including needs assessment, a care plan and health and wellbeing information and support.**
- **By 2022 the lung health check model will be extended.**
- **By 2023, stratified, follow-up pathways for people who are worried their cancer may have recurred. These will be in place for all clinically appropriate cancers.**
- **By 2028, the NHS will diagnose 75% of cancers at stage 1 or 2.**

Cardiovascular disease

3.66. **Heart and circulatory disease, also known as cardiovascular disease (CVD), causes a quarter of all deaths in the UK[115] and is the largest cause of premature mortality in deprived areas. This is the single biggest area where the NHS can save lives over the next 10 years.** CVD is largely preventable, through lifestyle changes and a combination of public health and NHS action on smoking and tobacco addiction, obesity, tackling alcohol misuse and food reformulation. Chapter Two sets out more detail. Eating too much salt remains a leading cause of raised blood pressure, leading to thousands of heart attacks, strokes and early deaths. Reducing salt in foods by 1 gram/day, for example, could prevent 1,500 premature deaths each year and save the NHS over £140 million annually. The government has been clear that salt intake needs to reduce. Some – but insufficient – progress has been made with the voluntary salt reduction programme. The government has agreed to set out by Easter 2019 the details of how the programme's targets will be met.

3.67. **Early detection and treatment of CVD can help patients live longer, healthier lives.** Too many people are still living with undetected, high-risk conditions such as high blood pressure, raised cholesterol, and atrial fibrillation (AF). Other countries have made more progress on identification and diagnosis working towards people routinely knowing their 'ABC' (AF, Blood pressure and Cholesterol). Replicating this approach will be increasingly possible with digital technology, and major progress could be achieved working with the voluntary sector, employers, the public sector and NHS staff themselves.

3.68. **Working with local authorities and PHE, we will improve the effectiveness of approaches such as the NHS Health Check, rapidly treating those identified with high-risk conditions.** Working with voluntary sector partners, community pharmacists and GP practices will also provide opportunities for the public to check on their health, through tests for high blood pressure and other high-risk conditions. Expanding access to genetic testing for Familial Hypercholesterolaemia (FH), which causes early heart attacks and affects at least 150,000 people in England[116], will enable us to diagnose and treat those at genetic risk of sudden cardiac death. Currently only 7% of those with FH have been identified[117], but we will aim to improve that to at least 25% in the next five years through the NHS genomics programme.

3.69. **Where individuals are identified with high risk conditions, appropriate preventative treatments will be offered in a timely way.** We will support pharmacists and nurses in primary care networks (see Chapter One) to case find and treat people with high-risk conditions. Where 100 people with AF are identified and receive anticoagulation medication, an average of four strokes are averted, preventing serious disability or even death. The creation of a national CVD prevention audit for primary care will also support continuous clinical improvement.

3.70. **People with heart failure and heart valve disease will be better supported by multi-disciplinary teams as part of primary care networks.** 80% of heart failure is currently diagnosed in hospital, despite 40% of patients having symptoms that should have triggered an earlier assessment[118]. When admitted to hospital, we will improve rapid access to heart failure nurses so that more patients with heart failure, who are not on a cardiology ward, will receive specialist care and advice[119]. Better, personalised planning for patients will reduce nights spent in hospital and reduce drug spend. Greater access to echocardiography in primary care will improve the investigation of those with breathlessness, and the early detection of heart failure and valve disease.

3.71. **Fast and effective action will help save lives of people suffering a cardiac arrest.** The chance of survival from a cardiac arrest that occurs out of hospital doubles if someone receives immediate resuscitation (CPR) or a high energy electric shock to the heart (defibrillation)[120]. A national network of community first responders and defibrillators will help save up to 4,000 lives each year by 2028. This will be supported by educating the general public, including young people of school age, about how to recognise and respond to out-of-hospital cardiac arrest. We also will work with partners such as the British Heart Foundation to harness new technology and ensure the public and emergency services are able to rapidly locate this life saving equipment in an emergency. More effective mapping of data on incidence will help direct community initiatives to areas where they are most needed, with the British Heart Foundation's national Outcomes Registry allowing us to track survival rates and target unwarranted variation.

CASE STUDY:

CPR and GoodSAM

Apps and mobile technology are increasingly helping people to play a role in their own care and that of others. The GoodSAM app platform allows members of the public who can deliver basic life support (CPR) and use a defibrillator to receive alerts from anyone in their local area who needs urgent assistance. It integrates with ambulance dispatch systems and also features a crowdsourced map of defibrillators – including those in vehicles. The platform now has over 19,000 volunteers and partnerships with 80 organisations, including many NHS ambulance trusts. This is being supported to scale nationwide.

3.72. **Cardiac rehabilitation is an intervention recommended by NICE which can save lives, improve quality of life and reduce hospital readmissions[121].** Access to and uptake of cardiac rehabilitation services varies across England, and only 62,822 patients (52%) of the 121,500 eligible patients per year take up offers of cardiac rehabilitation[122]. Scaling up and improving marketing of cardiac rehabilitation to be amongst the best in Europe will prevent up to 23,000 premature deaths and 50,000 acute admissions over 10 years.

Milestones for cardiovascular disease

- **The NHS will help prevent up to 150,000 heart attacks, strokes and dementia cases over the next 10 years.**
- **We will work with our partners to improve community first response and build defibrillator networks to improve survival from out of hospital cardiac arrest.**
- **By 2028 the proportion of patients accessing cardiac rehabilitation will be amongst the best in Europe, with up to 85% of those eligible accessing care.**

Stroke care

3.73. **Stroke, a preventable disease, is the fourth single leading cause of death in the UK and the single largest cause of complex disability[123].** Stroke mortality has halved in the last two decades[124]. However, without further action, due to changing demographics, the number of people having a stroke will increase by almost half, and the number of stroke survivors living with disability will increase by a third by 2035[125].

3.74. There is strong evidence that hyper acute interventions such as brain scanning and thrombolysis are best delivered as part of a networked 24/7 service[126]. Areas that have centralised **hyper-acute stroke care** into a smaller number of well-equipped and staffed hospitals have seen the greatest improvements[127]. This means a reduction in the number of stroke-receiving units, and an increase in the number of patients receiving high-quality specialist care. Integrated Stroke Delivery Networks (ISDNs) involving relevant agencies including ambulance services through to early supported discharge will ensure that all stroke units will, over the next five years, meet the NHS seven-day standards for stroke care and the National Clinical Guidelines for Stroke.

3.75. Mechanical thrombectomy and clot-busting treatment (thrombolysis) can significantly reduce the severity of disability caused by a stroke. These treatments carefully remove a blood clot from the blood vessel causing an interruption to the brain's blood supply, or use drugs to dissolve the clot. ISDNs will support STPs and ICSs to reconfigure stroke services into specialist centres, improve the use of thrombolysis and further roll out mechanical thrombectomy. This will ensure 90 percent of **stroke patients receive care on a specialist stroke unit** and that all patients who could benefit from thrombolysis (about 20 percent) receive it, up from just over half of eligible patients now. Expanding mechanical thrombectomy – from 1% to 10% of stroke patients – will allow 1,600 more people to be independent after their stroke each year. This combination of specialist stroke care, thrombolysis and thrombectomy would result in the NHS having the best performance in Europe for people with stroke[128].

3.76. **The NHS will work with Health Education England to modernise the stroke workforce with a focus on cross-specialty and in some cases cross-profession accreditation of particular 'competencies'.** This will include work with the medical Royal Colleges and specialty societies to develop a new credentialing programme for hospital consultants from a variety of relevant disciplines who will be trained to offer mechanical thrombectomy.

3.77. **Implementation and further development of higher intensity care models for stroke rehabilitation are expected to show significant savings that can be reinvested in improved patient care.** This includes reductions in hospital admissions and ongoing healthcare provision. Out of hospital, more integrated and higher intensity rehabilitation for people recovering from stroke, delivered in partnership with voluntary organisations including the Stroke Association, will support improved outcomes to six months and beyond. The existing national stroke audit (SSNAP) provides high quality information on the acute and inpatient rehabilitation care of stroke patients to improve stroke services. An update to SSNAP will provide a comprehensive dataset that meets the needs of clinicians, commissioners and patients by describing the quality of care provided for stroke patients from symptom onset through to rehabilitation and ongoing care.

3.78. **National support for the scaling of technology will assist the expansion of life-changing treatments to more patients.** This includes the use of CT perfusion scans to assess the reversibility of brain damage, improved access to MRI scanning and the potential use of artificial intelligence interpretation of CT and MRI scans to support clinical decisions regarding suitability for thrombolysis and thrombectomy. Interoperable information systems supported by telehealth will aid more timely transfer of information between providers, enabling more effective hyper-acute pathways and improving access to and intensity of rehabilitation.

Milestones for stroke care

- **In 2019 we will, working with the Royal Colleges, pilot a new credentialing programme for hospital consultants to be trained to offer mechanical thrombectomy.**
- **By 2020 we will begin improved post-hospital stroke rehabilitation models, with full roll-out over the period of this Long Term Plan.**
- **By 2022 we will deliver a ten-fold increase in the proportion of patients who receive a thrombectomy after a stroke so that each year 1,600 more people will be independent after their stroke.**
- **By 2025 we will have amongst the best performance in Europe for delivering thrombolysis to all patients who could benefit.**

Diabetes

3.79. Chapters One and Two set out a range of actions the NHS will be taking to prevent type 2 diabetes and reduce the variation in the quality of diabetes care. For those people living with a diagnosis of type 1 or type 2 diabetes the NHS will enhance its support offer. We will support people who are newly diagnosed to manage their own health by further expanding provision of **structured education and digital self-management support tools**, including expanding access to HeLP Diabetes an online self-management tool for those with type 2 diabetes.

3.80. The NHS will ensure that, in line with clinical guidelines, patients with type 1 diabetes benefit from life changing flash **glucose monitors** from April 2019, ending the variation patients in some parts of the country are facing. In addition, by 2020/21, all pregnant women with type 1 diabetes will be offered continuous glucose monitoring, helping to improve neonatal outcomes.

3.81. Through continuing investment in supporting delivery across primary care we will enable more people to achieve the recommended **diabetes treatment targets** and drive down variation between CCGs and practices to minimise their risk of future complications. Further, for those who periodically need secondary care support we will ensure that all hospitals in future provide access to multidisciplinary footcare teams and diabetes inpatient specialist nursing teams to improve recovery and to reduce lengths of stay and future readmission rates.

Respiratory disease

3.82. **Lung conditions, including lung cancer, are estimated to cost wider society around £9.9 billion each year[129].** Respiratory disease affects one in five people in England, and is the third biggest cause of death[130]. Hospital admissions for lung disease have risen over the past seven years at three times the rate of all admissions generally[131] and remain a major factor in the winter pressures faced by the NHS. Over the next ten years we will be targeting investment in improved treatment and support for those with respiratory disease, with an ambition to transform our outcomes to equal, or better, our international counterparts.

3.83. Incidence and mortality rates for those with respiratory disease are higher in disadvantaged groups and areas of social deprivation[132], where there is often higher smoking incidence, exposure to higher levels of air pollution, poor housing conditions and exposure to occupational hazards. Chapter Two detailed the NHS' contribution to tackling these risk factors.

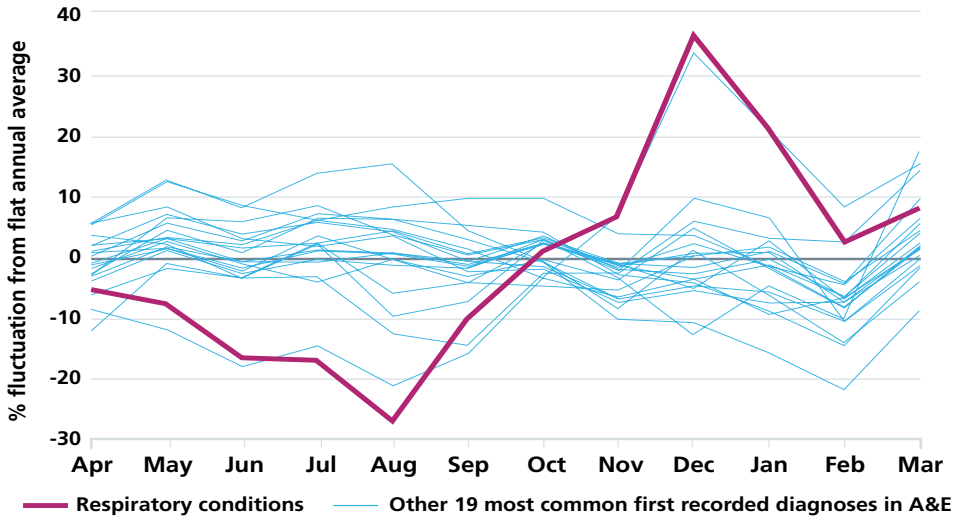
3.84. **The NHS will do more to detect and diagnose respiratory problems earlier.** Currently around a third of people with a first hospital admission for a COPD exacerbation have not been previously diagnosed[133]. From 2019 we will build on the existing NHS RightCare programme to reduce variation in the quality of spirometry testing across the country. Primary care networks (detailed in Chapter One) will support the diagnosis of respiratory conditions. More staff in primary care will be trained and accredited to provide the specialist input required to interpret results.

3.85. **Pulmonary rehabilitation** offers a structured exercise and education programme designed for those with lung disease or breathlessness. 90% of patients who complete the programme experience improved exercise capacity or increased quality of life[134]. However, it is currently only offered to 13% of eligible COPD patients, with a focus on those with more severe COPD[135]. By expanding pulmonary rehabilitation services over 10 years, 500,000 exacerbations can be prevented and 80,000 admissions avoided. To increase access to pulmonary rehabilitation, a population-management approach will be used in primary care to find eligible patients from existing COPD registers who have not previously been referred to rehabilitation. New models of providing rehabilitation to those with mild COPD, including digital tools, will be offered to provide support to a wider group of patients with rehabilitation and self-management support. We will increase the number of patients with COPD who are referred to pulmonary rehabilitation where this is appropriate through the use of the COPD discharge bundle.

3.86. **We will do more to support those with respiratory disease to receive and use the right medication.** 90% of NHS spend on asthma goes on medicines[136], but incorrect use of medication can also contribute to poorer health outcomes and increased risk of exacerbations, or even admission. Pharmacists in primary care networks will undertake a range of medicine reviews, including educating patients on the correct use of inhalers and contributing to multidisciplinary working. As part of this work, they can also support patients to reduce the use of short acting bronchodilator inhalers and switch to dry powder inhalers where clinically appropriate, which use significantly less fluorinated gases than traditional metered dose inhalers[137]. Pharmacists can also support uptake of new smart inhalers, as clinically indicated.

3.87. **Pneumonia continues to place a huge burden on the NHS – improving our response will help to relieve the pressure, particularly during winter.** Community-acquired pneumonia is a leading cause of admission to hospital, despite being avoidable in many cases[138]. Pneumonia also disproportionally affects older people, with incidence doubling for those aged 85-95 compared with 65-69[139]. For every degree drop in temperature below five degrees Celsius, there is a 10.5% increase in primary care respiratory consultations[140] and a 0.8% increase in respiratory admissions[141]. Acute pneumonia admissions have risen by 35% since 2013 with stays in hospitals getting shorter, indicating admission may not have always been essential[142]. Consistent use and application of risk scoring for deteriorating patients may reduce avoidable admissions to hospital. Patients identified with community acquired pneumonia in emergency departments will be supported to be cared for safely out of hospital by receiving nurse-led supported discharge services, as set out in Chapter One.

Figure 19: How respiratory conditions add to NHS 'winter pressures'. Average fluctuation in monthly admissions, 2010 to 2017.



Source: British Lung Foundation. Lung disease, the hidden driver of NHS winter pressure. December 2017.

3.88. **Enabling more people with heart and lung disease to complete a programme of education and exercise based rehabilitation will result in improved exercise capacity and quality of life in up to 90% of patients.** Breathlessness is a very common symptom that is shared by a number of cardiac and lung conditions as well as psychological and mental health conditions, and is compounded by physical de-conditioning. Generic pulmonary and cardiac rehabilitation programmes have been shown to be effective for both conditions, providing an opportunity for cardiac and pulmonary rehabilitation groups to join forces and manage the groups collaboratively[143]. Test and learn demonstrators will be used to establish an evidence base for joint cardiac and pulmonary rehabilitation models, which will then be promulgated across the NHS.

Adult mental health services

3.89. **The Long Term Plan makes a renewed commitment to grow investment in mental health services faster than the NHS budget overall for each of the next five years.** The NHS in England is already meeting the goal set in the recently launched Lancet Commission on Global Mental Health that high income countries should be spending at least 10% of their health services budget on mental health[144], and NHS England will be the only major Western health service to have made and sustained such a funding pledge for what will have been eight years by 2023/24. **NHS England's renewed pledge means mental health will receive a growing share of the NHS budget, worth in real terms at least a further £2.3 billion a year by 2023/24.** As a result mental health investment will be growing faster over the next five years than over the past five years. It is also the 'floor' level of uplift now being set nationally, and we expect it will be further increased by local investment decisions. We will ensure this translates into additional funding for frontline services, including locally agreed spending and delivery plans signed-off by commissioners and providers.

Common disorders

3.90. Nine out of ten adults with mental health problems are supported in primary care. The Improving Access to Psychological Therapies (IAPT) programme to treat common mental health conditions is world-leading. Mental illness is a leading cause of disability in the UK[145]. Stress, anxiety and depression were the leading cause of lost work days in 2017/18[146]. The cost of poor mental health to the economy as a whole is estimated to be far in excess of what the country gives the NHS to spend on mental health. So reducing the impact of common mental illness can also increase our national income and productivity[147].

3.91. The *Five Year Forward View for Mental Health* set out plans for expanding IAPT services so at least 1.5 million people can access care each year by 2020/21. **We will continue to expand access to IAPT services for adults and older adults with common mental health problems, with a focus on those with long-term conditions.** IAPT services have now evolved to deliver benefits to people with long-term conditions, providing genuinely integrated care for people at the point of delivery. More than half of patients who use IAPT services are moving to recovery, and nine out of ten people now start treatment in less than six weeks[148]. By 2023/24, an additional 380,000 adults and older adults will be able to access NICE-approved IAPT services.

3.92. The *Five Year Forward View for Mental Health* also set new waiting time standards covering the NHS' IAPT services, early intervention in psychosis and children and young people's eating disorders. All of these standards are being achieved or on track for delivery in 2020/21. Alongside work to explore the effectiveness of different approaches to integrated delivery with primary care, we will test four-week waiting times for adult and older adult community mental health teams, with selected local areas. This will help build our understanding of how best to introduce ambitious but achievable improvements in access, quality of care and outcomes. **We will then set clear standards for patients requiring access to community mental health treatment and roll them out across the NHS over the next decade.**

Severe mental health problems

3.93. The life expectancy of people with severe mental illnesses can be up to 20 years less than the general population. An independent review of the Mental Health Act, chaired by Professor Sir Simon Wessely has now made recommendations on improving legislation and practice[149]. It has examined rising detention rates, racial disparities in detention and concerns that the Act is out of step with a modern mental health system. The government is now considering the findings of the review in detail, including the need for better crisis services and improved community care for people with serious mental illness. Investment in these services forms a major part of this Long Term Plan.

3.94. **New and integrated models of primary and community mental health care will support adults and older adults with severe mental illnesses.** A new community-based offer will include access to psychological therapies, improved physical health care, employment support, personalised and trauma-informed care, medicines management and support for self-harm and coexisting substance use. This includes maintaining and developing new services for people who have the most complex needs and proactive work to address racial disparities. Local areas will be supported to redesign and reorganise core community mental health teams to move towards a new place-based, multidisciplinary service across health and social care aligned with primary care networks. By 2023/24, new models of care, underpinned by improved information sharing, will give 370,000 adults and older adults greater choice and control over their care, and support them to live well in their communities.

Emergency mental health support

3.95. **We will expand services for people experiencing a mental health crisis.** Three years ago, only 14% of adults surveyed felt they were provided with the right response when in crisis, and only half of community teams were able to offer an adequate 24-hour, seven-day crisis service[150]. In 2016, only 12% of hospital A&E departments had an all-age mental health liaison service meeting the 'core 24' service standard[151].

3.96. **The NHS will ensure that a 24/7 community-based mental health crisis response for adults and older adults is available across England by 2020/21.** Services will be resourced to offer intensive home treatment as an alternative to an acute inpatient admission. We are also working to ensure that no acute hospital is without an all-age mental health liaison service in A&E departments and inpatient wards by 2020/21, and that at least 50% of these services meet the 'core 24' service standard as a minimum. By 2023/24, 70% of these liaison services will meet the 'core 24' service standard, working towards 100% coverage thereafter.

3.97. **In the next ten years we are committed to ensuring the NHS will provide a single point of access and timely, universal mental health crisis care for everyone.** We will ensure that anyone experiencing mental health crisis can call NHS 111 and have 24/7 access to the mental health support they need in the community and we will set clear standards for access to urgent and emergency specialist mental health care. This will include post-crisis support for families and staff who are bereaved by suicide, who are likely to have experienced extreme trauma and are at a heightened risk of crisis themselves.

3.98. **We will also increase alternative forms of provision for those in crisis.** Sanctuaries, safe havens and crisis cafes provide a more suitable alternative to A&E for many people experiencing mental health crisis, usually for people whose needs are escalating to crisis point, or who are experiencing a crisis, but do not necessarily have medical needs that require A&E admission. They are commissioned through the NHS and local authorities, provided at relatively low costs, high satisfaction, and usually delivered by voluntary sector partners. While these services now exist in a number of areas, we will work to improve signposting, and expand coverage to reach more people and make a greater impact.

3.99. Models such as crisis houses and acute day care services, host families and clinical decision units can also prevent admission. The NHS will work hand in hand with the voluntary sector and local authorities on these alternatives and ensuring they meet the needs of patients, carers and families.

3.100. The Clinical Review of Standards will make recommendations for embedding urgent and emergency mental health in waiting time standards. This means that everyone who needs it can expect to receive timely care in the most appropriate setting, whether that is through NHS 111, accessing a liaison mental health service in A&E, or a community-based crisis service. **Specific waiting times targets for emergency mental health services will for the first time take effect from 2020.**

3.101. **Ambulance staff will be trained and equipped to respond effectively to people in a crisis.** Ambulance services form a major part of the support people receive in a mental health emergency. For example, South Western Ambulance Service NHS Foundation Trust reports that at least 10-15% of all calls are related to mental health. We will introduce new mental health transport vehicles to reduce inappropriate ambulance conveyance or by police to A&E. We will also introduce mental health nurses in ambulance control rooms to improve triage and response to mental health calls, and increase the mental health competency of ambulance staff through an education and training programme. A six-month pilot in the Yorkshire Ambulance Service NHS Trust showed that 48% of mental health calls were usually conveyed to A&E, but only 18% when triaged by a mental health nurse.

