

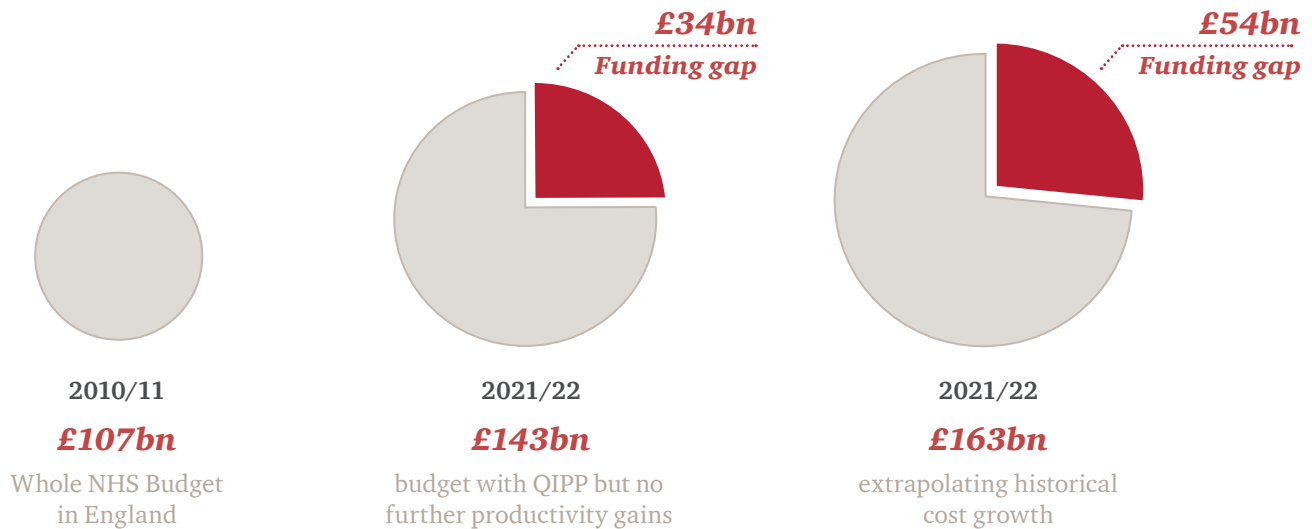
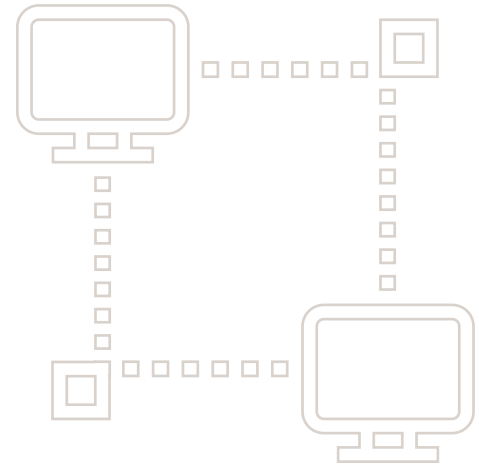
An aerial night view of a city with illuminated buildings and streets. A semi-transparent white box is overlaid on the left side, containing the text 'Transforming healthcare through technology'.

Transforming healthcare through technology

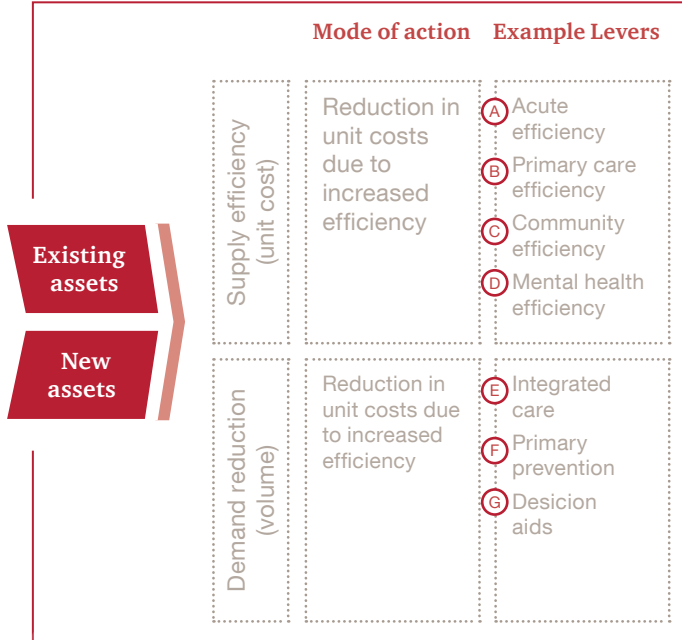
How technology can drive transformation

Healthcare organisations across the UK are well aware of the challenges they face. An ageing population will require more care in the future, but budgets are under severe pressure today.