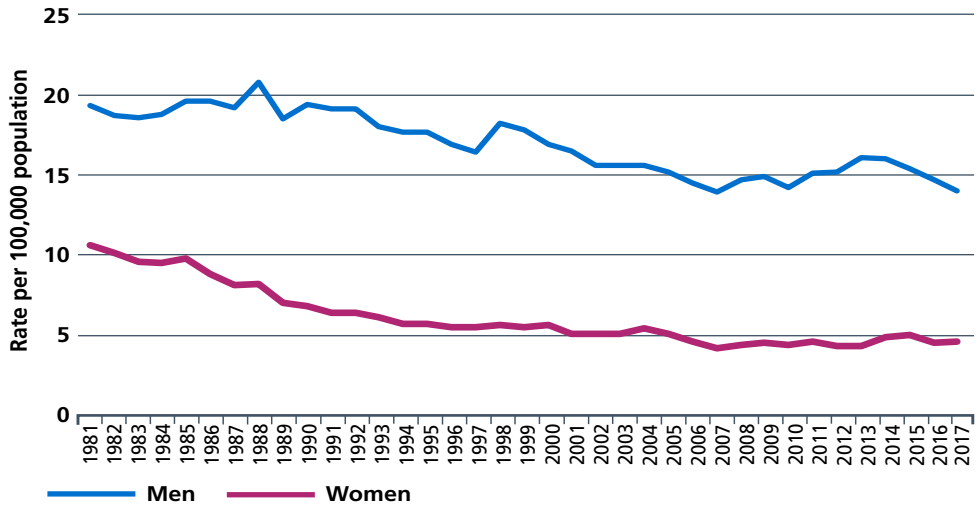
Inpatient care

3.102. For people admitted to an acute mental health unit, a therapeutic environment provides the best opportunity for recovery. Purposeful, patient-orientated and recovery-focused care is the goal from the outset. Units operating beyond capacity may struggle to offer such care and cannot admit new patients, who are then looked after further away from home or in non-specialist settings. The recent Crisp Commission highlighted a wide variation in the quality and capability of these acute mental health units across the country[152]. The *Five Year Forward View for Mental Health* programme is working to eliminate inappropriate out of area placements for non-specialist acute care by 2021. We will work with those units with a long length of stay and look to bring the typical length of stay in these units to the national average of 32 days. This will contribute to ending **acute out of area placements** by 2021, allowing patients to remain in their local area – maintaining relationships with family, carers and friends. In addition, as recommended by Professor Sir Simon Wessely's Mental Health Act review, capital investment from the forthcoming Spending Review will be needed to upgrade **the physical environment** for inpatient psychiatric care[153].

Suicide prevention

3.103. **Since 2015, the suicide rate has reduced from 10.1 to 9.2 per 100,000 of the population, but certain groups of people remain at heightened risk.** Suicide is more common in men than women, though male suicide rates are now at their lowest rates in over 30 years, and considerably lower than many other comparable countries.

Figure 20: Age-standardised suicide rates by sex, England, 1981 to 2017.



Source: Office for National Statistics. Suicides in the UK: 2017 registrations. September 2018.

3.104. The multi-agency suicide prevention and reduction programme implemented as part of the Five Year Forward View for Mental Health was the first of its kind. As part of this programme, we are on track to deliver a 10% reduction in suicide rates by 2020/21 and all local areas across the country now have multi-agency suicide prevention plans in place. We also now have a dedicated quality improvement programme to implement the findings from the National Confidential Inquiry into Suicide and Safety in Mental Health, and learn from deaths in NHS settings, to prevent future suicides.

3.105. We will continue to build on this progress with the Long Term Plan, so that **reducing suicides will remain an NHS priority over the next decade.** With the support of partners in addressing this complex, system-wide challenge, we will provide full coverage across the country of the existing suicide reduction programme. Through an enhanced mental health crisis model, anyone experiencing a crisis will be able to call NHS 111 and have 24/7 access to mental health support as well as the services described earlier in this chapter. We will expand specialist perinatal mental health services so that more women who need it have access to the care they need from preconception to two years after the birth of their baby. We are investing in specialist community teams to help support children and young people with autism and their families, and integrated models of primary and community mental health care which will support adults with severe mental illnesses, and support for individuals who self-harm.

3.106. **We will design a new Mental Health Safety Improvement Programme, which will have a focus on suicide prevention and reduction for mental health inpatients.** Building on the model used in Cambridge and Peterborough's crisis pathway, we will put in place suicide **bereavement support** for families and staff working in mental health crisis services in every area of the country. Finally, building on the work of the Global Digital Exemplar (GDE) programme, we will use decision-support tools and machine learning to augment our ability to deliver personalised care and predict future behaviour, such as risk of self-harm or suicide.

Milestones for mental health services for adults

- **New and integrated models of primary and community mental health care will give 370,000 adults and older adults with severe mental illnesses greater choice and control over their care and support them to live well in their communities by 2023/24.**
- **By 2023/24 an additional 380,000 people per year will be able to access NICE-approved IAPT services.**
- **By 2023/24, NHS 111 will be the single, universal point of access for people experiencing mental health crisis. We will also increase alternative forms of provision for those in crisis, including non-medical alternatives to A&E and alternatives to inpatient admission in acute mental health pathways. Families and staff who are bereaved by suicide will also have access to post-crisis support.**
- **By 2023/24, we will introduce mental health transport vehicles, introduce mental health nurses in ambulance control rooms and build mental health competency of ambulance staff to ensure that ambulance staff are trained and equipped to respond effectively to people experiencing a mental health crisis.**
- **Mental health liaison services will be available in all acute hospital A&E departments and 70% will be at 'core 24' standards in 2023/24, expanding to 100% thereafter.**

Short waits for planned care

3.107. Low back and neck pain is the greatest cause of years lost to disability[154], with chronic joint pain or osteoarthritis affecting over 8.75 million people in the UK. Over 30 million working days are lost due to musculoskeletal (MSK) conditions every year in the UK[155] and they account for 30% of GP consultations in England[156]. We will build on work already undertaken to ensure patients will have **direct access to MSK First Contact Practitioners (FCP).** 98% of STPs have confirmed pilot sites for FCP and 55% of pilots are already underway. We will expand the number of physiotherapists working in primary care networks, enabling people to see the right professional first time, without needing a GP referral. We will also expand access to support such as the online version of ESCAPE-pain (Enabling Self-management and Coping with Arthritic Pain through Exercise), a digital version of the well-established, face-to-face group programme[157].

3.108. For those patients that do need an operation, whether for MSK or any other condition, short waits are important. Cataract extraction, joint replacements and other planned surgery all help people stay independent and yield important quality of life gains. In the 1990s and 2000s the NHS made large investments in reducing waiting times for planned surgery. Waiting times remain low by historic standards, and GP referrals are flat, but in recent years treatment capacity has not grown fast enough to keep up with patient need, and the number of patients waiting longer than 18 weeks has been steadily increasing. **Under the Long Term Plan, the local NHS is being allocated sufficient funds over the next five years to grow the amount of planned surgery year-on-year, to cut long waits, and reduce the waiting list.** The phasing of this improvement will partly be shaped by the availability of staff to expand treatment capacity in hospitals, and will be determined annually through the planning guidance process.

3.109. The ability of patients to choose where they have their treatment remains a powerful tool for delivering improved waiting times and patient experiences of care. The NHS will continue **to provide patients with a wide choice of options for quick elective care**, including making use of available Independent Sector capacity. This will be supported by continued roll out of Capacity Alerts as a tool for CCGs to use to support GPs and patients to make informed decisions about where to have their treatment. Patients will continue to have choice at point of referral and anyone who has been waiting for six months will be reviewed and given the option of faster treatment at an alternative provider, with money following the patient to fund their care.

3.110. Given that two thirds of referral to treatment (RTT) 'clock stops' are outpatient appointments, the effect of removing up to a third of these (as set out in Chapter One) will be to distort how RTT waiting times performance is calculated. This is something the NHS National Medical Director's Clinical Standards Review will take into account in its recommendations in the spring. In the meantime, given that there will now, over the coming years, be sufficient funding available to CCGs and hospitals to eliminate long waits, we will reintroduce the incentive system under which hospitals and CCGs will both be fined for any patient who breaches 12 months.

3.111. Although inpatient elective admissions (as against day-cases or outpatients) constitute under 5% of RTT 'clock stops', separating urgent from planned services can make it easier for NHS hospitals to run efficient surgical services. Planned services are provided from a 'cold' site where capacity can be protected to reduce the risk of operations being postponed at the last minute if more urgent cases come in. Managing complex, urgent care on a separate 'hot' site allows trusts to provide improved trauma assessment and better access to specialist care, so that patients have better access to the right expertise at the right time. So we will continue to back hospitals that wish to pursue this model. In those locations where a complete site shift to 'cold' elective services is not feasible, we will also introduce a new option of 'A&E locals'.

CASE STUDY:

Gloucestershire Hospital

Gloucestershire Hospitals NHS Foundation Trust faced significant challenges, with poor A&E performance and high numbers of cancellations and delays to planned operations. The Getting it Right First Time (GIRFT) programme supported the trust to split its 'hot' emergency work and 'cold' planned trauma and orthopaedics work onto two separate sites. Senior clinical decision makers were introduced at the A&E 'front door' to help ensure patients were managed more effectively. During the first six months the trust was able to achieve its 4-hour A&E target for the first time since 2010 and had halved the number of cancelled operations. There was a reduction in waiting times for surgeries, including for hip or knee replacements, and an 8% increase in the amount of elective surgery performed.

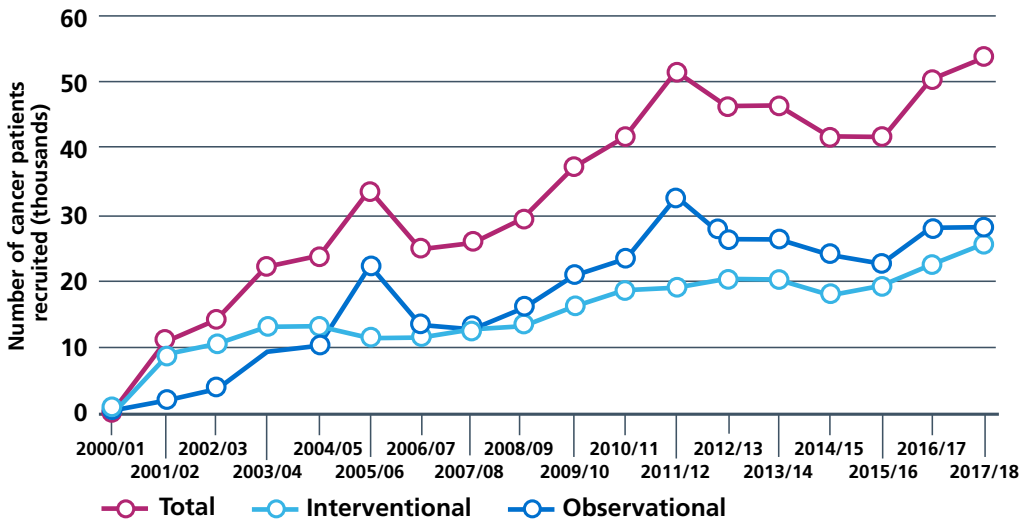
Research and innovation to drive future outcomes improvement

3.112. **Patients benefit enormously from research and innovation, with breakthroughs enabling prevention of ill-health, earlier diagnosis, more effective treatments, better outcomes and faster recovery.** Linking and correlating genomics, clinical data and data from patients provides routes to new treatments, diagnostic patterns and information to help patients make informed decisions about their care. 'Research-active' hospitals have lower mortality rates, with benefits not limited to those patients who participate in research.

3.113. **Research and innovation are also important for the UK economy, bringing jobs and services.** The Government's Industrial Strategy set an ambition for R&D spending to reach 2.4% of GDP by 2028, which could see health R&D spending hit £14 billion. The Life Sciences Industrial Strategy[158] highlights that the UK is one of the best places in the world to do biomedical research, with globally renowned scientists and institutions in a rich, connected ecosystem making new discoveries every day. The government's ambition is to treble industry contract and R&D collaborative research in the NHS over ten years, to nearly £1 billion. The UK has outstanding capabilities for research and innovation: our universities and science base, leading NHS providers, genomics programme and the UK Biobank. These assets, combined with better data infrastructure, have the potential to lock in the UK as a global force in data-driven scientific advances in healthcare. **The NHS endorses and will play its full part in the recently announced Life Sciences sector deal.**

3.114. **We will work to increase the number of people registering to participate in health research to one million by 2023/24.** People will be able to view opportunities to participate and register their interest on the NHS App by 2020. We will continue to make it faster, cheaper and easier to undertake research in England through simpler standardised trial set-up processes and prices, initiated as part of NHS England's *12 Actions*[159].

Figure 21: Recruitment of patients with a cancer diagnosis into clinical research studies in England.



Source: Health Foundation. Unfinished Business. November 2018.

3.115. **We will focus targeted investment in areas of innovation that we believe will be transformative, particularly genomics.** The NHS will be the first national health care system to offer whole genome sequencing as part of routine care. As part of the NHS' contribution to the UK government's broader aims to reach five million genomic tests and analyses over the same timeframe, **the new NHS Genomic Medicine Service will sequence 500,000 whole genomes by 2023/24.** This builds on the legacy of the ground-breaking 100,000 genomes programme, that was made possible because of the unique partnership between Genomics England and the NHS. This project is already delivering results for patients, with early indications that at least one in four people suffering from a rare disease will have a diagnosis they would not previously have received. As part of this ambition, **during 2019, seriously ill children who are likely to have a rare genetic disorder, children with cancer, and adults suffering from certain rare conditions or specific cancers, will begin to be offered whole genome sequencing.**

3.116. **We will speed up the pipeline for developing innovations in the NHS, so that proven and affordable innovations get to patients faster.** We will create a simpler, clearer system for medtech and digital that will apply across England. This will include a new advisory service for innovators, linked to the Academic Health Science Networks (AHSNs). We will bring together in one place all 'horizon-scanning' activities. And we will simplify health-related national innovation programmes, backing those that are most successful under a single multi-stakeholder governance structure. For medicines, the government and industry have agreed a new voluntary scheme for branded medicines pricing and access. The new scheme will mean patients benefit from faster adoption of cutting-edge and best value drugs, demonstrating our commitment to innovation while also supporting the sustainability of the NHS.

3.117. **To expand the NHS infrastructure for real world testing, we will expand the current NHS England 'Test Beds' through regional Test Bed Clusters from 2020/21.** These will develop clear operational and business models that are easy for other systems to adopt and adapt, backed by real world data on benefits and costs. The primary measure of the success of the Test beds will be the number of other NHS systems that decide to adopt their models. We want to see an increasing share of total NHS R&D funding spent on real world testing.

3.118. **Uptake of proven, affordable innovations will be accelerated through a new Medtech funding mandate.** This would apply to health tech products, other than pharmaceuticals, which have been assessed as cost saving by NICE. We will also significantly increase the number of NICE evaluations for these products, giving greater scope for assessment of digital products in particular. Products that are 'ready for spread' across the NHS will be given individualised support to increase adoption, coordinated by NHS England and NHS Improvement.

3.119. **We will invest in spreading innovation between organisations.** Funding for AHSNs, subject to their success in being able to spread proven innovations across England, will be guaranteed until April 2023. AHSNs will also link ever more closely with other regional support (e.g. Rightcare and GIRFT) to ensure adoption of innovation and service improvement are addressed in tandem. Performance on adopting proven innovations and on research including in mental health services will become part of core NHS performance metrics and assessment systems, as well as benchmarking data. Innovators working in the NHS will continue to be supported through our Clinical Entrepreneurs and NHS Innovation Accelerator programmes. Through a major expansion, these will include those seeking to drive quality improvement through non-commercial models.

3.120. **As UK-led innovations are proven as 'ready for spread' in England, we will support their global export through the work of Healthcare UK.** We will also form an NHS Export Collaborative with Healthcare UK by 2021, working with selected trusts to export NHS innovations.

Chapter 4: NHS staff will get the backing they need

4.1. **The performance of any healthcare system ultimately depends on its people – the NHS is no exception.** The NHS is the biggest employer in Europe and the world's largest employer of highly skilled professionals. 1.3 million people across the health service in England are devoting their working lives to caring for others. That is one in every 25 working age adults, three quarters of whom are women. Working in the NHS demands the highest levels of skill and compassion, and the NHS attracts some of the very best people from home and abroad. But, over the past decade, workforce growth has not kept up with need, and the way staff have been supported to work has not kept up with the changing requirements of patients.

4.2. **Our staff are feeling the strain due, in part, to the number of vacancies across many roles and in many parts of England.** There will always be a background number of vacancies as staff move between employers and advance their careers, but the current number is unsustainable, with the biggest shortfall in nursing[160]. NHS staff have continued to put patients first despite growing demand and rising pressure. We recognise this, and are committed to improving the working lives of all staff over the next few years and beyond.

4.3. **To make this Long Term Plan a reality, the NHS will need more staff, working in rewarding jobs and a more supportive culture.** By better supporting and developing staff, NHS employers can make an immediate difference to retaining the skills, expertise and care their patients need. They can, and will, also do more to improve equality and opportunities for people from all backgrounds to work in the NHS.

4.4. **New NHS roles and careers will be shaped to reflect the future needs and priorities set out in the rest of this Plan.** As we invest in our workforce, we need to ensure the NHS has primary care and generalist skills, to complement what has been a major move to more specialised hospital-based care in recent decades. To date workforce planning has been too disjointed at a national and local level. This will now change as HEE is better aligned nationally with NHS Improvement which now has lead responsibility for the NHS workforce. Locally, the Local Workforce Action Boards will become more accountable to health service and social care employers.

4.5. The challenge is substantial, but there are real opportunities to make improvements. **More people want to train to join the NHS than are currently in education or training. Many of those leaving the NHS would remain if they were offered improved development opportunities and more control over their working lives.**

4.6. **This Long Term Plan sets out a number of specific workforce actions developed by NHS Improvement and others that can have a positive impact now. The Plan also sets out our wider reforms for the NHS workforce which will be finalised by NHS Improvement and the Department of Health and Social Care when the education and training budget for HEE is set in 2019.**

4.7. As a service, we will now take sustained and concerted action to:

- ensure we have enough people, with the right skills and experience, so that staff have the time they need to care for patients well;
- ensure our people have rewarding jobs, work in a positive culture, with opportunities to develop their skills and use state of the art equipment, and have support to manage the complex and often stressful nature of delivering healthcare;

- strengthen and support good, compassionate and diverse leadership at all levels – managerial and clinical – to meet the complex practical, financial and cultural challenges a successful workforce plan and Long Term Plan will demand.

1. A comprehensive new workforce implementation plan

4.8. NHS workforce planning will always be complex and never an exact science, whether led nationally, regionally, or locally. But we must ensure plans work locally and add up nationally. Workforce plans need to be highly adaptive over the next ten years, and attentive to both the detail and the wider context.

4.9. Our aim is to ensure a sustainable overall balance between supply and demand across all staff groups. For doctors, we will focus on reducing geographical and specialty imbalances. For the wider workforce, we aim to ensure sufficient supply of nurses and to address specific shortages for AHPs and other key groups.

4.10. The funding available for additional investment in the workforce, in the form of training, education and continuing professional development (CPD) through the HEE budget has yet to be set by government. A **workforce implementation plan** will therefore be published later in 2019. NHS Improvement, HEE and NHS England will establish **a national workforce group** to ensure that such workforce actions agreed are delivered quickly. This will include the new NHS Chief People Officer, the NHS National Medical Director, the Chief Nursing Officer and the other Chief Professions Officers. The group will show how the future challenges can be addressed for the total workforce, as well as looking at each group individually. The group will also include **our first ever Chief Midwifery Officer**, along with representatives from staff side organisations, the Social Partnership Forum, Royal Colleges, The King's Fund, Health Foundation and Nuffield Trust.

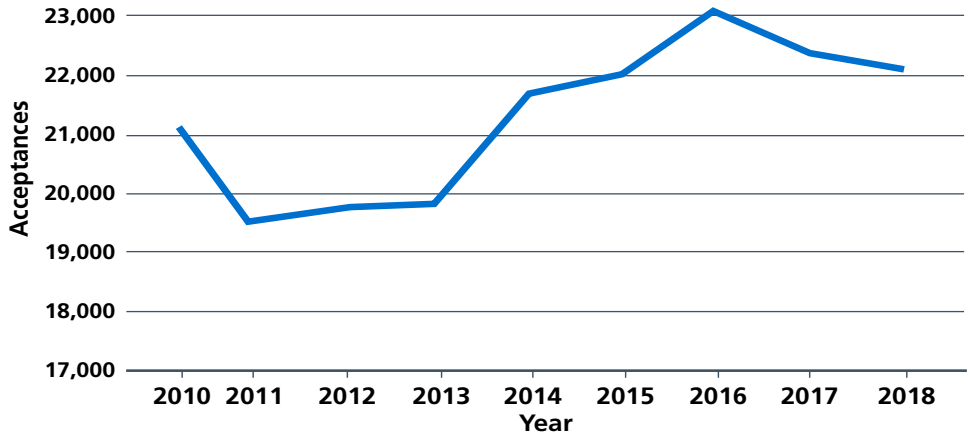
2. Expanding the number of nurses, midwives, AHPs and other staff

4.11. Nurses play a key role in delivering person-centred care in all parts of the NHS and have been the largest clinical workforce since 1948. Global demand for nurses remains strong and, while UK-based training is an asset, we are not yet training sufficient nurses to meet demand.

4.12. The NHS Improvement-led workforce group will agree action to improve supply over the course of the Long Term Plan. This will centre on increasing the number of undergraduate nursing degrees, reducing attrition from training and improving retention, with the aim of improving the nursing vacancy rate to 5% by 2028.

4.13. The NHS remains a highly attractive career choice. The main source of new nurses is through undergraduate education and, while other routes are important, restoring growth in this route is central to the success of the Long Term Plan. **22,200 applicants were accepted onto English nursing courses in 2018, a higher number than in seven of the last ten years.** And while the total number of applications fell, there were still nearly two applicants for each place offered[161].

Figure 22: Number of acceptances on to nursing degrees in England, 2010 to 2018.



Source: UCAS. Applications and acceptances. 2018.

4.14. However, across the UK, 14,000 applicants to nursing were not accepted onto courses. At a time of staff shortage across the NHS it is – to say the least – paradoxical that many thousands of highly motivated and well-qualified applicants who want to join the health service are being turned away. **A number of Higher Education Institutions (HEIs) have entry tariffs well above the levels set by other HEIs and deemed to meet appropriate standards by the Nursing and Midwifery Council[162].** In other cases the rationalising factor has been that HEE hasn't been able to guarantee the clinical placements needed to give hands-on experience. Both reasons now need to change.

4.15. To facilitate the Department of Health and Social Care's intended 25% increase in nurse undergraduate places, clinical placements for **an extra 5,000 places will be funded from 2019/20, a 25% increase.** From 2020/21, we will provide funding for clinical placements for as many places as universities fill, **up to a 50% increase**. And every nurse or midwife graduating will also be offered a five-year NHS job guarantee within the region where they qualify.

4.16. **We also need to make training more accessible. We will establish a new online nursing degree for the NHS, linked to guaranteed placements at NHS trusts and primary care, with the aim of widening participation.** This could be launched from 2020 depending on the speed of regulatory approvals. And to both minimise student debt and incentivise mature applicants, it will be offered for substantially less than the £9,250-a-year cost to current students.

4.17. Mature students are more likely to have family and other commitments that make it harder to retrain without financial support. This has particularly affected mental health and learning disabilities fill rates – key priorities for the NHS. This is why 'earn and learn' support premiums for students embarking on more flexible undergraduate degrees in mental health or learning disability nursing, who are also predominantly mature students will be explored, with the aim of having an additional 4,000 people training by 2023/24, supported by the increased funding for clinical placements.

4.18. Apprenticeships offer important opportunities for widening social participation in the NHS workforce. They also provide career ladders for staff to develop their skills, expand the contribution they can make to patient care and strengthen their commitment to continue working for the NHS. NHS organisations should look to take on the lead employer model, setting up the infrastructure to deliver apprenticeships on behalf of several trusts, and providing training and education. **We will continue to invest in the growth of nursing apprenticeships** with 7,500 new nursing associates starting in 2019, a 50% increase on 2018. We will also provide the necessary investment in training to create meaningful career ladders for these staff to develop and progress. This means that we will now be investing over half of the £200 million levy back into the NHS in 2019/20. But the terms of the levy may need to change if the NHS is to provide opportunities to more clinical staff in future. We will be providing evidence to the Government's review of the operation of the levy in 2020.

4.19. In the meantime, **we will also seek to grow wider apprenticeships in clinical and non-clinical jobs in the NHS**, with an expectation that employers will offer all entry-level jobs as apprenticeships before considering other recruitment options. We will continue to discuss a fair pay framework for apprenticeships with the Social Partnership Forum, balancing affordability against the need to grow these roles as quickly as we can and provide greater opportunities for people from less advantaged backgrounds to get a first foot on the NHS career ladder.

How some trusts have been able to use the Apprenticeship Levy

Leeds Teaching Hospitals NHS Trust has exceeded the public sector apprenticeship target by offering six week traineeship with a guaranteed interview for a level one apprentice clinical support worker role, with the option of progressing through apprenticeship levels until reaching a band 5 nurse role or level 6 degree in nursing with NMC registration.

North West Ambulance Service NHS Trust offers 145 apprenticeships a year, including level 4 ambulance associate practitioner apprenticeships. This has now been developed for all 10 ambulance trusts.

Royal Berkshire NHS Foundation Trust developed level 6 leadership and management apprenticeships to support clinical leaders, improve the number of BAME staff in senior roles and improve staff retention.

4.20. 170,000 Allied Health Professionals (AHPs) in 14 professions work independently across the spectrum of care from primary to specialist care provision. AHPs can significantly support the demand profile the NHS faces and we have recently published 15 studies demonstrating how AHPs currently support patient flow across the whole system[163]. The national workforce group will build on these to make specific recommendations for AHPs, in particular those in short supply – paramedics, podiatrists, radiographers, and speech and language therapists. The Chief Allied Health Professions Officer will further develop the national AHP strategy *AHPs into Action* to focus on the delivery of the Long Term Plan.

4.21. Pharmacists have an essential role to play in delivering the Long Term Plan. In hospitals, clinical pharmacists have for many years worked closely with other clinicians, seeing patients, taking part in ward rounds, and monitoring and reviewing treatment with medicines. In primary care, clinical pharmacists are now a key part of the general practice team in primary care networks, working alongside GPs and nurses, seeing patients and using their expertise to get the best health outcomes for people from medicines. The funding for the new primary care networks will be used to substantially expand the number of clinical pharmacists. In community pharmacy, we will work with government to make greater use of community pharmacists' skills and opportunities to engage patients, while also exploring further efficiencies through reform of reimbursement and wider supply arrangements.

4.22. National recruitment campaigns are effective, and take pressure off individual trusts to develop local campaigns that struggle to have the same impact. In the first two months of the 'We are the NHS' campaign an additional 203,069 people sought out more information on a future career as a nurse, and national campaigns can be equally effective for other roles. As a commitment to helping recruit more staff, attract returners and retain those we already have, we will develop annual campaigns in conjunction with Royal Colleges and the trade unions for those roles that the NHS most urgently needs.

3. Growing the medical workforce

4.23. **We are now growing medical school places from 6,000 to 7,500 per year.** Depending on the HEE training budget to be agreed in the Spending Review, the number of medical school places could grow further. The national workforce group will examine further options, including:

- more part-time study options;
- expanding the number of accelerated degree programmes which would allow people to train in four years rather than five years to widen access;
- greater contestability in allocating the 7,500 medical training places to universities so as to drive improvements in curricula (formal and informal), and the production of medical graduates who meet the primary care and specialty needs of the NHS.

4.24. The way doctors are trained and the way they work will be a key component of the workforce implementation plan. **We want to accelerate the shift from a dominance of highly specialised roles to a better balance with more generalist ones.** A quarter of adults currently live with two or more long-term conditions[164], and medical training needs to support doctors to manage comorbidities, alongside single conditions. A survey of 50 smaller hospitals found only five had more than 60% 'generalist' doctors with no correlation between medical patient case mix and skill mix expressed as the percentage of generalist staff[165].

4.25. So we will test a wide range of new incentives to ensure the balance between specialist and generalist doctors, and the balance of specialties within medicine, better matches patient needs. We will also work to ensure specialty choices made by doctors are better aligned to geographical shortages.

4.26. **The workforce implementation plan will build on the *General Practice Forward View* to increase the number of doctors working in general practice.** While the number of new recruits has been increasing well, the number of early retirements and part-time working has more than offset this. We still believe we need a net increase of 5,000 GPs as soon as possible and are committed to this. In addition, the workforce implementation plan will continue recent provision for a range of other roles – including pharmacists, counsellors, physiotherapists, nurse practitioners – building on the success in expanding these numbers by nearly 5,000 over the past three years – and hence building the skill mix to relieve pressure on GPs. Chapter One sets out how **primary care networks will be able to attract and fund additional staff to form an integral part of an expanded multidisciplinary team.** Initially, this will focus on clinical pharmacists, link workers, first contact physiotherapists and physician associates. Over time, it will be expanded to include additional groups such as community paramedics.

4.27. **Additionally, newly qualified doctors and nurses entering general practice will be offered a two-year fellowship**, a scheme suggested by the GP partnership review[166]. This would offer a secure contract of employment alongside a portfolio role tailored, where possible, to the aims of the individual and the needs of the local primary care system. This will enable newly qualified nurses to consider primary care as a first destination role. There is also evidence that such approaches will, for example, increase the number of GP registrars taking up substantive roles in primary care.

4.28. **The government has also committed to a new state-backed GP indemnity scheme from April 2019**, as part of a five-year funding and reform package. The purpose of the indemnity reform is to address concerns about rising NHS indemnity costs, in a cost neutral way, as well as extending the scope of coverage to support the expanded multidisciplinary teams described above.

4.29. Working with the British Medical Association, the medical Royal Colleges, the General Medical Council and providers, we will also address:

- how the wider NHS can support the implementation of HEE's work to improve the working lives of doctors in training, including providing adequate time for supervision, accelerating implementation of 'step out and step in' training programmes and further work to enable trainees to **switch specialties** without re-starting training;
- how to accelerate the development of **credentialing**, which has been piloted by HEE, to enable doctors to broaden the scope of their practice, both during and after training;
- how to reform and re-open the Associate Specialist grade as an attractive career option in line with the HEE led strategy for Specialist and Associate Specialist doctors;
- the acceleration of work to ensure doctors are trained with the **generalist skills** needed to meet the needs of an ageing population, alongside the development of specialist knowledge and skills;
- the development of incentives to ensure that the specialty choices of trainees meet the needs of patients by **matching specialty and geographical needs**, especially in primary care, community care and mental health services;
- the consideration of any further proposals from the work on reforming medical education which will support the delivery of the Long Term Plan.

4. International recruitment

4.30. From the inception of the NHS 70 years ago, patients have benefited from the expertise, commitment and compassion of staff who have come to work in the NHS. The Windrush anniversary this year was an important opportunity to celebrate the contribution of staff from the Caribbean. We owe a considerable debt to our staff from the European Economic Area (EEA), who – whether consultants, community nurses or catering assistants – play their part in keeping the NHS running. We want staff from the EEA that are currently working across the NHS to stay after the UK exits the European Union. Many trusts are now meeting the cost of applying for settled status for their staff from the EEA. NHS England and NHS Improvement will directly monitor NHS staffing flows post-Brexit to advise government on any necessary consequential action.

4.31. In the longer-term, we need to ensure we are training more of the people we need domestically. But this will take time given it takes three years to train a nurse and at least five years of training before a doctor can work in the NHS, so in the short-term we must also continue to ensure that high-skilled people from other countries from whom it is ethical to recruit are able to join the NHS. This will mean a step change in the recruitment of international nurses to work in the NHS and we expect that over the next five years this will increase nurse supplies by several thousand each year.

4.32. We recognise that doing so will require central support. The workforce implementation plan will set out **new national arrangements to support NHS organisations in recruiting overseas**. We will explore the potential to expand the Medical Training Initiative so that more medical trainees from both developed and developing countries can spend time learning and working in the NHS.

4.33. The changes to the immigration rules in 2018, which exempted all doctors and nurses from the immigration cap, have facilitated more responsive routes for recruiting staff in these professional groups. We will work with government to ensure the post-Brexit migration system provides the necessary certainty for health and social care employers, particularly for shortage roles.

4.34. The professional regulatory bodies have a significant role in enabling the recruitment and employment of appropriately trained overseas professionals in the UK. It is critical that individuals looking to register to work in the UK can move through regulatory processes quickly, while upholding the high standards the public expects. The NMC will update the English Language testing requirements for 2019 and we will continue to work with regulators to ensure that language competency and international registration processes are proportionate to risk and responsive to need.

5. Supporting our current NHS staff

4.35. People are proud to work in the NHS. Three-quarters of respondents to the 2017 staff survey reported they are enthusiastic about their job, and nine in 10 agreed their role makes a difference to patients and service users. However, the leaver rate for nurses was 8% in 2017 – up from 6.8% in 2013. **Growing the NHS workforce will partly depend on retaining the staff we have.** Training lead-times mean new investment in staff will not deliver additional supply for at least three years. This means concerted action to support employers in retaining staff is an urgent priority now and will remain a necessity throughout the next decade.

4.36. **NHS Improvement's Retention Collaborative has already delivered substantial measurable improvements** through targeted support for trusts with high turnover. We will extend this support to all NHS employers, and NHS Improvement is committed to improving staff retention by at least 2% by 2025, the equivalent of 12,400 additional nurses.

4.37. **One of the top reasons for people leaving is that they do not receive the development and career progression that they need.** CPD – or more specifically workforce development - has the potential to deliver a high return on investment. It offers staff career progression that motivates them to stay within the NHS and, just as importantly, equips them with the skills to operate at advanced levels of professional practice and to meet patients' needs of the future. HEE has committed to increase the proportion of its total budget spent on workforce development in the short-term, with a focus on primary care and community settings. Support from employers is also key – in particular ensuring that staff are given the time out to develop their skills. Following agreement of the HEE training budget in this year's Government Spending Review, we will expect to increase investment in CPD over the next five years.

4.38. **We will expand multi-professional credentialing to enable clinicians to develop new capabilities formally recognised in specific areas of competence.** This will allow clinicians to shift or expand their scope of practice to other areas more easily, creating a more adaptable workforce. With partners, we have already developed several credentials, for example the Royal College of Nursing's Advanced Level Nurse Practitioner credentialing scheme and the Royal College of Emergency Medicine's credentialing for Emergency Care Advanced Clinical Practitioners. We will accelerate development of credentials for mental health, cardiovascular disease, ageing population, preventing harm and cancer, with the intention of publishing standards in 2020.

4.39. Inflexible and unpredictable working patterns make it harder for people to balance their work and personal life obligations. **To make the NHS a consistently great place to work, we will seek to shape a modern employment culture for the NHS – promoting flexibility, wellbeing and career development, and redoubling our efforts to address discrimination, violence, bullying and harassment.** Many of the building blocks for this work are already in place in parts of the NHS. The Social Partnership Forum has set out an important programme on bullying and harassment.

4.40. It is unacceptable that a quarter of staff experienced harassment, bullying or abuse from other staff in the last 12 months. The workforce implementation plan will aim to shape a new deal for frontline staff. It is an opportunity to work with staff, employers and trade unions to build a modern working culture where all staff feel supported, valued and respected for what they do. And where the values we seek to achieve for our patients – kindness, compassion, professionalism – are the same values we demonstrate towards one another.

4.41. The NHS has recently launched a new programme to tackle violence. This includes working with the police and Crown Prosecution Service to secure swift prosecutions, improved training for staff to deal with violence and prompt mental health support for staff who have been victims of violence. As part of our action on violence in the NHS, we will pilot and evaluate the use of body worn cameras by paramedics. We will not tolerate violence against NHS staff and, where justified, will always seek to prosecute incidents of verbal and physical abuse. We will invest up to £2 million a year from 2019/20 in these programmes to reduce violence, bullying and harassment for our staff. We will invest a further £8 million by 2023/24 to pilot the use of body cameras to keep our staff safe.

4.42. **Respect, equality and diversity will be central to changing the culture and will be at the heart of the workforce implementation plan.** The NHS draws on a remarkably rich diversity of people to provide care to our patients. But we fall short in valuing their contributions and ensuring fair treatment and respect. Through the Workforce Race Equality Standard, we are making progress in addressing these issues from the perspective of BAME staff. However, two years is not long enough to achieve the necessary change and so **NHS England will invest an extra £1 million a year to extend its work to 2025.** Each NHS organisation will set its own target for BAME representation across its leadership team and broader workforce by 2021/22. This will ensure senior teams and Boards more closely represent the diversity of the local communities they serve. We will also develop a new Workforce Disability Equality Standard with the aim of the NHS becoming a model employer in this regard.

4.43. We need to ensure equality for women, who make up three quarters of our workforce. The review of the Gender Pay Gap for doctors will contribute to gender equality in the NHS. However, the issue is broader and more complex and, in addition, concerns about the experiences of LGBT+ staff are highlighted by the staff survey. To strengthen our existing programme to support equality and diversity in the NHS, the new Chief People Officer will consider what more we need to do involving the Social Partnership Forum, NHS Employers, and members of the NHS Equality and Diversity Council.

4.44. The best solutions come from staff themselves. Talk Health and Care allows staff to post ideas, questions and challenges, and is already providing useful insights into the experiences of our people. NHS England is also backing #ProjectA, a 12-month, staff-led engagement exercise with 2,000 staff across all 10 ambulance trusts in England. Teams of ambulance staff and patients identified six priorities to be implemented across the country, including how to reduce stress and isolation for frontline staff.

4.45. An expanded Practitioner Health Programme will help all NHS doctors access specialist mental health support, providing a safe, confidential non-stigmatising service to turn to when they are struggling and need help. This means **the NHS will have the most comprehensive national mental health support offer to doctors of any health system in the world[167].**

4.46. The NHS Chief People Officer, working with the national workforce group will take action for all NHS staff to:

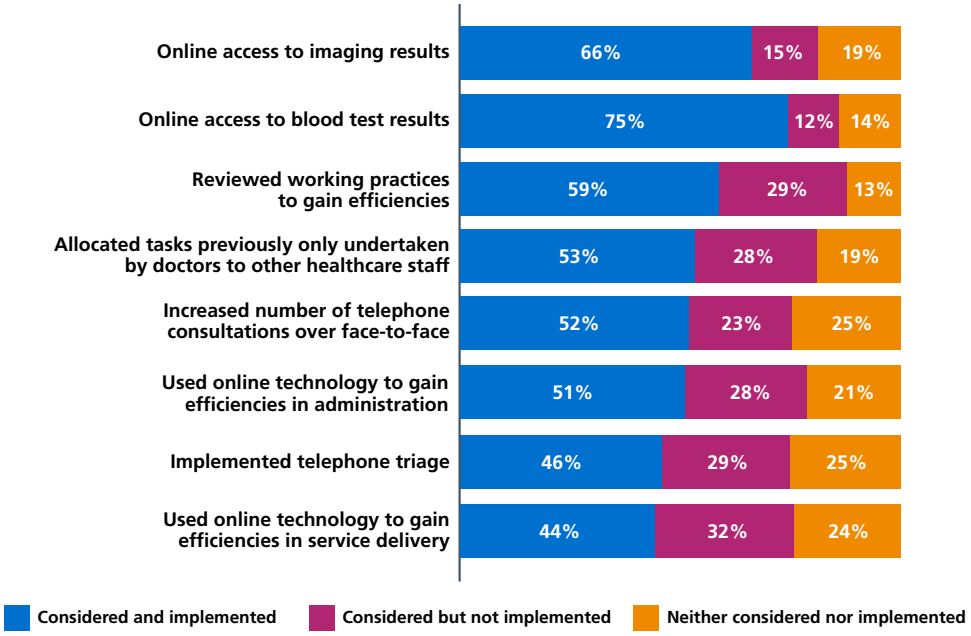
- improve health and wellbeing, building on the NHS Health and Wellbeing Framework that includes recommendations from the Stevenson/Farmer review of mental health and employers, and to support improved health and wellbeing of staff and management of sickness absence;
- support flexible working, including clarity on the proportion of roles to be advertised as flexible; and the ability to express preferences about shifts further in advance enabled by e-rostering technology introduced over the next year and associated applications;
- clarify expectations on induction and other mandatory training;
- enable staff to more easily move from one NHS employer to another;
- set expectations for the practical help and support our staff should receive to raise concerns, or inappropriate behaviours, confidentially.

6. Enabling productive working

4.47. **Ensuring staff are making the most of their skills and expertise will form a critical component of the NHS workforce implementation plan.** We need to work at national and local levels to put in place changes that remove wasted time and irritating tasks, so that staff are able to focus on patient care. HEE's Workforce STAR is an online, interactive workforce transformation tool designed to support Trusts finding workforce solutions in this area. The rapid development of technology is a key opportunity to free up staff time. Staff report technology often delays access to the information they need, and that the personal technology in their pockets is more useful and functional than the technology they are provided at work. Improving technology will free up expensive staff time and provide safety prompts that will improve the quality of care. Professor Eric Topol is currently leading work to consider what education and training changes may be needed to maximise the opportunities of technology, artificial intelligence and genomics in the NHS. His conclusions will inform our workforce implementation plan.

Figure 23: Doctors' views on 'smarter' working practices.

"In the past two years have you considered or implemented any of the following to adjust your working practices, in order to try and alleviate pressure on workload and capacity?"



Source: General Medical Council (GMC). The state of medical education and practice in the UK. December 2018.

4.48. **By 2021, NHS Improvement will support NHS trusts and foundation trusts to deploy electronic rosters or e-job plans.** The adoption of these tools such as e-job planning and e-rostering across the NHS will help ensure staff use their time optimally to provide patient care. This technology also helps providers make the most of their available workforce, thereby reducing the reliance on costly temporary staff.

4.49. To inform the work of the national workforce group, we will also commission a review of NHS workforce data, to ensure that the information available on the electronic staff record, NHS workforce data collections and other sources such as the Model Hospital databases, provide both local and national bodies with real time access to a single source of trusted information to guide and support both day-to-day and strategic workforce decision making.

7. Leadership and talent management

4.50. **Great quality care needs great leadership at all levels.** Evidence shows that the quality of care and organisational performance are directly affected by the quality of leadership and the improvement cultures leaders create[168,169,170]. While some parts of the NHS have created and sustained the leadership cultures necessary for outstanding performance and the big service changes set out in this Long Term Plan, this is not yet commonplace. We also do not currently have a sufficient pipeline of highly skilled and readily deployable senior leaders – a 2018 survey by The King's Fund and NHS Providers found 8% of Executive Director roles were filled by an interim or vacant, while 37% of trusts had at least one vacant Executive Director post[171].

4.51. **There will be a new compact with our most senior leaders.** We will better support them, particularly those undertaking the most challenging roles; ensuring they have both the time and space to make a difference, and appropriate 'air cover' when taking difficult decisions. NHS England and NHS Improvement are already aligning our operating models, and we will continue to work closely with other regulatory bodies to ensure our expectations are clear and consistent, and to keep our assurance and oversight proportionate. We will consistently model the behaviours we expect to see from leaders in our interactions with them. These commitments will be enshrined in a new 'NHS leadership code' which will set out the cultural values and leadership behaviours of the NHS and will be used to underpin everything from our recruitment practices to development programmes.

4.52. **We will also do more to nurture the next generation of leaders by more systematically identifying, developing and supporting those with the capability and ambition to reach the most senior levels of the service.** The national workforce group will look at options for improving the NHS leadership pipeline. This will build on the recent Kerr[172] and Kark[173] reviews. It will include:

- a systematic regional and local approach for identifying, assessing, developing, deploying and supporting talent, to be in place from early 2019;
- proposals to ensure that more senior clinicians take on executive leadership roles building on the recent Faculty of Medical Leadership and Management report on clinical leadership;
- expansion of the NHS graduate management training scheme, and support for graduates from the scheme, while also identifying high-potential clinicians and others to receive career support to enable progression to the most senior levels of the service;
- a consideration of the potential benefits and operation of a professional registration scheme for senior NHS leaders, similar to those used in other sectors of the economy and amongst other NHS professionals, which would recognise the role of NHS management and help the NHS attract and retain the best people for the most challenging jobs;
- measures to support transitions from other sectors into senior leadership positions in the NHS.

4.53. **We will do more to develop and embed cultures of compassion, inclusion, and collaboration across the NHS.** Building on the ambitions of *Developing People: Improving Care* we will work to support all parts of the NHS to create an inclusive and just culture that leads to outstanding staff engagement and patient care, including:

- programmes and interventions to ensure a more diverse leadership cadre, and more inclusive cultures, to improve the experience and representation of all staff and the population they serve;
- leadership development offers available to staff at all levels, and the establishment of a faculty of coaches and mentors available to support senior leaders;
- developing the knowledge of improvement skills and how to apply them for all levels of leadership in the NHS.

Examples of specific requirements in the Workforce Implementation Plan

For **cancer**, we need to recruit an additional 1,500 new clinical and diagnostic staff across seven priority specialisms between 2018 and 2021. Since 2017, there has been a net increase of 833 FTE staff across the seven priority specialisms.

The **mental health** sector is already delivering innovative workforce solutions to meet the needs of patients. As well as an increase in the recruitment and retention in mental health medical training, new roles, such as physician associates, nursing associates, AHP associates and Advanced Clinical Practitioners are an important part of meeting current and future workforce demands. The evidence for these approaches is strong – introducing Peer Support Workers to acute settings has been shown to reduce readmissions.

We will work with HEE to modernise the **stroke** workforce with a focus on cross-specialty and in some cases cross-profession accreditation of particular competencies. This will include work with the medical Royal Colleges and specialty societies to introduce a new credentialing programme for hospital consultants from a variety of relevant disciplines who will be trained to offer mechanical thrombectomy.

8. Volunteers

4.54. **Staff, patients and volunteers benefit from well-designed volunteering initiatives.** Volunteers contribute across a range of NHS roles, from first responders and care companions to trust governors and transport volunteers. They enable staff to deliver high-quality care that goes above and beyond core services. Well-designed and managed volunteering programmes improve satisfaction and wellbeing ratings for staff, as well as volunteers and patients. Local volunteering allows older people to stay physically active and connected to their communities[174], and younger people to develop skills and experience for work and education[175]. But not all NHS organisations offer these opportunities for their local community, as the ratio of staff to volunteers in acute trusts ranges from 2:1 to 26:1[176]. We will therefore encourage NHS organisations to give greater access for younger volunteers through programmes such as #iWill and an increased focus on programmes in deprived areas, and for those with mental health issues, learning disabilities and autism. And **we will back the Helpforce programme with at least £2.3 million of NHS England funding to scale successful volunteering programmes across the country, part of our work to double the number of NHS volunteers over the next three years.**

Chapter 5: Digitally-enabled care will go mainstream across the NHS

5.1. Virtually every aspect of modern life has been, and will continue to be, radically reshaped by innovation and technology – and healthcare is no exception. Sustained advances in computing and the democratisation of information are driving choice and control throughout our daily lives, giving us heightened expectations around digital services. Technology is continually opening up new possibilities for prevention, care and treatment. Premature babies, who would have died ten years ago, live long and healthy lives; people who would have been house-bound in pain now walk thanks to new drugs; and genomic testing is increasingly available to help diagnosis and treatment. The NHS is a hotbed of innovation and technological revolution in clinical practice.

5.2. This country has a rich heritage of pioneering research and invention in healthcare. Around 25% of the world's top 100 prescription medicines were discovered and developed here. As a priority launch market for new cancer drugs, the UK is one of only three countries (with Germany and the USA) to have access to more than 40 of the 55 oncology medicines initially launched between 2012 and 2016[177].

5.3. Good progress has been made in achieving the ambitions set out in the *Five Year Forward View* and the *Wachter* report, with many new or enhanced digital and technology systems and services delivered over the last three years. Citizens have access to high quality NHS information and digital services through the transformed nhs.uk website. Citizens and health professionals can access over 70 apps that have been assessed and approved via the NHS Apps Library. WiFi is being installed across the NHS estate. The national roll-out of the NHS App has begun, and will provide citizens with access to NHS 111 online, their GP record, the ability to book appointments, update data sharing preferences and register for organ donation, all from their computer or smart phone.

5.4. The Electronic Prescription Service (EPS) is now used in 93% of England's 7,300 GP practices, with more than 67% of their prescriptions delivered via EPS. This has improved patient experience and saved the NHS £136 million in the three years from 2013 to 2016. People can book hospital appointments online via the NHS e-Referral Service, which now covers every hospital and every GP practice, creating expected savings for the NHS in excess of £50 million a year.

5.5. The Global Digital Exemplar (GDE) programme has supported 16 acute, seven mental health and three ambulance trusts to lead the national drive to make our hospitals the most IT-advanced in the world. Seventeen, soon to rise to 24, trusts have been designated 'Fast Followers' to work with and learn from the GDEs so these advances can be spread through the NHS. The Local Health and Care Record (LHCR) programme has started the work to create integrated care records across GPs, hospitals, community services and social care. Digital innovation hubs are set to provide a world class environment for clinical research, reinforcing England's position at the forefront of life sciences invention and innovation.

5.6. However, we have not yet enabled the wholesale transformation of the NHS that patients have a right to expect. As set out in Chapter One, the way we deliver care remains locked into the service model largely created when the NHS was founded in 1948. Technology will play a central role in realising the Long Term Plan, helping clinicians use the full range of their skills, reducing bureaucracy, stimulating research and enabling service transformation.

People will have more control over the care they receive and more support to manage their health, to keep themselves well and better manage their conditions, while assisting carers in their vital work.

5.7. The NHS is made up of hundreds of separate but linked organisations, and the burden of managing complex interactions and data flows between trusts, systems and individuals too often falls on patients and clinicians. Digital services and data interoperability give us the opportunity to free up time and resources to focus on clinical care and staying healthy.

5.8. In ten years' time, we expect the existing model of care to look markedly different. The NHS will offer a 'digital first' option for most, allowing for longer and richer face-to-face consultations with clinicians where patients want or need it. Primary care and outpatient services will have changed to a model of tiered escalation depending on need. Senior clinicians will be supported by digital tools, freeing trainees' time to learn. When ill, people will be increasingly cared for in their own home, with the option for their physiology to be effortlessly monitored by wearable devices. People will be helped to stay well, to recognise important symptoms early, and to manage their own health, guided by digital tools.

Practical priorities will drive NHS digital transformation

- **Create straightforward digital access to NHS services, and help patients and their carers manage their health.**
- **Ensure that clinicians can access and interact with patient records and care plans wherever they are.**
- **Use decision support and artificial intelligence (AI) to help clinicians in applying best practice, eliminate unwarranted variation across the whole pathway of care, and support patients in managing their health and condition.**
- **Use predictive techniques to support local health systems to plan care for populations.**
- **Use intuitive tools to capture data as a by-product of care in ways that empower clinicians and reduce the administrative burden.**
- **Protect patients' privacy and give them control over their medical record.**
- **Link clinical, genomic and other data to support the development of new treatments to improve the NHS, making data captured for care available for clinical research, and publish, as open data, aggregate metrics about NHS performance and services.**
- **Ensure NHS systems and NHS data are secure through implementation of security, monitoring systems and staff education.**
- **Mandate and rigorously enforce technology standards (as described in The Future of Healthcare) to ensure data is interoperable and accessible.**
- **Encourage a world leading health IT industry in England with a supportive environment for software developers and innovators.**

1. Empowering people

5.9. **People will be empowered, and their experience of health and care will be transformed, by the ability to access, manage and contribute to digital tools, information and services.** We will ensure these technologies work for everyone, from the most digitally literate to the most technology averse, and reflect the needs of people trying to stay healthy as well as those with complex conditions.

5.10. **We will provide a trustworthy place for people to find health information, apps and register to access NHS services.** The NHS Apps Library, NHS App and NHS login will enable easy access to personalised content and digital tools and services. Following its first public release last year, we will continue to develop the NHS App to create a consistent way for people to access the NHS digitally.

5.11. **The NHS App will create a standard online way for people to access the NHS. The app will work seamlessly with other services at national and local levels and, where appropriate, be integrated into patient pathways.** We will create an open environment to make it easier for developers to build enhancements that support specific communities, conditions, demographic groups or languages. The NHS login will allow for a single way for patients to identify themselves to a range of services.

5.12. **In 2019/20, 100,000 women will be able to access their maternity record digitally with coverage extended to the whole country by 2023/24.** Additionally a digital version of the 'red book' will help parents record and use information about their child, including immunisation records and growth. This will be made available in a mobile format that follows the family and removes the need for a paper record. It will also help children start life with a digital Personal Health Record (PHR) that they can build on throughout their lives.

5.13. **We will work with the wider NHS, the voluntary sector, developers, and individuals in creating a range of apps to support particular conditions**. We will develop and expand the successful Diabetes Prevention Programme to offer digital access from 2019. People newly diagnosed with diabetes will be supported through expanded pilots for digital structured education as well as a roll-out of HeLP – an evidence-based, self-directed self-management programme. By 2020, we aim to endorse a number of technologies that deliver digitally-enabled models of therapy for depression and anxiety disorders for use in IAPT services across the NHS. And we expect this to expand to include therapies for children and young people and other modes of delivery, such as virtual and augmented reality, which are already demonstrating early success through the mental health GDE programme. We will also create the Application Programming Interface (API) and appropriate governance models to underpin this work, so that technical barriers won't stand in the way of innovation.

5.14. **Support for people with long-term conditions will be improved by interoperability of data, mobile monitoring devices and the use of connected home technologies over the next few years.** By 2020, every patient with a long-term condition will have access to their health record through the Summary Care Record accessed via the NHS App. This will also be available to all urgent and emergency care services, with appropriate permission. By 2023, the Summary Care Record functionality will be moved to the PHR held within the LHCR systems, which will be able to send reminders and alerts directly to the patient.

5.15. **Patients' Personal Health Records will hold a care plan that incorporates information added by the patient themselves, or their authorised carer.** Making care plans available to the patient and all clinicians caring for them will help ensure care is not duplicated, tests are not repeated and appropriate actions are taken in a timely manner. The PHRs will also hold data that the patient chooses to share with the NHS, including from monitoring devices such as digital scales or blood pressure cuffs. Patients who choose to join a condition monitoring programme will be able to benefit from insights from these data and will be monitored for combinations of symptoms that may indicate clinical events and result in contact from a health adviser or clinician to help the individual stay well. Patients and clinicians will also be able to add information about living circumstances which may require reasonable adjustments to be made.

2. Supporting health and care professionals

5.16. **The information technology revolution in the NHS also needs to make it a more satisfying place for our staff to work.** At present, too much of the technology in the NHS is a burden on our staff – slow to log in, clunky to use and unreliable in moments of crisis. We will ensure that health and care professionals have the tools they need to efficiently deliver safe and effective patient care, and require vendors to meet usability standards to match those we expect in the rest of our lives. We will enable staff to capture all health and care information digitally at the point of care, and optimise clinical processes to reduce administrative burden. We will support the workforce to develop the digital skills they need to make effective use of these tools and mobile access to digital services to allow health and care workers to work more flexibly.

5.17. **Supporting moves towards prevention and support, we will go faster for community-based staff.** Over the next three years we want all staff working in the community to have access to mobile digital services, including the patient's care record and plan, that will help them to perform their role. This will allow them to increase both the amount of time they can spend with patients and the number of patients they can see. Ambulance services will also have access to the digital tools that they need to reduce avoidable conveyance to A&E.

Table 4: Challenges to effective mobile working by community nurses in patient's homes.

Poor connectivity when in patient's home	**85.1%**
Cannot access GP electronic record	**56.8%**
Limited or no training to use devices	**20.8%**
Mobile device not compatible with other software	**21.1%**
Uploading onto systems that do not talk to each other leading to multiple data entry	**32.7%**

Source: The Queen's Nursing Institute (QNI). Nursing in the digital age: Using technology to support patients in the home. 2018.

5.18. **We will also invest in enhancing the digital leadership of the NHS** by further expanding the successful NHS Digital Academy programme. We will expect informatics leadership representation on the board of every NHS organisation, with chief executives capable of driving the transformation of their organisations and non-executive directors able to support and demand increasing digital maturity over the next five years. We will increase training in digital capabilities for the health and care workforce and focus on attracting excellent technical expertise and skills, particularly in 'newer' digital fields so that our workforce can continue to deliver our technology strategy.

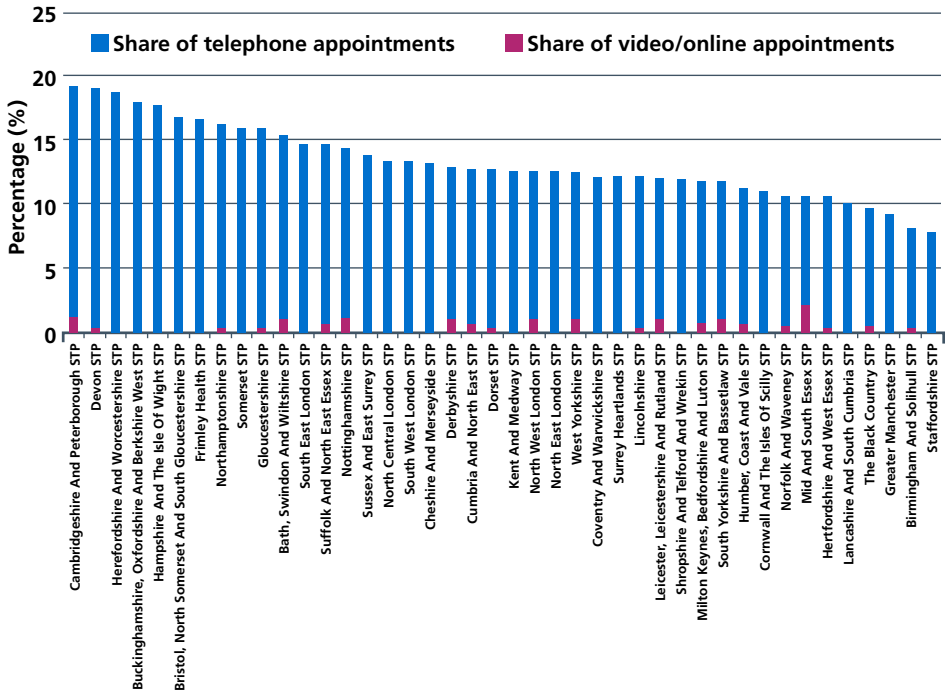
3. Supporting clinical care

5.19. **Digital transformation will enable us to make big strides towards forging a lifelong relationship between people and the NHS.** Alongside the face-to-face contacts that remain important to many people and for many conditions, people will be able to use technology to access and interact with health and care services seamlessly.

5.20. **Patients, clinicians and the carers working with them will have technology designed to help them.** They will have a digital service for managing their interactions with the NHS, a view of their record, care plan, expectations, appointments and medications, to enable care to be designed and delivered in the place that is most appropriate for them.

5.21. **If people need NHS advice or care, they will have increasing digital options.** A secure NHS login will provide access and a seamless digital journey. The NHS App and its browser-based equivalent will enable people to follow a simple triage online to help them manage their own health needs or direct them to the appropriate service. If needed they will be able to be connected with their local services; get an appointment with an urgent treatment centre, out of hours services or GP, or be prescribed medicine to be collected from their nearest pharmacy. Increasingly, automated systems and AI will make these services smarter, but in-person services will always be there to do what computers can't and provide personal contact for those who need or want it. **And as set out in Chapter One, over the next five years, every patient will be able to access a GP digitally, and where appropriate, opt for a 'virtual' outpatient appointment.**

Figure 24: Current share of GP appointments by phone, video or online, by STP.



Source: NHS Digital. Appointments in General Practice. October 2018.

5.22. The NHS cannot fully embrace the opportunity offered by new technologies if many hospitals and services remain largely paper-based. The Secretary of State has announced that NHS organisations will from 2020 no longer use fax machines to communicate with other NHS organisations or patients. **All providers, across acute, community and mental health settings, will be expected to advance to a core level of digitisation by 2024.** This will cover clinical and operational processes across all settings, locations and departments and be based on robust, modern IT infrastructure services for hosting, storage, networks and cyber security. To support this, we will accelerate the roll out of Electronic Patient Record (EPR) systems and associated apps, including a spectrum of Software as a Service (SaaS)/Cloud-based variants. Provider digitisation will be implemented to nationally agreed standards to enable integration with the LHCR to provide patient-centric and clinician-centric digital user journeys across all health settings.

5.23. **A new wave of Global Digital Exemplars will enable more trusts to use world-class digital technology and information to deliver better care, more efficiently.** The continued roll-out of GDE blueprints to more Fast Followers will ensure the NHS achieves maximum value by reducing duplication and sharing systems between organisations where possible based on open standards and interoperability. Central funding will be made available to trusts (subject to an upper limit) to help them meet mandated standards and technical requirements.

5.24. **Technology will enable the NHS to redesign clinical pathways.** Easy access to referral decision trees, referral templates and direct access to investigations that reflect evidence-based best practice and universal access to 'one click away' specialist advice and guidance for GPs, will avoid many patients from requiring referral for an appointment. Triaging (and potentially completing) some specialist referrals such as in dermatology with photos and questionnaires will allow some patients to be managed entirely digitally. Virtual clinics with escalation to face-to-face appointments where needed – such as the virtual fracture clinics run in Bradford and renal care in Tower Hamlets – can replace follow-up appointments for many conditions, as set out in Chapter One.

5.25. **By 2022, technology will better support clinicians to improve the safety of and reduce the health risks faced by children and adults.** An integrated child protection system will replace dozens of legacy systems and we will deliver a screening and vaccination solution that is worthy of the NHS' world leading services.

4. Improving population health

5.26. **During 2019, we will deploy population health management solutions to support ICSs to understand the areas of greatest health need and match NHS services to meet them.** Over the coming years these solutions will become increasingly sophisticated in identifying those groups of people who are at risk of adverse health outcomes and predict which individuals are most likely to benefit from different health and care interventions, as well as shining a light on health inequalities. We will be able to routinely identify missed elements of pathways of care for individuals and ensure that those gaps are filled. This will also support greater transparency of health and social care data on population health outcomes and organisational performance.

5.27. **The use of de-personalised data extracted from local records, in line with information governance safeguards, will enable more sophisticated population health management approaches and support world-leading research.** We will make frictionless APIs available to industry and the developer community to stimulate innovation and support integration with other products. We will enable the NHS to work with suppliers to develop user journeys, supplemented with data and insights, that help clinicians to do their jobs more effectively and more efficiently. The initial API and workflow integration initiatives will develop towards full integration with smart home and wearable devices.

5. Improving clinical efficiency and safety

5.28. **Digital technology can support the NHS to deliver high quality specialist care more efficiently.** Early examples of what will be a much more profound shift include:

- By 2021, pathology networks will mean quicker test turnaround times, improved access to more complex tests and better career opportunities for healthcare scientists at less overall cost. Mandated open standards in procurement will ensure that these networks are ready to exploit the opportunities afforded by AI, such as image triage, which will help clinical staff to prioritise their work more effectively, or identify opportunities for process improvement;
- By 2023, diagnostic imaging networks will enable the rapid transfer of clinical images from care settings close to the patient to the relevant specialist clinician to interpret. This open standards-based infrastructure will enable both the rapid adoption of new assistive technologies to support improved and timely image reporting, as well as the development of large clinical data banks to fuel research and innovation.

5.29. Decision support and artificial intelligence are developing all the time. These technologies need to be embraced by the NHS, but also subjected to the same scrutiny that we would apply to any other medical technology. In the coming years AI will make it possible for many tasks to be automated, quality to increase and staff to focus on the complexity of human interactions that technology will never master.

5.30. We have seen that the NHS is a potential target for cyber criminals. We will ensure NHS systems and data are secure through the implementation of security and monitoring systems across the whole estate, the education of all staff, and the design of systems and services to be resilient and recoverable. We will mandate and continually update cyber security standards and behaviours for our systems and staff.

5.31. **To achieve these digital advances, we need to create the right environment and infrastructure for innovation to thrive by:**

- creating a secure and capable digitally literate workforce;
- requiring every technology supplier to the NHS to comply with published open standards to enable interoperability and continual improvement;
- making solutions that are commissioned and developed by the NHS available as 'open source' to the developer community so that they can build on and enhance them to meet the evolving needs of the NHS and our patients;
- ensuring that LHCR data platforms provide open and free APIs for developers to create new solutions that can compete with and, where appropriate, replace the traditional solutions used by the NHS;
- making available a set of central capabilities that are rapidly deployable and can be used as the basis for future local innovation and development, such as the NHS Login or the national record locator service.

Milestones for digital technology

- During 2019 we will introduce controls to ensure new systems purchased by the NHS comply with agreed standards, including those set out in *The Future of Healthcare*.
- By 2020, five geographies will deliver a longitudinal health and care record platform linking NHS and local authority organisations, three additional areas will follow in 2021.
- In 2020/21, people will have access to their care plan and communications from their care professionals via the NHS App; the care plan will move to the individual's LHCR across the country over the next five years.
- By summer 2021, we will have 100% compliance with mandated cyber security standards across all NHS organisations in the health and care system.
- In 2021/22, we will have systems that support population health management in every Integrated Care System across England, with a Chief Clinical Information Officer (CCIO) or Chief Information Officer (CIO) on the board of every local NHS organisation.
- By 2022/23, the Child Protection Information system will be extended to cover all health care settings, including general practices.
- By 2023/24 every patient in England will be able to access a digital first primary care offer (see 1.44).
- By 2024, secondary care providers in England, including acute, community and mental health care settings, will be fully digitised, including clinical and operational processes across all settings, locations and departments. Data will be captured, stored and transmitted electronically, supported by robust IT infrastructure and cyber security, and LHCRs will cover the whole country.

Chapter 6: Taxpayers' investment will be used to maximum effect

6.1. **The new funding settlement announced by the Prime Minister in June 2018 promised NHS England's revenue funding would grow by an average of 3.4% in real terms a year over the next five years[178] delivering a real terms increase of £20.5 billion by 2023/24.** This represents a step change on recent years, which have averaged 2.2%, and moves closer to returning to the NHS long-term average funding trend of 3.7% per year since 1948[179].

6.2. **This extra spending will need to deal with current pressures and unavoidable demographic change and other costs, as well as new priorities.** Over the coming decade, the NHS will inevitably need to look after more people, with greater needs, as a result of our growing and ageing population. For example, the number of people over 85 is projected to increase from 1.3 million to 2 million – an amazing achievement – and they will need proper and increasing support. The growth in average costs with age is projected to increase at a faster rate, due to the growing number of long-term conditions and particularly multiple conditions.

6.3. **Putting the NHS back onto a sustainable financial path is a key priority in the Long Term Plan and is essential to allowing the NHS to deliver the service improvements in this Plan.** This means:

- the NHS (including providers) will return to financial balance;
- the NHS will achieve cash-releasing productivity growth of at least 1.1% a year, with all savings reinvested in frontline care;
- the NHS will reduce the growth in demand for care through better integration and prevention;
- the NHS will reduce variation across the health system, improving providers' financial and operational performance;
- the NHS will make better use of capital investment and its existing assets to drive transformation.

6.4. **This chapter sets out how the NHS is meeting these five 'tests'.** The commitments in this Plan are stretching but feasible. They flow from a coherent and robust set of costed propositions, grounded in evidence, and based on a comprehensive assessment of future demand, moderated where possible by practical and evidence-based action. To repay the continued investment of taxpayer funding, the NHS will continue to lead the way in driving up productivity, reducing unwarranted variation and eliminating waste.

Test 1: The NHS (including providers) will return to financial balance

6.5. **The NHS will use the five-year funding settlement to ensure rigorous and disciplined financial management across all NHS organisations.** Over the next five years, this means achieving three interrelated objectives:

- continuing to **balance the NHS' books nationally** across providers and commissioners;
- reducing the aggregate provider deficit each year, with NHS Improvement committing to return the provider sector to balance in 2020/21;
- reducing year-on-year the number of trusts and CCGs individually in deficit, so that **all NHS organisations are in balance** by 2023/24.

6.6. **Changes to payment arrangements and allocations will take better account of the costs of delivering efficient services locally.** This will be achieved by phasing in an updated Market Forces Factor over the next five years.

6.7. **Reforms to the payment system** will move funding away from activity-based payments and ensure a majority of funding is population-based. This will make it easier to redesign care across providers, support the move to more preventive and anticipatory care models, and reduce transaction costs. We do, however, envisage retaining appropriate volume-related payments for elective care for now, alongside new incentives for improvements in quality (including patient experience).

6.8. **We will move to a blended payment model, beginning with urgent and emergency care, with a single set of financial incentives aligned to the commitments in the Long Term Plan.** The CQUIN framework will be reformed for both CCG-commissioned and specialised services. The scheme will become simpler, more impactful and easier for providers to implement. The revised approach will remove, on a cost neutral basis, two national variations to the tariff: the marginal rate for emergency tariff and the emergency readmissions rule, which will not form part of the new payment model.

6.9. **2019/20 will be a transitional year, with one-year, rebased control totals.** The rebased control totals, which will be financially neutral in aggregate at the national level, will take into account the impact of distributional effects from any changes agreed following engagement in areas such as price relativities, the Market Forces Factor and national variations to the tariff. There will be greater flexibility for all STPs and ICSs to agree financially neutral changes to control totals within their systems, where this will improve overall financial and operational performance.

6.10. NHS Improvement will deploy an **accelerated turnaround process** in the 30 worst financially performing trusts that, between them, account for all the net total of the trust provider deficit.

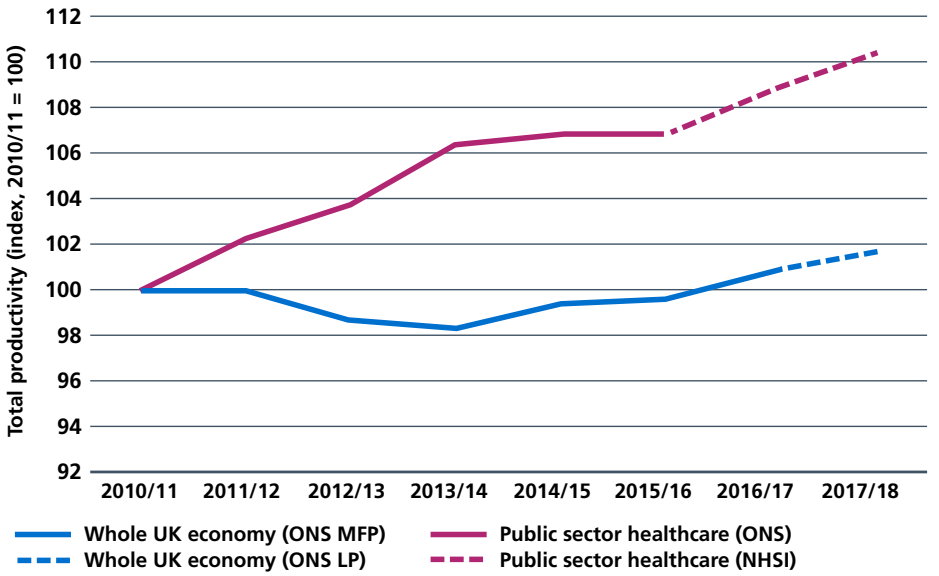
6.11. As set out in Chapter One, ICSs will become the level of the system where commissioners and providers make shared decisions about financial planning, and prioritisation. **Beyond 2019/20 we will introduce further financial reforms that will support ICSs to deliver integrated care.** Through a process of earned financial autonomy we will give local health systems greater control over resources on the basis of a track record of strong financial and performance delivery, assessed in part through the new ICS accountability and performance framework.

6.12. **We will also create a new Financial Recovery Fund (FRF) to support systems' and organisations' efforts to make all NHS services sustainable.** As a result of this funding, we expect the number of trusts reporting a deficit in 2019/20 to be reduced by more than half, and by 2023/24 no trust to be reporting a deficit. We also expect the size of the FRF to reduce over the course of the five-year financial settlement with funding replaced by recurrent efficiency improvements delivered through multi-year recovery plans. Any FRFs released by over-delivery against plans will, where possible, be redeployed locally. The FRF will only be accessible for trusts where deficit control totals indicate a risk to financial sustainability and continuity of services, and where financial recovery plans, agreed with NHS Improvement and NHS England regional teams, are in place to deliver significant year-on-year improvement in sustainability and financial performance including NHS Improvement's requirement of additional efficiency of at least 0.5% per annum over and above the sector 1.1% minimum requirement. This multi-year financial recovery plan, agreed with NHS England and NHS Improvement, will set out the actions required to make services sustainable at both trust and system level and agreed responsibilities to make this happen within the ICS or STP. These plans will draw on local understanding of the health system, but we expect that all systems and trusts will implement proven initiatives, including the Model Hospital, Rightcare and GIRFT and the major opportunities identified within the Long Term Plan, such as redesigning over time outpatients to be able to avoid up to a third of face-to-face outpatient visits. The FRF will mean the end of the control total regime and Provider Sustainability Fund for all trusts which deliver against their recovery plans by 2021 at the latest.

Test 2: The NHS will achieve cash-releasing productivity growth of at least 1.1% per year

6.13. Last year the NHS delivered over £6 billion of quality and cost improvements[180,181], and in recent years, NHS productivity has improved at a faster rate than the overall UK economy:

Figure 25: NHS versus whole economy productivity growth.



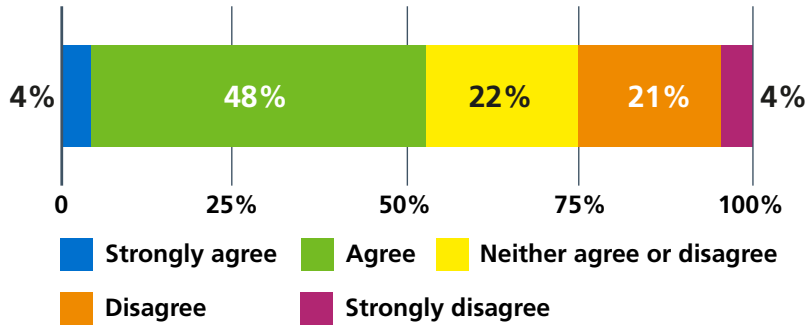
Source: Unpublished NHS Improvement data.

6.14. The government has set the NHS an objective of making re-investable efficiency and productivity gains of at least 1.1% a year over the next five years. Because we have an agreed NHS revenue funding settlement, all these gains can be retained by the NHS and reinvested in more and better patient care. This section summarises some of the steps we will take to deliver these improvements for patients, in the short, medium and long-term.

Reducing waste and increasing time to care

6.15. **Despite the overall efficiency of the NHS, there is still waste and an opportunity to improve efficiency.** A recent survey of leaders of NHS trusts and foundation trusts found that a majority agreed that opportunities still exist for greater efficiency even in their own organisation.

Figure 26: Trust leaders' views on the question "To what extent do you agree that your trust wastes too much money through inefficiency?"



Source: NHS Providers: Making the most of the money. Efficiency and the long-term plan. October 2018.

Similarly doctors agree that the joining up of primary and secondary services as set out in this Long Term Plan will reduce waste:

Table 5: Doctors' views on the need for integration of primary and secondary care. Percentage of English doctors agreeing that…

"Collaboration between primary and secondary care doctors will reduce bureaucracy and transaction costs."	**82%**

Source: British Medical Association survey. Doctors' views on working in the NHS. November 2018.

6.16. **We have worked with staff across the NHS to identify opportunities to deliver more effective patient care.** Our approach is to deliver clinically-led improvement and put the patient in the heart of the system. We deliver this through an approach called Getting It Right First Time (GIRFT). GIRFT will combine with other clinically-led programmes such as NHS RightCare and an increased investment in Quality Improvement (QI) to accelerate work to end unjustified clinical practice variation.

6.17. **Over the next two years we will focus on ten priority areas** as part of a strengthened efficiency and productivity programme:

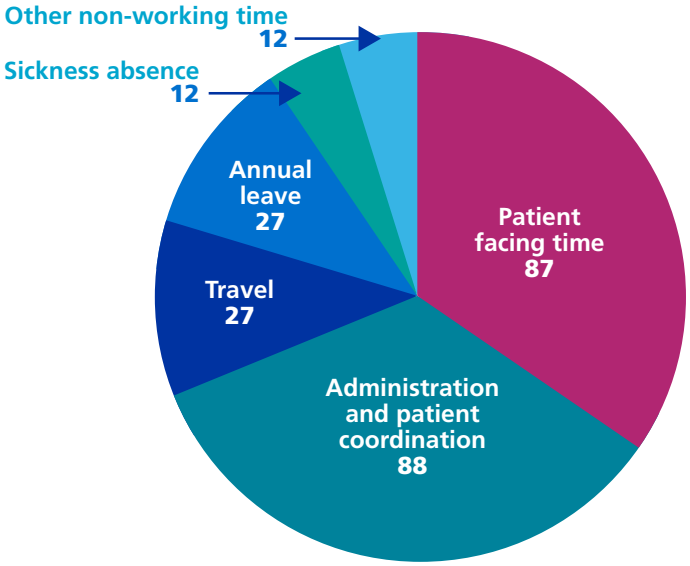
i. **Improving the availability and deployment of the clinical workforce to ensure the right clinicians are available to patients at all times, further reducing bank and agency costs**. By 2021, all clinical staff working in the NHS will be deployed using an electronic roster or e-job plan. By 2023, all providers will be able to use evidence-based approaches to determine how many staff they need on wards and in other care settings. This will provide staff with opportunities for flexible working while helping reduce unwarranted variation and improve safety.

ii. **Procurement savings by aggregation of volumes and standardising specifications.** The NHS spends nearly £6 billion a year on hospital consumables, including syringes and gloves, and common goods. We have introduced a new centralised NHS procurement organisation, Supply Chain Coordination Limited (SCCL), to help use this purchasing power on a national scale to get the best deals and deliver high quality affordable care for patients. By 2022, we will double the volume of products bought through SCCL to 80%, extend the number of nationally contracted products and consolidate the way local and regional procurement teams operate.

iii. Over 1.5 billion diagnostic tests are undertaken every year and feature in four in every five patient pathways. Capacity in diagnostic services has not kept pace with the growth in demand. We have fewer MRI and CT scanners per capita than most OECD countries[182], for example, while vacancy rates are 12.5% for radiologists and 15% for radiographers[183]. Yet, the number of patients referred for diagnostic tests has risen by over 25% over the last five years. So delivering an effective, high-quality service requires investment in new equipment and staff, underpinned by a new model of diagnostic provision. **Delivering pathology and imaging networks to improve the accuracy and turnaround times on tests and scans will make best use of the expanding workforce, and reduce unit costs.** In 2018, seven Genomic Laboratory Hubs were established with mobilisation towards consolidated provision. By 2021, all pathology services across England will be part of a pathology network and, by 2023, we will have introduced new diagnostic imaging networks. The pathology networks will mean quicker test turnaround times, improved access to more complex tests at a lower overall cost and better career opportunities for healthcare scientists and clinicians. The investment in a new digital diagnostic imaging service will enable clinical images from care settings close to the patient to be rapidly transferred to the relevant specialist clinician to interpret regardless of geography. This infrastructure will enable the rapid adoption of new assistive technologies to improve and speed up image reporting, as well as the development of large clinical data banks to fuel research and innovation.

iv. **The NHS will improve efficiency in community health services, mental health and primary care, which together cost around £27 billion a year.** This Long Term Plan sets out the new investment we will make to improve these services. We will also support staff to increase the amount of time they can spend with patients to reduce the unacceptable variation as, for example, documented in Lord Carter's review of community services. To enable this, over the next three years, we want all staff working in the community to have access to mobile devices and digital services as set out in Chapter Five. Ambulance services will be able to reduce avoidable conveyance to A&E by accessing patients records, alternative services and have the right clinical support and training. We will also ensure primary care networks can be most effective by introducing extended roles such as physiotherapists, clinical pharmacists and pharmacy technicians as set out in Chapter One. The GIRFT programme has already started work in mental health and will be extended across to community health services and primary care from April 2019.

Figure 27: Average number of days per working year spent on different activities by a frontline healthcare professional delivering services in the community.



Source: Lord Carter's review into unwarranted variations in mental health and community health services. NHS Improvement 2018.

v. **Delivering value from the £16 billion we spend on medicines.** Over the next five years, all providers will be expected to implement electronic prescribing systems to reduce errors by up to 30%. Up to 10% of hospital admissions in the elderly population are medicines-related, so pharmacists will routinely work in general practice helping to relieve pressure on GPs and supporting care homes. Research shows as many as 50% of patients do not take their medicines as intended and pharmacists will support patients to take their medicines to get the best from them, reduce waste and promote self-care. We will reduce the prescribing of low clinical value medicines and items which are readily available over the counter to save over £200 million a year. This aim is supported by agreed measures to manage branded health service medicines through the new statutory and voluntary pricing and access schemes. The new voluntary scheme has been agreed between industry, DHSC and NHS England, and is intended to ensure access to innovative new medicines coupled with affordability. We will use digital technology to ensure that best practice is followed, generics are used where possible and duplication is eliminated. Augmented intelligence to analyse data on medicines prescribing will also help us to eliminate fraud.

vi. **Making further efficiencies in NHS administrative costs across providers and commissioners, both nationally and locally.** This will save over £700 million by 2023/24, comprising £290 million from commissioners and over £400 million from providers. We will ensure that an increasing share of the NHS budget is invested in frontline services by simplifying costly and overly bureaucratic contracting processes, supported by reforms to the

payment system as we progressively move away from episode-based payments. We will require commissioners and providers to continue to redesign and reduce the costs of transactional services. All core transactional services, such as processing invoice payments, will be automated over the next five years.

vii. **The NHS will improve the way it uses its land, buildings and equipment. This will mean we improve quality and productivity, energy efficiency and dispose of unnecessary land to enable reinvestment while supporting the government's target to build new homes for NHS staff.** We will work with all providers to reduce the amount of non-clinical space by a further 5%, freeing up over one million square metres of space for clinical or other activity. By 2020, we aim to reduce the NHS' carbon footprint by a third from 2007 levels including by improving energy efficiency through widespread implementation of LED lighting and smart energy management. We will also improve the way we manage our estate and modernise and standardise our ambulance fleet to help to reduce emissions and to improve air quality (see the Appendix).

viii. **Research evidence shows some interventions are not clinically effective or only effective when they are performed in specific circumstances.** And as medical science advances, some interventions are superseded by those that are less invasive or more effective. The NHS needs to ensure that the least effective interventions are not routinely performed, or only performed in more clearly defined circumstances. This summer, the Academy of Medical Royal Colleges, NICE, NHS Clinical Commissioners, NHS England and NHS Improvement joined forces to consult on how best to reduce inappropriate interventions. This will potentially avoid needless harm to patients, and free up scarce professional time for performing other interventions - including creating headroom for proven innovations. The time and resources saved will all be reinvested in patient care.

ix. **Improving patient safety will reduce patient harm and the substantial costs associated with it through a new ten-year national strategy, to be published in 2019.** We aim to be the best healthcare system in the world at drawing insight from multiple sources of patient safety information. Our existing National Reporting and Learning System (NRLS) is uniquely able to detect themes, patterns and issues that are not recognised locally but require national action. A new Patient Safety Incident Management System will replace the current NRLS by 2020. We will use machine learning from incident data, which has the potential to create better insights from the data we collect and introduce a more effective system of Patient Safety Alerts. The Government's new Medical Examiner system and the Healthcare Safety Investigation Branch should also improve NHS investigation and support implementation of recommendations. Improving patient safety requires people to have the capability and capacity to take action. We will develop a shared and consistent Patient Safety Curriculum that will support current and future NHS staff and patients. We will develop Patient Advocates for Safety to ensure patients are fundamentally involved throughout the system. We will also develop a network of senior Patient Safety Specialists who will be the backbone of patient safety in the NHS. We will build on existing work on preventing patient deterioration including Sepsis and NEWS2 implementation. We will continue our maternal and neonatal safety improvement programme, our work on infection prevention and control and the 'Stop the Pressure' programme to prevent pressure ulcers, aligned with the new National Wound Care Strategy. We will design new Medication Safety and Mental Health Safety Improvement

Programmes. We will work on falls and fracture prevention, where we know that a 50% improvement in the delivery of evidence-based care could deliver £100 million in savings. NHS Resolution reported total provisions for all indemnity schemes of £77 billion at the end of 2017/18. We will also continue to use elements of the Clinical Negligence Scheme for Trusts to drive improvements in care, building on the success of the maternity incentive scheme delivered in 2017/18.

x. **The NHS Counter Fraud Authority will continue to tackle patient, contractor, payroll, or procurement fraud.** These initiatives include large scale patient eligibility checking services, managed by NHS Business Services Authority.

Test 3: The NHS will reduce the growth in demand for care through better integration and prevention

6.18. Chapters One, Two and Three of this Long Term Plan describe in detail how this is being done.

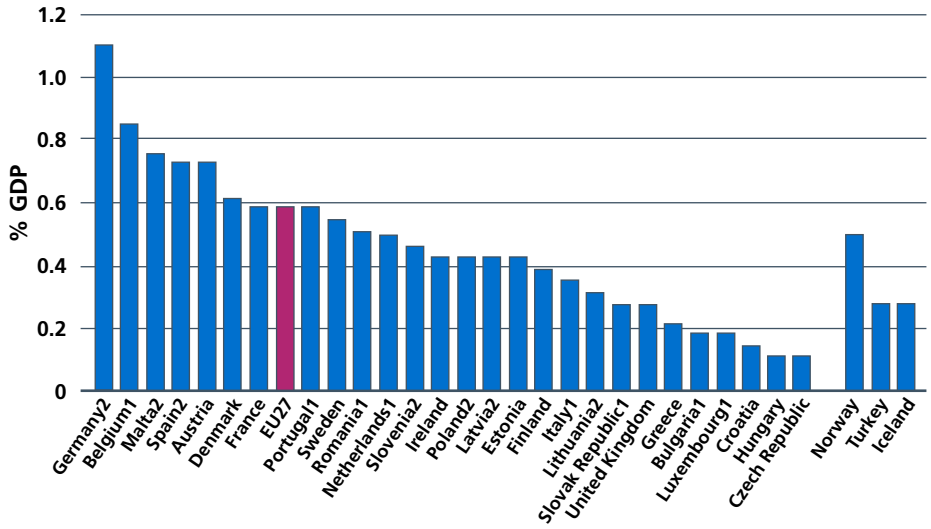
Test 4: The NHS will reduce unjustified variation in performance

6.19. Chapters Two, Three and Six of this Long Term Plan describe in detail how this is being done. As set out elsewhere in this Plan, we will radically improve transparency including through the Model Hospital work. We will reduce unwarranted variation across the NHS, improve providers' operational and financial performance as well as clinical practice variations. Wherever possible, individual programmes have been designed to narrow variation in health outcomes and reduce inequalities. For example, the modernisation of the Bowel Cancer Screening Programme will improve participation rates in previously marginalised populations. The expansion of lung health checks is similarly aimed at populations at higher risk of lung cancer and respiratory disease. Our clinically-led national GIRFT programme generates comparative information that facilitates the identification of best practice, supported by tools such as the Model Hospital. The NHS RightCare programmes take an evidence-based approach to assist in the design of optimum pathways of care. By investing in QI, we will ensure our staff have the skills and methodology to simultaneously improve care and reduce costs. Reducing unwarranted variation will be a core responsibility of ICSs. We expect all ICSs, supported by our national programmes, to bring together clinicians and managers to implement appropriately standardised evidence-based pathways.

Test 5: The NHS will make better use of capital investment and its existing assets to drive transformation

6.20. The NHS already uses its capital assets and infrastructure more intensively than most other western countries and, in recent years, has invested less capital than these other countries and our historic track record.

Figure 28: Gross fixed capital formation in the health sector as a share of GDP 2016 (nearest year).



1. Refers to gross fixed capital formation in ISIC 86: Human health activities (ISIC Rev.4).
2. Refers to gross fixed capital formation in ISIC Q: Human health and social work activities (ISIC Rev.4).

Source: OECD. Health at a Glance 2018: Europe 2018. State of Health in the EU Cycle. November 2018.

6.21. Much of our estate consists of world-leading facilities that enable the NHS to deliver outstanding care for patients. But some of our estate is old, in parts significantly older than the NHS itself, and would not meet the demands of a modern health service even if upgraded. Equally, meeting our future aspirations will require our digital capability and diagnostic equipment to be enhanced significantly. At the Spring and Autumn budgets in 2017, the government announced an additional allocation of £3.9 billion to accelerate estates transformation, tackle critical backlog maintenance issues and support efficiency. All STPs now have estates plans to support their clinical and service strategies, and include proposals for a pipeline of possible capital investments. The Chancellor has confirmed that NHS long-term capital investment will be considered in the 2019 Spending Review. In return, we will continue to maximise the productivity benefits we generate from our estate, through improving utilisation of clinical space, ensuring build and maintenance is done sustainably, improving energy efficiency and releasing properties not needed to support the government's target of building new houses.

6.22. We are also considering a number of reforms to the NHS' capital regime to ensure capital funding is prioritised and allocated efficiently, supports the transformation of services and increased productivity, and allows for effective planning and control. These reforms will be set out in detail alongside the capital settlement at the Spending Review, and will remove the existing fragmentation of funding sources, short-termism of capital decision making and uncertainty for local health economies. As part of this work we will implement the forthcoming premises review for primary care.

Chapter 7: Next steps

7.1. This Long Term Plan is built on the work and insight of leaders, clinicians, patients, the public and other experts from across the NHS, the voluntary sector and beyond. To support delivery, we will develop a new operating model, based on the principles of co-design and collaboration, working with leaders from across the NHS and with our partners.

7.2. It provides the framework for local planning for the next five years and beyond. Existing commitments in the *Five Year Forward View* and national strategies for cancer, mental health, learning disability, general practice and maternity will all continue to be implemented in 2019/20 and 2020/21 as originally planned. And as set out in Chapter Six, 2019/20 will be a transition year, with every NHS trust, foundation trust and CCG expected to agree single year organisational operating plans and contribute to a single year local health system-level plan.

7.3. The Government's Spending Review will set out details of the NHS capital budget and funding for education and training, as well as the local government settlement to cover public health and adult social care services. In spring, the national implementation framework and the Clinical Review of Standards will be published with testing and evaluating of any new and revised standards occurring prior to implementation from October 2019. **To support local planning, local health systems will receive five-year indicative financial allocations for 2019/20 to 2023/24 and be asked to produce local plans for implementing the commitments set out in the Long Term Plan in 2019.** They will be expected to engage with their local communities and delivery partners in developing plans, which will be based on a comprehensive assessment of population need. We expect that they will build on their existing plans and set out proposals for how they will deliver the outcomes set out in the Long Term Plan. They will also take account of the different starting points and phasing of progress in different parts of the country. We will however require all NHS organisations delivering health services to adopt interventions proven to deliver benefits for patients and staff. This will particularly apply where we need to deliver improvements consistently and as one NHS to secure these benefits. We will set out a single list of essential interventions, including effective e-rostering and e-job planning and processes for standardising and aggregating procurement demand for products and services to make the most of the NHS pound. Local health systems will also have access to expert advice and support through the regions including clinically focused transformation programmes and access to technical expertise such as on rostering, mobile working, procurement, estates, and corporate services. Local implementation plans will then be brought together in a detailed national implementation programme in the autumn.

7.4. Our approach to delivering the Long Term Plan will balance national direction with local autonomy to secure the best outcomes for patients. Local implementation will be led by the clinicians and leaders who are directly accountable for patient care and making efficient use of public money. This will ensure local health systems have the ability and accountability for shaping how the Plan is implemented.

7.5. **ICSs will be central to the delivery of the Long Term Plan and by April 2021 we want ICSs covering all of the country.** As local systems are in different states of readiness, we will support each developing system to produce and implement a clear development plan and timetable. This will include an intensive support programme for the most challenged systems with peer support from more developed systems.

7.6. Delivering the Long Term Plan will rely on local health systems having the capability to implement change effectively. Systematic methods of Quality Improvement (QI) provide an evidence-based approach for improving every aspect of how the NHS operates. Through developing their improvement capabilities, including QI skills and data analytics, systems will move further and faster to adopt new innovations and service models and implement best practices that can improve quality and efficiency and reduce unwarranted variations in performance. A programme to build improvement capability is established in around 80% of the trusts rated 'outstanding' by the CQC. We will, in partnership with the Health Foundation, support an increase in the number of ICSs building improvement capability to implement new ideas and practices.

A new way of working

7.7. As local health systems work more closely together, the same needs to happen at national level. **NHS England and NHS Improvement will implement a new shared operating model designed to support delivery of the Long Term Plan.** There will be a reduction in duplication through shared regional teams accountable for managing local systems and the providers within them. The new way of working will draw together people and capabilities, resources, activities and leadership to collectively deliver greater value for the NHS and for patients. The revitalised culture of support and collaboration will be underpinned by a new approach. The key commitments to deliver this approach are:

- a reorientation away from principally relying on arms-length regulation and performance management to supporting service improvement and transformation across systems and within providers;
- strong governance and accountability mechanisms in place for systems to ensure that the NHS as a whole can secure the best value from its combined resources;
- a reinforcement of accountability at Board, Governing Body and local system ICS level for adopting standards of best practice and making their contribution to critical national improvement programmes, on a comply or explain basis;
- making better use and improving the quality of the data and information that local systems and providers have access to improve patient services.

7.8. **The establishment of ICSs everywhere from 2021 will be built on strong and effective providers and commissioners, underpinned by clear accountabilities.** Trust boards are responsible for the quality of care they provide for patients and for the financial resources and staff they manage. Many initiatives will require cross-organisational actions, and it is only through working collaboratively that trusts and commissioners will agree the services that each organisation will provide and the cost they will reasonably incur in providing those services – ensuring these are affordable within the system's collective financial budgets.

7.9. **As ICSs take hold, we will support organisations to take on greater collaborative responsibility.** There will be a clear expectation that strong, successful organisations not only provide high-quality care and financial stewardship from an institutional perspective, but also take on responsibility, with system providers, for wider objectives in relation to the use of NHS resources and population health. This will mean that neither trusts nor CCGs will pursue actions which, whilst potentially improving their institutional financial position, would result in a worse position for the system overall. This will be supported by a system oversight approach which reviews organisational and system objectives alongside the performance of individual organisations, whereby our regions seek to understand the drivers of challenges facing organisations and ensure that solutions reflect the wider system changes required.

7.10. **Mutual Aid will be an integral part of the role of leaders, both managers and clinicians.** As we move to an NHS which is deeply interconnected, leaders in all parts of the NHS will be encouraged to support one another across and beyond their organisations. This will be especially the case for thriving, successful organisations which will increasingly be asked to support their neighbours develop capabilities and build resilience. This will form part of a 'duty to collaborate' for providers and clinical commissioning groups alike.

7.11. **The NHS has an almost unrivalled ability to bring together data to inform care, and we will build on the Model Hospital by increasing its transparency and extending it into the model health system.** We will do this by automating and standardising the generation and storage of data to reduce the burden on frontline services and eradicate unnecessary and duplicative assurance templates.

7.12. **Our new regional structures will play a key role in locally devolved initiatives.** The collaborative work which will need to underpin the development of local plans, and the detailed understanding of the services that each provider will need to deliver to meet the trajectory of outcomes, will be supported by the new regional teams. In particular, these teams will play a key role in ensuring the system is securing the best value from its combined resources to deliver the Long Term Plan.

Possible legislative change

7.13. **The changes set out in this Long Term Plan can generally be achieved within the current statutory framework, but legislative change would support more rapid progress.** The Acts of Parliament that currently govern the NHS give considerable weight to individual institutions working autonomously, when the success of our Plan depends mainly on collective endeavour. Local NHS bodies need to be able to work together to redesign care around patients, not services or institutions, and the same is also true for the national bodies. And the rules and processes for procurement, pricing and mergers are skewed more towards fostering competition than to enabling rapid integration of care planning and delivery.

7.14. In response to the formal request earlier in the year from the cross-party House of Commons Health and Social Care Committee and from the Prime Minister, **we have in discussion with NHS colleagues, therefore developed a provisional list of potential legislative changes for Parliament's consideration. These proposals are based on what we've heard from clinicians and NHS leaders, as well as national professional and representative bodies.** These proposals would:

- **Give CCGs and NHS providers shared new duties to promote the 'triple aim' of better health for everyone, better care for all patients, and sustainability, both for their local NHS system and for the wider NHS.** These statutory duties on CCGs and trusts would further support them to work in tandem with their neighbours for the benefit of their local population and wider NHS. These new reciprocal duties would also contribute to supporting our wider goal of securing a stronger chain of accountability for managing public money within and between local NHS organisations;

- **Remove specific impediments to 'place-based' NHS commissioning.** The 2012 Act creates some barriers to ICSs being able to consider the best way of spending the total 'NHS pound'. Lifting a number of restrictions on how CCGs can collaborate with NHS England would help, as would NHS England being able to integrate Section 7A public health functions with its core Mandate functions where beneficial;

- **Support the more effective running of ICSs** by letting trusts and CCGs exercise functions, and make decisions, jointly. This is simpler and less expensive than creating an additional statutory tier of bureaucracy. It would mean giving NHS foundation trusts the power to create joint committees with others. It would allow – and encourage – the creation of a joint commissioner/provider committee in every ICS, which could operate as a transparent and publicly accountable Partnership Board. To manage conflicts of interest, any procurement decisions – including whether to procure – would be reserved to the commissioner only;

- **Support the creation of NHS integrated care trusts.** Since the repeal of NHS trust legislation in 2012, the NHS has limited options if it wants to create a new NHS integrated care provider (ICP), for example to deliver primary care and community services for the first time under a single, streamlined ICP contract. Remedying this would both reduce administration costs and help with clinical sustainability. It should also be easier for proposed organisational mergers to progress, without diluting any of the current safeguards on frontline service changes;

- **Remove the counterproductive effect that general competition rules and powers can have on the integration of NHS care.** We propose to remove the Competition and Markets Authority's (CMA) duties, introduced by the 2012 Act, to intervene in NHS provider mergers, and its powers in relation to NHS pricing and NHS provider licence condition decisions. This would not affect the CMA's critical investigations work in tackling abuses and anti-competitive behaviour in health-related markets such as the supply of drugs to the NHS. We propose similarly dispensing with Monitor's 2012 Act competition roles, so that it could focus fully on NHS provider development and oversight;

- **Cut delays and costs of the NHS automatically having to go through procurement processes.** We propose to free up NHS commissioners to decide the circumstances in which they should use procurement, subject to a 'best value' test to secure the best outcomes for patients and the taxpayer. The current rules lead to wasted procurement costs and fragmented provision, particularly across the GP/urgent care/community health service workforce. This would mean repealing the specific procurement requirements in the Health and Social Care 2012 Act. We also propose to free the NHS from wholesale inclusion in the Public Contract Regulations. We would instead set out our own statutory guidance for the NHS to follow. At the same time, we propose to protect and strengthen patient choice and control, including through our wider programme to deliver personalised care;

- **Increase flexibility in the NHS pricing regime.** This would provide further flexibility in the setting of national prices, support the move away from activity-based tariffs where that makes sense, facilitate better integration of care and make it easier to commission Section 7A public health services as part of a bundle with other related services, on a nationally consistent basis;

- **Make it easier for NHS England and NHS Improvement to work more closely together.** We propose that as a minimum, NHS England and NHS Improvement should be free to establish a joint committee and subcommittees to exercise their functions, with corresponding streamlining of non-executive and executive functions.

"That is always the process of legislation in this country. It starts off by voluntary effort, it starts off by empirical experiment, it starts by improvisation. It then establishes itself by merit, and ultimately at some stage or other the State steps in and makes what was started by voluntary action and experiment a universal service[184]."

Aneurin Bevan, April 1946

Engaging people

7.15. The NHS Long Term Plan has been developed based on the advice and experience of clinical experts and other stakeholders, patients and the public. Engagement has been integral at all points of the developing the Plan.

7.16. We are grateful to everyone who shared their time, energy, expertise and experience through this process which included:

- 14 working groups that ensured our proposals benefited from a breadth of expertise and experience, with membership drawn from a range of organisations including patient groups, staff and clinical representatives and senior doctors, nurses or Allied Health Professionals (AHPs), and local NHS leaders;
- 200 distinct engagement events, and over 2,500 responses to our engagement questions from a range of respondents and organisations together representing a combined total of 3.5 million individuals or organisational members/supporters;
- work in partnership with the Patients Association and Healthwatch England to engage patients and the public, with Healthwatch England submitting evidence from over 85,000 people.

7.17. **We will build on the open and consultative process that this Plan is built on, and strengthen the ability of patients, professionals and the public to contribute, by establishing an NHS Assembly in early 2019.** The NHS Assembly will bring together a range of organisations and individuals at regular intervals, to advise the boards of NHS England and NHS Improvement as part of the 'guiding coalition' to implement this Long Term Plan. The Assembly membership will bring insight and frontline experience to the forum where stakeholders discuss and oversee progress on the Long Term Plan. Its members will be drawn from, among others, national clinical, patient and staff organisations; the Voluntary, Community and Social Enterprise (VCSE) sector; the NHS Arm's Length Bodies (ALBs); and frontline leaders from ICSs, STPs, trusts, CCGs and local authorities.

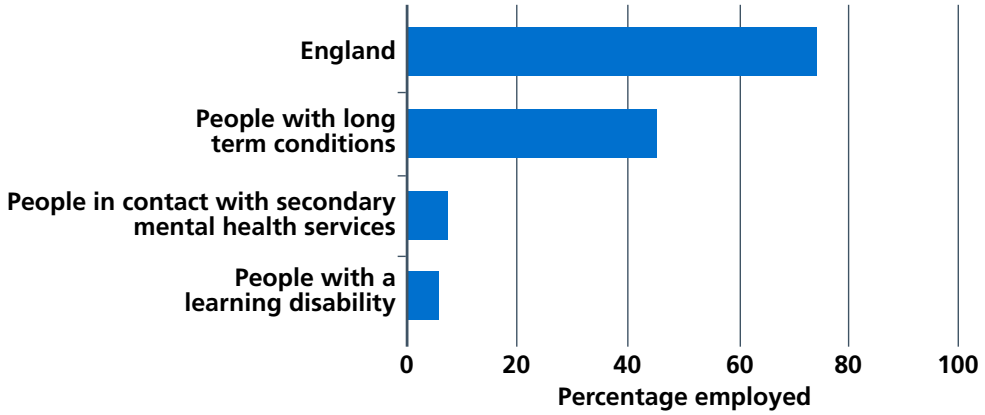
Our National Health Service was founded in 1948 in place of fear - the fear that many people had of being unable to afford care for themselves and their families. And it was founded in a spirit of optimism - at a time of great uncertainty, coming shortly after the sacrifices of war. At its best our National Health Service is the practical expression of a shared commitment by the British people: over the past seven decades, there when we need it, at the most profound moments in our lives. But as medicine advances, health needs change, and society develops, the Health Service continually has to move forward. This Long Term Plan shows how we will do so. So that looking forward to the NHS' 80th Birthday, in a decade's time, we have a service that is fit for the future.

Appendix: How the NHS Long Term Plan supports wider social goals

Health and employment

1. **For people in work, fast and convenient access to health services plays an important role in maintaining employment.** Mental health and musculoskeletal conditions remain the main reason for sickness absence. NHS provision of services for both is increasing. Digital provision of mental health support is also increasing, providing more flexibility in accessing services around work. Expansion of physiotherapists working in primary care networks will be one way in which patients will see the right professional first time. People who are off work for more than four weeks are more likely to fall out of work permanently. Personalised care plans that support people to manage their condition in work, with reasonable adjustments where needed, will reduce this.

Figure 29: Percentage of the population who are employed, by disability status, England, 2016 to 2017.



Source: Public Health England. Health profile for England: 2018. September 2018.

2. **Stable employment is a major factor in maintaining good mental health, and is an important outcome for recovery for people with a mental health problem.** For people being supported by secondary mental health services, there is a 65% employment gap compared with the general population. And people with mental health problems are also often over-represented in high-turnover, low-pay and often part-time or temporary work.

3. **The NHS is on track to support up to 20,000 people with severe mental illness to find and retain employment by 2020/21.** Based on over 20 years of research, the Individual Placement and Support (IPS) employment model is internationally recognised as the most effective way to support people with mental health problems to gain and keep paid employment. On average, people who receive IPS show employment rates of 30-40% compared to rates in the control group of 10-12%. Those supported by IPS work significantly more hours per month, and have higher earnings and better job tenure. Some show reduced rates of hospital admission and less time spent in hospital. Follow-up studies over 8-12 years confirm these better outcomes are maintained over the longer term. These schemes have also been shown to be cost-effective.

4. In May 2018, with the government, Sheffield City Region and the West Midlands Combined Authority, the NHS launched the world's largest trial of IPS services. This trial is evaluating whether IPS can be equally as valuable and cost effective for people who have any health condition and are using primary and community care services. A trial providing employment support via IAPT will also offer support to 24,000 people by 2021. Where these health and work trials are effective, the NHS will work with government to secure investment for future provision.

5. **Through increasing access to IPS, the NHS will support an additional 35,000 people with severe mental illnesses where this is a personal goal to find and retain employment by 2023/24, a total of 55,000 people per year.** This investment will support people to get back into or gain access to employment. It will improve outcomes and recovery for people, meaning they spend less time in hospital and live healthier, happier lives. By 2028/29, we aim to extend this to 50% of the eligible population to benefit up to 115,000 people.

6. **We will continue to offer more opportunities for people with a learning disability and for people with autism.** Supported internship opportunities targeted at people with a learning disability and/or autism will increase by 2023/24, with at least half converted to paid employment over the first five years of the Long Term Plan. The number of NHS internship and employment programmes/sites delivered through 'Project Search' and 'Project Choice' will increase as will the number of NHS organisations making the Learning Disability Employment Programme pledge.

7. **Employers have a key role to play in supporting their staff to stay well and in work.** The government has published a framework to help employers record and voluntarily report information on disability, mental health and wellbeing in the workplace[185]. The framework invites employers to report on training and support provided to staff, uptake of support, recruitment and retention rates and results from staff surveys. It also links in recommendations from *Thriving at Work* and *Disability Confident.* This framework sits alongside the *Campaign to End Loneliness* pledge that asks employers to commit to supporting their employees' social wellbeing. There is still more to do and we welcome the government's commitment to consulting on measures to encourage and support all employers to play their part in this agenda and to improve access to occupational health.

8. Sickness absence rates in the NHS are higher (4% in 2017) than other public sector organisations (2.9% in 2016) and the private sector (1.9% in 2016)[186]. Our new Chief People Officer will lead work to improve our staff health and wellbeing, and help close this gap to the public sector average. Building on existing work with 70 organisations, we will provide targeted support to trusts to access fast track occupational health services and a line management development programme. This complements the recent publication of the NHS Health and Wellbeing Framework[187], which includes recommendations from *Thriving at Work: The Stevenson/Farmer review of mental health and employers*[188].

Health and the justice system

9. **Additional investment in services for people experiencing a mental health crisis will make a real difference for people who need support, and will help ease pressures on police services.** The NHS also commissions health care for children, young people and adults across secure and detained settings, which include prisons, secure facilities for children and young people, police and court Liaison and Diversion services and immigration removal centres. Adults, children and young people will receive health screening on entering prison and a follow-up appointment within seven days, or sooner as required. This will be supported by the full roll-out of the health and justice digital patient record information system across all adult prisons, immigration removal centres and secure training centres for children and young people. This will include the digital transfer of patient records before custody, in custody and on release.

10. **Health and justice services are provided to some of the most vulnerable members of our society.** Many people within the justice system experience greater problems than the rest of the population but do not regularly access timely healthcare. The NHS is already working with partners across government to improve the wellbeing of people in prison, reduce inequalities and address health-related drivers of offending behaviours[189]. A priority in services for this group of patients is improving continuity of care. The care after custody service, RECONNECT, starts working with people before they leave prison and helps them to make the transition to community-based services that will provide the health and care support that they need. 250,000 people churn through prison annually and 57% serve sentences of 12 months or less. Over the next five years RECONNECT will engage and support more people after custody per year.

11. **Since 2017, five parts of England have been testing a new Community Service Treatment Requirement (CSTR) programme.** This enables courts to require people to participate in community treatment, instead of a custodial sentence. CSTR sites have provided community treatment for people who would otherwise have been sentenced inappropriately. We will build on this by expanding provision to more women offenders, short-term offenders, offenders with a learning disability and those with mental health and additional requirements.

12. **We will invest in additional support for the most vulnerable children and young people in, or at risk of being in, contact with the youth justice system.** The development of a high-harm, high risk, high vulnerability trauma-informed service will provide consultation, advice, assessment, treatment and transition into integrated services. This will provide support to, and help to address the complex and challenging needs of vulnerable children and young people.

13. **The NHS also supports the justice system to provide healthcare support to victims.** Across England, 47 sexual assault referral centres currently provide health support for people who have been a victim of sexual assault. We will expand provision to ensure survivors of sexual assault are offered integrated therapeutic mental health support, both immediately after an incident and to provide continuity of care where needed.

Veterans and the Armed Forces

14. **We will expand our support for all veterans and their families as they transition out of the armed forces, regardless of when people left the services.** Local transition, liaison and treatment services provide support for a range of healthcare and social needs. By 2023/24, these services will expand access to complex treatment services as well as targeted interventions for veterans in contact with the criminal justice system. To ensure all GPs in England are equipped to best serve our veterans and their families, over the next five years we will roll out a veterans accreditation scheme in conjunction with the Royal College of GPs.

Care leavers

15. The most vulnerable children, who need extra help from the state to safeguard their wellbeing, do not reliably get the support or access to the services that their needs demand. This results in poorer health outcomes, particularly for care leavers, despite the commitment of dedicated health and care professionals. We must ensure that these vulnerable children and young people benefit from the improvements that we are making to health services. The NHS, together with partners at national and local level, will commit to improve outcomes for our most vulnerable children and young people, by targeting early help for adults living in households with vulnerable children, and by improving access to targeted support for these children, especially during transition to adult services, building on the current assessment pilots for children entering the care system.

Health and the environment

16. **Looking beyond healthcare provision, the NHS has a wider role to play in influencing the shape of local communities.** Through the Healthy New Towns programme, the NHS is playing a leading role in shaping the future of the built environment. In spring 2019 we will set out the principles and practice for *Putting Health into Place* guidelines for how local communities should plan and design a healthy built environment. These have been developed with a network of 12 housing developers who are committed to developing homes that fit these principles. This covers approximately 70,000 homes over the next five years. In 2019/20, NHS England will build on this by working with government to develop a Healthy New Towns Standard, including a Healthy Homes Quality Mark to be awarded to places that meet the high standards and principles that promote health and wellbeing. Embedding these principles within local planning guidance would ensure all future developments have a focus on design that support prevention and wellbeing.

17. **The NHS is leading by example in sustainable development and reducing use of natural resource in line with government commitments.** In 2016/17 NHS providers generated nearly 590,000 tonnes of waste. Of this only 15% goes directly to landfill, with 23% of waste recycled[190]. Between 2010 and 2017 the health and care sector reduced water consumption by 21%, equivalent to around 243,000 Olympic swimming pools. The carbon footprint of health and social care has reduced by 19% since 2007, despite a 27% increase in activity. This leaves a significant challenge to deliver the Climate Change Act target of 34% by 2020 and 51% by 2025. A shift to lower carbon inhalers will deliver a reduction of 4%, with a further 2% delivered through transforming anaesthetic practices. Additional progress in reducing waste, water and carbon will be delivered by ensuring all trusts adhere to best practice efficiency standards and adoption of new innovations. Key to this will be delivering improvements, including reductions in single use plastics, throughout the NHS supply chain.

The NHS as an 'anchor institution'

18. **As an employer of 1.4 million people, with an annual budget of £114 billion in 2018/19, the health service creates social value in local communities.** Some NHS organisations are the largest local employer or procurer of services. For example, nearly one in five people employed in Blackpool work for the NHS and the Gross Value Added (GVA) from health spending is significantly higher than in areas in the south (over 17% vs 4% in London). Sandwell and West Birmingham Hospitals NHS Trust has committed to deploying 2% of its future annual budget with local suppliers, estimating it will add £5-8 million to the local economy. Leeds Teaching Hospitals NHS Trust is supporting the city's inclusive growth strategy by targeting its employability and schools outreach offer at neighbourhoods in the most deprived 1% nationally and is increasing its apprenticeship programmes by 51% year-on-year. In partnership with the Health Foundation, we will work with sites across the country to identify more of this good practice that can be adopted across England.

Glossary of terms

A&E	Accident and Emergency
ACT	Alcohol Care Team
ADHD	Attention deficit hyperactivity disorder
AF	Atrial fibrillation
AHP	Allied health professional
AHSN	Academic Health Science Network
AI	Artificial intelligence
ALB	Arm's Length Body
API	Application programming interface
BAME	Black, Asian and Minority Ethnic
BCF	Better Care Fund
BMA	British Medical Association
BMI	Body mass index
CAS	Clinical Assessment Service
CCG	Clinical commissioning group
CCIO	Chief Clinical Information Officer
CETR	Care, Education and Treatment Review
CI	Confidence interval
CIO	Chief Information Officer
CMA	Competition and Markets Authority
CNST	Clinical Negligence Scheme for Trusts
COPD	Chronic obstructive pulmonary disease
CPD	Continuing professional development
CPR	Cardiopulmonary resuscitation
CQC	Care Quality Commission
CQUIN	Commissioning for Quality and Innovation
CRN	Clinical Research Network
CSTR	Community Service Treatment Requirement
CT	Computerised tomography
CTR	Care and Treatment Review
CVD	Cardiovascular disease
DHSC	Department of Health and Social Care
DTOC	Delayed transfer of care
ECDS	Emergency Care Data Set
EEA	European Economic Area
EHCH	Enhanced Health in Care Homes
EPR	Electronic patient record
EPS	Electronic Prescription Service
ESCAPE-pain	Enabling Self-management and Coping with Arthritic Pain through Exercise
FCP	First Contact Practitioners
FH	Familial Hypercholesterolaemia
FRF	Financial Recovery Fund
FTE	Full-time equivalent
GBD	Global Burden of Disease
GDE	Global Digital Exemplar
GDP	Gross domestic product
GIRFT	Getting It Right First Time
GMC	General Medical Council
GP	General practitioner

GVA	Gross Value Added
HEE	Health Education England
HEI	Higher Education Institution
HFSS	High in fat, salt and sugar
HPV	Human papilloma virus
IAPT	Improving Access to Psychological Therapies
ICP	Integrated Care Provider
ICS	Integrated Care System
IPS	Individual Placement and Support
ISDN	Integrated Stroke Delivery Network
LeDeR	Learning Disabilities Mortality Review Programme
LGBT+	Lesbian, Gay, Bisexual, Transgender
LHCR	Local Health and Care Records
LoS	Length of stay
LTP	Long Term Plan
MCP	Multispeciality community provider
MRI	Magnetic resonance imaging
MSK	Musculoskeletal
NEWS2	National Early Warning Score 2
NHS	National Health Service
NICE	National Institute for Health and Care Excellence
NIHR	National Institute for Health Research
NMC	Nursing and Midwifery Council
NRLS	National Reporting and Learning System
OECD	Organisation for Economic Co-operation and Development
PACS	Primary Acute Care Systems
PHB	Personal health budget
PHE	Public Health England
PHR	Personal health record
QI	Quality Improvement
QNI	Queen's Nursing Institute
QOF	Quality and Outcomes Framework
R&D	Research and development
RDC	Rapid Diagnostic Centre
RTT	Referral to treatment
SaaS	Software as a Service
SAS	Specialty and associate specialist
SBLCB	Saving Babies Lives Care Bundle
SCCL	Supply Chain Coordination Limited
SDEC	Same Day Emergency Care
SSNAP	Sentinel Stroke National Audit Programme
STOMP	Stopping over medication of people with a learning disability autism or both
STAMP	Supporting Treatment and Appropriate Medication in Paediatrics
STP	Sustainability and Transformation Partnership
SUS	Secondary Uses Service
UCLH	University College London Hospitals
UNICEF	United Nations International Children's Emergency Fund
UTC	Urgent Treatment Centre
VCSE	Voluntary, Community and Social Enterprise

References

1. Dayan, M., Gardner, T., Kelly, E. & Ward, D. (2018) How good is the NHS? The Nuffield Trust. Available from: https://www.nuffieldtrust.org.uk/research/the-nhs-at-70-how-good-is-the-nhs
2. OECD/EU (2018) Health at a Glance: Europe 2018: State of Health in the EU Cycle. p.48. Available from: https://www.oecd-ilibrary.org/health-at-a-glance-europe-2018_5j8qqfkl0x24.pdf?itemId=%2Fcontent%2Fpublication%2Fhealth_glance_eur-2018-en&mimeType=pdf
3. OECD (2017) Health at a Glance 2017: OECD Indicators. p.107. Available from: https://www.oecd-ilibrary.org/health-at-a-glance-2017_5jfqgv50kpjk.pdf?itemId=%2Fcontent%2Fpublication%2Fhealth_glance-2017-en&mimeType=pdf
4. Ham, C., Charles, A. & Wellings, D. (2018) Shared responsibility for health: the cultural change we need. The King's Fund. Available from: https://www.kingsfund.org.uk/publications/shared-responsibility-health
5. NHS England internal analysis
6. The Health Foundation (2017) The impact of providing enhanced support for care home residents in Rushcliffe: Health Foundation consideration of findings from the Improvement Analytics Unit. Available from: https://www.health.org.uk/publication/impact-enhanced-support-rushcliffe
7. Raleigh, V. (2018) What is happening to life expectancy in the UK?. The Health Foundation. Available from: https://www.kingsfund.org.uk/publications/whats-happening-life-expectancy-uk
8. Kingston, A., Wohland, P., Wittenberg, R., Robinson, L., Brayne, C., Matthews, F. & Jagger, C. (2017) Is late life dependency increasing or not? A comparison of the Cognitive Function and Ageing Studies (CFAS). The Lancet. 390 (10103), 1676-1684. Available from: https://doi.org/10.1016/S0140-6736(17)31575-1
9. Royal College of Nursing (2018) Falls Resources for nursing professionals on the prevention, treatment and management of falls in older people. Available from: https://www.rcn.org.uk/clinical-topics/older-people/falls
10. Public Health England (2018) A Return on Investment Tool for the Assessment of Falls Prevention Programmes for Older People Living in the Community. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/679856/A_return_on_investment_tool_for_falls_prevention_programmes.pdf
11. Prince, M., Knapp, M., Guerchet, M., McCrone, P., Prina, M., Comas-Herrera, A., Wittenberg, R., Adelaja, B., Hu, B., King, D., Rehill, A. & Salimkumar, D. (2014) Dementia UK: Second edition – Overview. Alzheimer's Society. Available from: http://eprints.lse.ac.uk/59437/1/Dementia_UK_Second_edition_-_Overview.pdf
12. Donegan, K., Fox, N., Black, N., Livingston, G., Banerjee, S. & Burns, A. (2017) Trends in diagnosis and treatment for people with dementia in the UK from 2005 to 2015: a longitudinal retrospective cohort study. The Lancet Public Health. 2 (3), PE149-E156. Available from: https://doi.org/10.1016/S2468-2667(17)30031-2
13. Alzheimer's Research UK (2016) Attitudes to dementia. Available from: https://www.dementiastatistics.org/statistics/attitudes-to-dementia/
14. Department of Health (2015) Prime Ministers Challenge on Dementia 2020: Implementation Plan. p.62. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/507981/PM_Dementia-main_acc.pdf
15. Wyatt, S., Child, K., Hood, A., Cooke, M. & Mohammed, M. (2017) Changes in admission thresholds in English emergency departments. Emerg Med J 34 (12), 773-779. Available from: https://doi.org/10.1136/emermed-2016-206213
16. Kingston, A., Wohland, P., Wittenberg, R., Robinson, L., Brayne, C., Matthews, F. & Jagger, C. (2017) Is late life dependency increasing or not? A comparison of the Cognitive Function and Ageing Studies (CFAS). The Lancet. 390 (10103), 1676-1684. Available from: https://doi.org/10.1016/S0140-6736(17)31575-1
17. Ham, C., Charles, A. & Wellings, D. (2018) Shared responsibility for health: the cultural change we need. The King's Fund. Available from: https://www.kingsfund.org.uk/publications/shared-responsibility-health
18. Royal College of Physicians (2018) Outpatients: The future - adding value through sustainability. Available from: https://www.rcplondon.ac.uk/projects/outputs/outpatients-future-adding-value-through-sustainability
19. Asaria, M., Doran, T. & Cookson, R. (2016) The costs of inequality: whole-population modelling study of lifetime inpatient hospital costs in the English National Health Service by level of neighbourhood deprivation. J Epidemiol Community Health. 70 (10), 990-996. Available from: http://dx.doi.org/10.1136/jech-2016-207447

20. Finch, D., Bibby, J. & Elwell-Sutton, T. (2018) Briefing: Taking our health for granted. The Health Foundation. Available from: https://www.health.org.uk/publications/taking-our-health-for-granted
21. Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392 (10158), 1647-1661. Available from: https://doi.org/10.1016/S0140-6736(18)32207-4
22. Institute for Health Metrics and Evaluation (2018) GBD Compare Data Visualization. Accessible from: https://vizhub.healthdata.org/gbd-compare/
23. Office for National Statistics (2018) Adult smoking habits in the UK: 2017. Accessible from: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/bulletins/adultsmokinghabitsingreatbritain/2017
24. Department of Health (2017) Towards a Smokefree Generation: A Tobacco Control Plan for England. Available from: https://www.gov.uk/government/publications/towards-a-smoke-free-generation-tobacco-control-plan-for-england
25. Royal College of Paediatrics and Child Health (2018) Child health in England in 2030: comparisons with other wealthy countries. Available from: https://www.rcpch.ac.uk/resources/child-health-england-2030-comparisons-other-wealthy-countries
26. Evison, M., Agrawal, S., Conroy, M., Bendel, N., Sewak, N., McWilliams, L., Jerram, J., Shackley, D., Preece, R., Brown, L. & Barber, P. (2018) Building the case for comprehensive hospital-based tobacco addiction services: Applying the Ottawa Model to the City of Manchester. Lung Cancer. 121, 99-100. Available from: https://doi.org/10.1016/j.lungcan.2018.04.010
27. Reid, R., Mullen, K., Slovinec D'Angelo, M., Aitken, D., Papadakis, S., Haley, P., McLaughlin, C. & Pipe, A. (2010) Smoking cessation for hospitalized smokers: An evaluation of the "Ottawa Model". Nicotine & Tobacco Research.12 (1), 11-18. Available from: https://doi.org/10.1093/ntr/ntp165
28. Mullen, K., Manuel, D., Hawken, S., Pipe, A., Coyle, D., Hobler, L., Younger, J. Wells, G. & Reid, R. (2017) Effectiveness of a hospital-initiated smoking cessation programme: 2-year health and healthcare outcomes. Tobacco Control. 26 (3), 293-299. Available from: http://dx.doi.org/10.1136/tobaccocontrol-2015-052728
29. Royal College of Physicians (2018) Hiding in plain sight: Treating tobacco dependency in the NHS. Available from: https://www.rcplondon.ac.uk/projects/outputs/hiding-plain-sight-treating-tobacco-dependency-nhs
30. Organisation for Economic Cooperation and Development (2017) Obesity Update 2017. Available from: http://www.oecd.org/health/obesity-update.htm
31. NHS Digital (2018) Statistics on Obesity, Physical Activity and Diet - England, 2018 [PAS]. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-obesity-physical-activity-and-diet/statistics-on-obesity-physical-activity-and-diet-england-2018
32. Public Health England (2017) Health matters: obesity and the food environment. Available from: https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment--2
33. Institute for Fiscal Studies. Children's exposure to TV advertising of food and drink: Briefing note. https://www.ifs.org.uk/publications/13019
34. Office for National Statistics (2018) UK business: activity, size and location. Available from: https://www.ons.gov.uk/businessindustryandtrade/business/activitysizeandlocation/datasets/ukbusinessactivitysizeandlocation
35. Caraher, M., Lloyd, S., Mansfield, M., Alp, C., Brewster, Z. & Gresham, J. (2016) Secondary school pupils' food choices around schools in a London borough: Fast food and walls of crisps. Appetite. 103, 208-220. Available from: https://doi.org/10.1016/j.appet.2016.04.016
36. Strategic Review of Health Inequalities in England Post-2010 (2010) Fair Society, Healthy Lives: The Marmot Review. Available from: https://www.parliament.uk/documents/fair-society-healthy-lives-full-report.pdf
37. Lean, M., Leslie, W., Barnes, A., Brosnahan, N., Thom, G. & McCombie, L. et al. (2018) Primary care-led weight management for remission of type 2 diabetes (DiRECT): an open-label, cluster-randomised trial. The Lancet. 391 (10120), 541-551. Available from: https://doi.org/10.1016/S0140-6736(17)33102-1

38. Newton, J., Briggs, A., Murray, C., Dicker, D., Foreman, K. & Wang, H. et al. (2015) Changes in health in England, with analysis by English regions and areas of deprivation, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013. The Lancet. 386 (10010), 2257-2274. Available from: https://doi.org/10.1016/S0140-6736(15)00195-6
39. NHS Digital (2017) Statistics on Alcohol: England 2017. Available from: https://files.digital.nhs.uk/publicationimport/pub23xxx/pub23940/alc-eng-2017-rep.pdf
40. National Institute for Health and Care Excellence (2016) Quality and Productivity case study. Available from: https://www.nice.org.uk/savingsandproductivityandlocalpracticeresource?id=2603
41. PHE modelling based on NICE (2016) Quality and Productivity case study. Available from: https://www.nice.org.uk/savingsandproductivityandlocalpracticeresource?id=2603
42. British Lung Foundation (2018) Toxic air at the door of the NHS. Available from: https://www.blf.org.uk/take-action/campaign/nhs-toxic-air-report
43. Sustainable Development Unit (2018) Natural Resource Footprint. Available from: https://www.sduhealth.org.uk/policy-strategy/reporting/natural-resource-footprint-2018.aspx
44. Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392 (10158), 1647-1661. Available from: https://doi.org/10.1016/S0140-6736(18)32207-4
45. Office for National Statistics (2015) Inequality in healthy life expectancy at birth by national deciles of area deprivation: England. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/datasets/inequalityinhealthylifeexpectancyatbirthbynationaldecilesofareadeprivationengland
46. Aiden, H. (2018) Multimorbidity Understanding the challenge. The Richmond Group of Charities. Available from: https://richmondgroupofcharities.org.uk/sites/default/files/multimorbidity_-_understanding_the_challenge.pdf
47. University of Bristol (2013) CIPLOID (Confidential Inquiry into Premature Deaths of People with Learning Disabilities) Full final report. Available from: http://www.bristol.ac.uk/cipold/reports/
48. Independent Mental Health Taskforce to the NHS in England (2016) The Five Year Forward View for Mental Health. Available from: https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf
49. Public Helath England (2018) Severe mental illness (SMI) and physical health inequalities: briefing. Available from: https://www.gov.uk/government/publications/severe-mental-illness-smi-physical-health-inequalities/severe-mental-illness-and-physical-health-inequalities-briefing
50. Dorning, H., Davies, A. & Blunt, I. (2015) Focus on: People with mental ill health and hospital use. The Nuffield Trust. Available from: https://www.nuffieldtrust.org.uk/research/focus-on-people-with-mental-ill-health-and-hospital-use
51. Mencap (2018) How common is learning disability?. Available from: https://www.mencap.org.uk/learning-disability-explained/research-and-statistics/how-common-learning-disability
52. Hosking, F., Carey, I., Shah, S., Harris, T., DeWilde, S., Beighton, C. & Cook, D. (2016) Mortality Among Adults With Intellectual Disability in England: Comparisons With the General Population. American Journal of Public Health. 106 (8), 1483-1490. Available from: https://doi.org/10.2105/AJPH.2016.303240
53. Emerson, E. & Baines, S. (2010) The Estimated Prevalence of Autism among Adults with Learning Disabilities in England. Improving Health and Lives: Learning Disabilities Observatory. Available from: http://www.wecommunities.org/MyNurChat/archive/LDdownloads/vid_8731_IHAL2010-05Autism.pdf
54. Lenehan, C. (2017) These are our children. Council for disabled children. Available from: https://www.ncb.org.uk/sites/default/files/field/attachment/These%20are%20Our%20CHildren_Lenehan_Review_Report.pdf
55. Thomas, B. (2012) Homelessness kills: An analysis of the mortality of homeless people in the early twenty-first century in England. Crisis. Available from: https://www.crisis.org.uk/media/236798/crisis_homelessness_kills2012.pdf
56. Wyatt, L. (2017) Positive outcomes for homeless patients in UCLH Pathway programme. British Journal of Healthcare Management. 23 (8), 367-371. Available from: https://doi.org/10.12968/bjhc.2017.23.8.367
57. Pathway (2018) About us. Available from: https://www.pathway.org.uk/about-us/

58. Social Enterprise UK (2016) What is it all about? Available from: https://www.socialenterprise.org.uk/what-is-it-all-about
59. Bevan Healthcare (2018) About Bevan Healthcare. Available from: https://bevanhealthcare.co.uk/about-us/
60. Community Catalysts (2018) Community enterprise. Available from: https://www.communitycatalysts.co.uk/whatweoffer/communitymicro-enterprise/
61. Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392 (10158), 1647-1661. Available from: https://doi.org/10.1016/S0140-6736(18)32207-4
62. Healthwatch. (2018) What matters most - Healthwatch England Annual Report 2017-18. Available from: https://www.healthwatch.co.uk/report/2018-12-13/our-annual-report-201718
63. Draper, E., Gallimore, I., Kurinczuk, J., Smith, P., Boby, T., Smith, L. & Manktelow, B.(2018) MBRRACE-UK Perinatal Mortality Surveillance Report, UK Perinatal Deaths for Births from January to December 2016. Available from: https://www.npeu.ox.ac.uk/downloads/files/mbrrace-uk/reports/MBRRACE-UK%20Perinatal%20Surveillance%20Full%20Report%20for%202016%20-%20June%202018.pdf
64. RCPCH. (2018) The case for investing in children and young people's diabetes services | RCPCH. Available from: https://www.rcpch.ac.uk/resources/case-investing-children-young-peoples-diabetes-services
65. Royal College of Paediatrics and Child Health (2018) Child health in England in 2030: comparisons with other wealthy countries. Available from: https://www.rcpch.ac.uk/resources/child-health-england-2030-comparisons-other-wealthy-countries
66. Cheung, R. (2018) International comparisons of health and wellbeing in early childhood. Nuffield Trust. Available from: https://www.nuffieldtrust.org.uk/files/2018-03/1521031084_child-health-international-comparisons-report-web.pdf
67. NHS Digital. (2015) Health and Wellbeing of 15 year olds in England: Findings from the What About YOUth? Survey 2014. Available from: https://files.digital.nhs.uk/publicationimport/pub19xxx/pub19244/what-about-youth-eng-2014-rep.pdf
68. Office for National Statistics (2018) MYE1: Population estimates: Summary for the UK, mid-2017. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland
69. Office for National Statistics (2018) Death registrations summary tables - England and Wales. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/deathregistrationssummarytablesenglandandwalesreferencetables
70. Office for National Statistics (2018) Child mortality in England and Wales. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/childmortalitystatisticschildhoodinfantandperinatalchildhoodinfantandperinatalmortalityinenglandandwales
71. MBRRACE-UK (2018) Saving Lives, Improving Mothers' Care. Available from: https://www.npeu.ox.ac.uk/mbrrace-uk/reports
72. Healthcare Quality Improvement Partnership (2018) MBRRACE-UK Perinatal Mortality Surveillance Report 2018. Available from: https://www.hqip.org.uk/resource/mbrrace-uk-perinatal-mortality-surveillance-report-2018
73. Royal College of Obstetricians & Gynaecologists (2018) Each Baby Counts: 2018 progress report. Available from: https://www.rcog.org.uk/en/guidelines-research-services/audit-quality-improvement/each-baby-counts/reports-updates/each-baby-counts-2018-progress-report/
74. Draper, E., Gallimore, I., Kurinczuk, J., Smith, P., Boby, T., Smith, L. & Manktelow, B.(2018) MBRRACE-UK Perinatal Mortality Surveillance Report, UK Perinatal Deaths for Births from January to December 2016. Available from: https://www.npeu.ox.ac.uk/downloads/files/mbrrace-uk/reports/MBRRACE-UK%20Perinatal%20Surveillance%20Full%20Report%20for%202016%20-%20June%202018.pdf
75. Department of Health and Social Care (2018) Fortifying flour with folic acid: government to consult. Available from: https://www.gov.uk/government/news/fortifying-flour-with-folic-acid-government-to-consult

76. Langhoff-Roos, J., Kesmodel, U., Jacobsson, B., Rasmussen, S. & Vogel, I. (2006) Spontaneous preterm delivery in primiparous women at low risk in Denmark: population based study. BMJ. 332, 937–939. Available from: https://doi.org/10.1136/bmj.38751.524132.2F
77. MBRRACE-UK (2018) Saving Lives, Improving Mothers' Care. Available from: https://www.npeu.ox.ac.uk/mbrrace-uk/reports
78. Sandall, J., Soltani, H., Gates, S., Shennan, A. & Devane, D. (2016) Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database of Systematic Reviews. (4). Available from: https://doi.org/10.1002/14651858.CD004667.pub5
79. Homer, C., Leap, N., Edwards, N. and Sandall, J. (2017). Midwifery continuity of carer in an area of high socio-economic disadvantage in London: A retrospective analysis of Albany Midwifery Practice outcomes using routine data (1997–2009). Midwifery. 48, 1-10. Accessible from: https://doi.org/10.1016/j.midw.2017.02.009
80. Care Quality Commission (2018) Maternity services survey 2017. Available from: https://www.cqc.org.uk/publications/surveys/maternity-services-survey-2017
81. Howard, L., Ryan, E., Trevillion, K., Anderson, F., Bick, D., Bye, A., Byford, S., O'Connor, S., Sands, P., Demilew, J., Milgrom, J. & Pickles, A. (2018) Accuracy of the Whooley questions and the Edinburgh Postnatal Depression Scale in identifying depression and other mental disorders in early pregnancy. The British Journal of Psychiatry, 212 (1), 50-56. Available from: https://doi.org/10.1192/bjp.2017.9
82. Bauer, A., Parsonage, M., Knapp, M., Iemmi, V. & Adelaja B. (2014) The Costs of Perinatal Mental Health Problems. Centre for Mental Health. Available from: https://www.centreformentalhealth.org.uk/publications/costs-of-perinatal-mental-health-problems
83. The 1001 Critical Days (2016) The 1001 Critical Days The Importance of the Conception to Age Two Period. Available from: https://www.1001criticaldays.co.uk/sites/default/files/1001%20days_oct16_1st.pdf
84. Paulson, J. & Bazemore, S. (2010) Prenatal and Postpartum Depression in Fathers and Its Association With Maternal Depression: A Meta-analysis. JAMA. 303 (19), 1961–1969. Available from: https://doi.org/10.1001/jama.2010.605
85. Thom, D. & Rortveit, G. (2010) Prevalence of postpartum urinary incontinence: a systematic review. Acta Obstetricia et Gynecologica Scandinavica. 89 (12), 1511-22. Available from: https://doi.org/10.3109/00016349.2010.526188
86. Johannessen, H.H., Wibe, A., Stordahl, A., Sandvik, L., Backe, B. & Mørkved, S. (2013) Prevalence and predictors of anal incontinence during pregnancy and 1 year after delivery: a prospective cohort study. BJOG. 121 (3), 269-280. Available from: https://doi.org/10.1111/1471-0528.12438
87. Barber, M. (2016) Pelvic organ prolapse. BMJ. 354, i3853. Available from: https://doi.org/10.1136/bmj.i3853
88. Victora, C., Bahl, R., Barros, A., França, G., Horton, S., Krasevec, J., Murch, S., Sankar, M., Walker, N. & Rollins, N. (2016) Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. The Lancet. Available from: https://doi.org/10.1016/S0140-6736(15)01024-7
89. Public Health England (2018) Breastfeeding at 6 to 8 weeks after birth: 2017 to 2018 annual data. Available from: https://www.gov.uk/government/statistics/breastfeeding-at-6-to-8-weeks-after-birth-annual-data
90. NHS Digital (2018) Mental Health of Children and Young People in England, 2017 [PAS]. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2017/2017
91. Kessler, R., Berglund, P., Demler, O., Jin, R., Merikangas, K., & Walters, E. (2005) Lifetime prevalence and age of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry. 62 (6), 593–602. Available from: https://doi.org/10.1001/archpsyc.62.6.593
92. NHS Digital (2018) Mental Health of Children and Young People in England, 2017 [PAS]. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2017/201
93. Public Health England (2015) Prescribing of psychotropic drugs to people with learning disabilities and/or autism by general practitioners in England. Available from: https://webarchive.nationalarchives.gov.uk/20160704161911/http://www.improvinghealthandlives.org.uk/securefiles/160704_1723//Psychotropic%20medication%20and%20people%20with%20learning%20disabilities%20or%20autism.pdf

94. Department of Health and Social Care (2018) The Government response to the Learning Disabilities Mortality Review (LeDeR) Programme Second Annual Report. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/739560/government-response-to-leder-programme-2nd-annual-report.pdf
95. Crane, L., Chester, J., Goddard, L., Henry, L., & Hill, E. (2016) Experiences of autism diagnosis: A survey of over 1000 parents in the United Kingdom. Autism. 20 (2), 153–162. Available from: https://doi.org/10.1177/1362361315573636
96. Lenehan, C. (2017) These are our children. Council for disabled children. Available from: https://www.ncb.org.uk/sites/default/files/field/attachment/These%20are%20Our%20CHildren_Lenehan_Review_Report.pdf
97. NHS Digital (2018) Learning Disability Services Monthly Statistics - AT: October 2018, MHSDS: August 2018. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/learning-disability-services-statistics/provisional-statistics-at-october-2018-mhsds-august-2018-final
98. NHS England (2018) Assuring Transformation dataset. https://digital.nhs.uk/data-and-information/data-collections-and-data-sets/data-collections/assuring-transformation
99. NHS England (2018) Testing New Care Models in tertiary mental health services. Available from: https://www.england.nhs.uk/mental-health/taskforce/imp/mh-new-care-models/
100. Sholl, C., Reid, C. & Udwin, O. (2014) Preventing residential care for young people with intellectual disabilities and challenging behaviours: the development of the Ealing Intensive Therapeutic and Short Breaks Service. Association for Child and Adolescent Mental Health. Occasional Paper 32: Intellectual Disabilities and Challenging Behaviour, Chapter 2, 15-25. Available from: http://pavingtheway.works/project/wp-content/uploads/2015/11/Sholl-Reid-Udwin-preventing-residential-care-for-young-people-with-intellectual-disabilities-and-challenging-behaviours.pdf
101. Reid, C., Sholl, C. & Gore, N. (2013) Seeking to prevent residential care for young people with intellectual disabilities and challenging behaviour: examples and early outcomes from the Ealing ITSBS. Tizard Learning Disability Review. 18 (4), 171-178. Available from: https://doi.org/10.1108/TLDR-01-2013-0003
102. NHS Improvement (2018) The learning disability improvement standards for NHS trusts. Available from: https://improvement.nhs.uk/documents/2926/v1.17_Improvement_Standards_added_note.pdf
103. RCPCH. (2018) Child health in 2030 in England: comparisons with other wealthy countries. Available from: https://www.rcpch.ac.uk/sites/default/files/2018-10/child_health_in_2030_in_england_-report_2018-10.pdf
104. McHale, P., Wood, S., Hughes, K., Bellis, M., Demnitz, U. & Wyke, S. (2013) Who uses emergency departments inappropriately and when - a national cross-sectional study using a monitoring data system. BMC medicine. 11. 258. 10.1186/1741-7015-11-258
105. McHale, P., Wood, S., Hughes, K., Bellis, M., Demnitz, U. & Wyke, S. (2013) Who uses emergency departments inappropriately and when - a national cross-sectional study using a monitoring data system. BMC Med. 11, 258. Available from: https://doi.org/10.1186/1741-7015-11-258
106. Office for National Statistics (2018) 2016 based England and Wales period life expectancies, 1948 to 2016. Available from: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/adhocs/0085772016basedenglandandwalesperiodlifeexpectancies1948to2016
107. Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392 (10158), 1647-1661. Available from: https://doi.org/10.1016/S0140-6736(18)32207-4
108. British Heart Foundation (2018) UK Factsheet November 2018. Available from: https://www.bhf.org.uk/-/media/files/research/heart-statistics/bhf-cvd-statistics---uk-factsheet.pdf
109. Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392 (10158), 1647-1661. Available from: https://doi.org/10.1016/S0140-6736(18)32207-4

110. Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392 (10158), 1647-1661. Available from: https://doi.org/10.1016/S0140-6736(18)32207-4
111. Stafford, M., Steventon, A., Thorlby, R., Fisher, R., Turton, C. & Deeny, S. (2018) Understanding the health care needs of people with multiple health conditions. The Health Foundation. Available from: https://www.health.org.uk/publications/understanding-the-health-care-needs-of-people-with-multiple-health-conditions
112. S Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392 (10158), 1647-1661. Available from: https://doi.org/10.1016/S0140-6736(18)32207-4
113. National Cancer Registration and Analysis Service (2010) Routes to Diagnosis. Available from: http://www.ncin.org.uk/publications/routes_to_diagnosis
114. National Institute for Health and Care Excellence (2017) Suspected cancer: recognition and referral. Available from: https://www.nice.org.uk/guidance/ng12
115. British Heart Foundation (2018) UK Factsheet November 2018. Available from: https://www.bhf.org.uk/-/media/files/research/heart-statistics/bhf-cvd-statistics---uk-factsheet.pdf
116. Public Health England (2018) Familial Hypercholesterolaemia Implementing a systems approach to detection and management. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/731873/familial_hypercholesterolaemia_implementation_guide.pdf
117. Public Health England (2018) Familial Hypercholesterolaemia Implementing a systems approach to detection and management. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/731873/familial_hypercholesterolaemia_implementation_guide.pdf
118. Bottle, A., Kim, D., Aylin, P., Cowie, M., Majeed, A. & Hayhoe, B. (2018) Routes to diagnosis of heart failure: observational study using linked data in England. Heart. 104 (7), 600-605. Available from: https://doi.org/10.1136/heartjnl-2017-312183
119. Cleland, J., McDonagh, T., Rigby, A., Yassin, A., Whittaker, T & Dargie, H. (2011) The national heart failure audit for England and Wales 2008–2009. Heart. 97 (11), 876-886. Available from: https://doi.org/10.1136/hrt.2010.209171
120. Perkins, G., Lockey, A., de Belder, M., Moore, F., Weissberg, P. & Gray, H. (2016) National initiatives to improve outcomes from out-of-hospital cardiac arrest in England. Emergency Medical Journal. 33 (7), 448-451. Available from: http://dx.doi.org/10.1136/emermed-2015-204847
121. National Institute for Health and Care Excellence (2013) Myocardial infarction: cardiac rehabilitation and prevention of further cardiovascular disease. Available at: https://www.nice.org.uk/guidance/cg172
122. British Heart Foundation (2018) The National Audit of Cardiac Rehabilitation (NACR) Annual Statistical Report 2017. Available from: https://www.bhf.org.uk/informationsupport/publications/statistics/national-audit-of-cardiac-rehabilitation-annual-statistical-report-2017
123. Stroke Association (2018) State of the nation: Stroke statistics. Available from: https://www.stroke.org.uk/system/files/sotn_2018.pdf
124. NHS Digital (2018). Mortality from stroke. Available at https://digital.nhs.uk/data-and-information/publications/clinical-indicators/compendium-of-population-health-indicators/compendium-mortality/current/mortality-from-stroke
125. Patel, A., Berdunov, V., King, D., Quayyum, Z., Wittenberg, R. & Knapp, M. (2017) Current, future and avoidable costs of stroke in the UK. Available from: https://www.stroke.org.uk/sites/default/files/costs_of_stroke_in_the_uk_report_-executive_summary_part_2.pdf
126. Hunter, R., Davie, C., Rudd, A., Thompson, A. & Walker, H. (2013) Impact on Clinical and Cost Outcomes of a Centralized Approach to Acute Stroke Care in London: A Comparative Effectiveness Before and After Model. PLOS ONE. 8 (8), e70420. Available from: https://doi.org/10.1371/journal.pone.0070420
127. Morris, S., Hunter, R., Angus, R., Boaden, R., McKevitt, C., Perry, C., Pursani, N., Rudd, A., Schwamm, L., Turner, S., Tyrell, P., Wolfe, C. & Fulop N. (2014) Impact of centralising acute stroke services in English metropolitan areas on mortality and length of hospital stay: difference-in-differences analysis. British Medical Journal. 349, g4757. Available from: https://doi.org/10.1136/bmj.g4757

128. Aguiar de Sousa, D., von Martial, R., Abilleira, S., Gattringer, T., Kobayashi, A., Gallofre, M., Fazekas, F., Szikora, I., Feigin, V., Caso, V. & Fischer, U. (2018) Access to and delivery of acute ischaemic stroke treatments: A survey of national scientific societies and stroke experts in 44 European countries. European Stroke Journal. 0(0) 1–16. Available from: https://doi.org/10.1177/2396987318786023
129. British Lung Foundation (2016) The battle for breath - the economic burden of lung disease. Available from: https://www.blf.org.uk/policy/economic-burden
130. Public Health England (2015) Respiratory disease: applying All Our Health. Available from: https://www.gov.uk/government/publications/respiratory-disease-applying-all-our-health/respiratory-disease-applying-all-our-health
131. British Lung Foundation (2017) Out in the cold – lung disease, the hidden driver of NHS winter pressure. Available from: https://www.blf.org.uk/policy/out-in-the-cold
132. Strategic Review of Health Inequalities in England Post-2010 (2010) Fair Society, Healthy Lives: The Marmot Review. Available from: https://www.parliament.uk/documents/fair-society-healthy-lives-full-report.pdf
133. Bastin, AJ., Starling, L., Ahmed, R., Dinham, A., Hill, N., Stern, M. & Restrick, LJ. (2010) High prevalence of undiagnosed and severe chronic obstructive pulmonary disease at first hospital admission with acute exacerbation. Chronic Respiratory Disease. 7(2) 91–97. Available from: https://doi.org/10.1177/1479972310364587
134. Royal College of Physicians (2017) National Asthma and COPD Audit Programme (NACAP). Available from: https://www.rcplondon.ac.uk/projects/national-asthma-and-copd-audit-programme-nacap
135. Royal College of Physicians (2017) National Asthma and COPD Audit Programme (NACAP). Available from: https://www.rcplondon.ac.uk/projects/national-asthma-and-copd-audit-programme-nacap
136. NHS Networks. (2013) 2012-13 programme budgeting PCT benchmarking tool (Data File). Available from: https://www.networks.nhs.uk/nhs-networks/health-investment-network/news/2012-13-programme-budgeting-data-is-now-available
137. Yang, J., Chauduri, R., Thomson, N., Ramparasad, N., O'Pray, H., Barclay, S., MacBride-Stewart, S., McCallum, C., Sharma, V., McSharry, C., Murray, D., Shepherd, M & Nicola Lee, WT (2018) Insights into frequent asthma exacerbations from a primary care perspective and the implications of UK National Review of Asthma Deaths recommendations. Primary Care Respiratory Medicine. Vol 28 (35) Available from: https://www.nature.com/articles/s41533-018-0103-9
138. British Lung Foundation (2016) The battle for breath - the impact of lung disease in the UK. Available from: https://www.blf.org.uk/policy/the-battle-for-breath-2016
139. Chalmers, J., Campling, J., Ellsbury, G., Hawkey, P., Madhava, H & Slack, M (2017) Community-acquired pneumonia in the United Kingdom: a call to action. Pneumonia 9: 15. Available from: https://doi.org/10.1186/s41479-017-0039-9
140. Hajat, S. & Haines, A. (2002) Associations of cold temperatures with GP consultations for respiratory and cardiovascular disease amongst the elderly in London. International Journal of Epidemiology. 31 (4), 825-830. Available from: https://doi.org/10.1093/ije/31.4.825
141. Chalabi, Z., Erens, B., Hajat, S., Heffernan, C., Jones, L., Mays, N., Ritchie, B. & Wilkinson, P. (2015) Evaluation of the implementation and health-related impacts of the cold weather plan for England. Policy Innovation Research Unit. Available from: http://piru.lshtm.ac.uk/assets/files/Cold%20Weather%20Plan%20Final%20Report%202015-14.pdf
142. Internal NHS England analysis based on NHS Digital (2018) Hospital Episode Statistics. Available from: https://digital.nhs.uk/data-and-information/data-tools-and-services/data-services/hospital-episode-statistics
143. Man, W., Chowdhury, F., Taylor, R., Evans, R., Doherty, P., Singh, S., Booth, S., Thomason, D., Andrews, D., Lee, C., Hanna, J., Morgan, M., Bell, D & Cowie, M (2016) Building consensus for provision of breathlessness rehabilitation for patients with chronic obstructive pulmonary disease and chronic heart failure. Chronic Respiratory Diseases. 13(3):229-39. Available from: https://doi.org/10.1177/1479972316642363
144. Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., Chisholm, D., Collins, P., Cooper, J., Eaton, J., Herrman, H., Herzallah, M., Huang, Y., Jordans, M., Kleinman, A., Medina-Mora, M., Morgan, E., Niaz, U., Omigbodun, O., Prince, M., Rahman, A., Saraceno, B., Sarkar, B., De Silva, M., Singh, I., Stein, D., Sunkel, C & Unuzter, J (2018) The Lancet Commission on global mental health and sustainable development. The Lancet. 392 (10157), 1553-1598. Available from: https://doi.org/10.1016/S0140-6736(18)31612-X

145. Knapp, M. (ed.), McDaid, D. (ed.) & Parsonage, M. (ed.). (2011) Mental health promotion and mental illness prevention: the economic case. Department of Health. Available from: https://www.gov.uk/government/publications/mental-health-promotion-and-mental-illness-prevention-the-economic-case
146. Health and Safety Executive. (2018) Health and safety at work Summary statistics for Great Britain 2018. Available from: http://www.hse.gov.uk/statistics/overall/hssh1718.pdf
147. Farmer, P. & Stevenson, D. (2017) Thriving at Work: a review of mental health and employers. Available from: https://www.gov.uk/government/publications/thriving-at-work-a-review-of-mental-health-and-employers
148. NHS Digital. (2018) Psychological Therapies: reports on the use of IAPT services, England - September 2018 final, including reports on the IAPT pilots and quarter 2 2018-19 data - NHS Digital. Available from: https://digital.nhs.uk/data-and-information/publications/statistical/psychological-therapies-report-on-the-use-of-iapt-services/september-2018-final-including-reports-on-the-iapt-pilots-and-quarter-2-2018-19
149. Department of Health and Social Care (2018) Modernising the Mental Health Act – final report from the independent review. Available from: https://www.gov.uk/government/publications/modernising-the-mental-health-act-final-report-from-the-independent-review
150. CQC. (2015) Right here right now. People's experiences of help, care and support during a mental health crisis. Available from: https://www.cqc.org.uk/sites/default/files/20150611_righthere_mhcrisiscare_summary_3.pdf
151. Barrett, J., Aitken, P. and Lee, W. (n.d.) Report of the 3rd Annual Survey of Liaison Psychiatry in England (LPSE-3). Health Education England. Available from: https://www.hee.nhs.uk/sites/default/files/documents/Report%20of%20the%203rd%20Annual%20Survey%20of%20Liaison%20Psychiatry%20in%20England%20FINAL.pdf
152. The independent Commission on Acute Adult Psychiatric Care (2016) Old Problems, New Solutions: Improving Acute Psychiatric Care for Adults in England. Available from: http://media.wix.com/ugd/0e662e_6f7ebeffbf5e45dbbefacd0f0dcffb71.pdf
153. HM Government (2018) The independent review of the Mental Health Act: Interim report. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/703919/The_independent_Mental_Health_Act_review__interim_report_01_05_2018.pdf
154. Steel, N., Ford, J., Newton, J., Davis, A., Vos, T. & Naghavi, M. et al. (2018) Changes in health in the countries of the UK and 150 English Local Authority areas 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. The Lancet. 392: 1647–61. DOI http://dx.doi.org/10.1016/S0140-6736(18)32207-4
155. Office for National Statistics (2017) Sickness absence in the UK labour market: 2016. Available from: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/sicknessabsenceinthelabourmarket/2016
156. Department of Health (2006) The Musculoskeletal Services Framework. A joint responsibility: doing it differently. Available from: https://webarchive.nationalarchives.gov.uk/20130124073659/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4138412.pdf
157. NHS Innovation Accelerator (2018) Award-winning ESCAPE-pain programme now online. Available from: https://nhsaccelerator.com/award-winning-escape-pain-programme-now-online/
158. HM Government. (2018) Life Sciences: Sector Deal - GOV.UK. Available from: https://www.gov.uk/government/publications/life-sciences-sector-deal
159. NHS England. (2017) 12 Actions to Support and Apply Research in the NHS. Available from: https://www.england.nhs.uk/wp-content/uploads/2018/05/08-pb-30-11-2017-supporting-and-applying-research.pdf
160. NHS Improvement. Quarterly performance of the NHS provider sector: quarter 1 2018/19. https://improvement.nhs.uk/resources/quarterly-performance-nhs-provider-sector-quarter-1-201819/
161. Universities and Colleges Admissions Service (2018) End of Cycle Report 2018: Summary of applicants and acceptances. Available from: https://www.ucas.com/file/196141/download?token=7YGpHk71
162. Universities and Colleges Admissions Service (2018) Daily Clearing Analysis: Overview. Nursing analysis at 00:05 on Thursday 13 September 2018 (28 days after A level results day). Available from: https://www.ucas.com/file/187976/download?token=7mXkvYI3

163. NHS Improvement (2018) Allied Health Professions (AHPs) supporting patient flow. Available from: https://improvement.nhs.uk/resources/allied-health-professions-ahps-supporting-patient-flow/
164. Stafford, M., Steventon, A., Thorlby, R., Fisher, R., Turton, C. & Deeny, S. (2018) Understanding the health care needs of people with multiple health conditions. The Health Foundation. Available from: https://www.health.org.uk/publications/understanding-the-health-care-needs-of-people-with-multiple-health-conditions
165. Imison, C. & Vaughan, L. (2018) Acute medical care in England: Findings from a survey of smaller acute hospitals. Available from: https://www.nuffieldtrust.org.uk/files/2018-09/1536830967_medical-generalism-interim-report-slide-deck-final.pdf
166. Department for Health and Social Care (2018) GP partnership review: key lines of enquiry, call for evidence. Available from: https://www.gov.uk/government/publications/gp-partnership-review-key-lines-of-enquiry-call-for-evidence
167. NHS England (2018) NHS to prioritise doctors' mental health. Available from: https://www.england.nhs.uk/2018/10/nhs-to-prioritise-doctors-mental-health/
168. West, M., Topakas, A. & Dawson, J. (2014) Climate and culture for health care performance. The Oxford handbook of organizational climate and culture. 335-359. Available from: https://doi.org/10.1093/oxfordhb/9780199860715.013.0018
169. Care Quality Commission (2017) Driving improvement: Case studies from eight trusts. Available from: https://www.cqc.org.uk/sites/default/files/20170614_drivingimprovement.pdf
170. Faculty of Medical Leadership and Management, Centre for Creative Leadership & The King's Fund (2015) Leadership and leadership development in healthcare: The evidence base. Available from: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/leadership-leadership-development-health-care-feb-2015.pdf
171. Anandaciva, S., Ward, D., Randhawa, M. & Edge, R. (2018) Leadership in today's NHS: Delivering the impossible. The King's Fund & NHS Providers. Available from: https://www.kingsfund.org.uk/sites/default/files/2018-07/Leadership_in_todays_NHS.pdf
172. Department of Health and Social Care (2018) Empowering NHS leaders to lead - Sir Ron Kerr. Available from: https://www.gov.uk/government/publications/sir-ron-kerr-review-empowering-nhs-leaders-to-lead
173. Department of Health and Social Care (2018) Kark Review of the Fit and Proper Persons Requirement: Terms of reference and protocol. Available from: https://www.gov.uk/government/publications/kark-review-terms-of-reference
174. Centre for Ageing Better (2018) Age-friendly and inclusive volunteering: Review of community contributions in later life. Available from: https://www.ageing-better.org.uk/publications/age-friendly-inclusive-volunteering
175. The Behavioural Insights Team (2016) Does social action help develop the skills young people need to succeed in adult life?. Available from: https://www.behaviouralinsights.co.uk/education-and-skills/does-social-action-help-develop-the-skills-young-people-need-to-succeed-in-adult-life/
176. Galea, A., Naylor, C., Buck, D & Weaks, L (2013) Volunteering in acute trusts in England: Understanding the scale and impact. The King's Fund. Available from: https://www.kingsfund.org.uk/sites/default/files/field/field_publication_file/volunteering-in-acute-trusts-in-england-kingsfund-nov13.pdf
177. IQVIA. (2018) Global Oncology Trends 2018 - IQVIA. Innovation, Expansion and Disruption. Available from: https://www.iqvia.com/institute/reports/global-oncology-trends-2018
178. HM Government (2018) Prime Minister sets out 5-year NHS funding plan. Available from: https://www.gov.uk/government/news/prime-minister-sets-out-5-year-nhs-funding-plan
179. Institute for Fiscal Studies & The Health Foundation (2017) Securing the future: funding health and social care to the 2030s. Available from: https://www.ifs.org.uk/publications/12994
180. NHS Improvement. (2018) Performance of the NHS provider sector for the year ended 31 March 2018. Available from: https://improvement.nhs.uk/documents/2852/Quarter_4_2017-18_performance_report.pdf
181. NHS England. (2018) Financial Performance Report Fourth Quarter 2017/18. Available from: https://www.england.nhs.uk/wp-content/uploads/2017/06/financial-information-q4-17-18.pdf

182. Organisation for Economic Cooperation and Development (2017) Health at a Glance 2017: OECD indicators. Available from: www.oecd.org/health/health-systems/health-at-a-glance-19991312.htm
183. Health Education England (2018). https://model.nhs.uk/home/dashboard?dashboardId=854fcf9a-3222-411d-be6b-bcd06452d070
184. Bevan, A. (1946) Speech to the Institute of Hospital Administrators [Speech] 6 April 1946. Available from: https://www.sochealth.co.uk/national-health-service/the-sma-and-the-foundation-of-the-national-health-service-dr-leslie-hilliard-1980/aneurin-bevan-and-the-foundation-of-the-nhs/bevans-speech-to-the-institute-of-hospital-administrators-6-april-1946/
185. Department for Work and Pensions & Department of Health and Social Care (2018) Voluntary reporting on disability, mental health and wellbeing. Available from: https://www.gov.uk/government/publications/voluntary-reporting-on-disability-mental-health-and-wellbeing
186. Office of National Statistics (2017) Sickness absence in the UK labour market: 2016. Available from: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/sicknessabsenceinthelabourmarket/2016
187. NHS Employers (2018) NHS Health and Wellbeing Framework. Available from: https://www.nhsemployers.org/case-studies-and-resources/2018/05/nhs-health-and-wellbeing-framework
188. Department for Work and Pensions & Department of Health and Social Care (2017) Thriving at Work: the Stevenson/Farmer review of mental health and employers. Available from: https://www.gov.uk/government/publications/thriving-at-work-a-review-of-mental-health-and-employers
189. HM Government & NHS England (2018) National Partnership Agreement for Prison Healthcare in England: 2018-2021. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/697130/moj-national-health-partnership-2018-2021.pdf
190. Sustainable Development Unit (2018) Natural Resource Footprint: Reducing the use of natural resources in health and social care. Available from: https://www.sduhealth.org.uk/policy-strategy/reporting/natural-resource-footprint-2018.aspx

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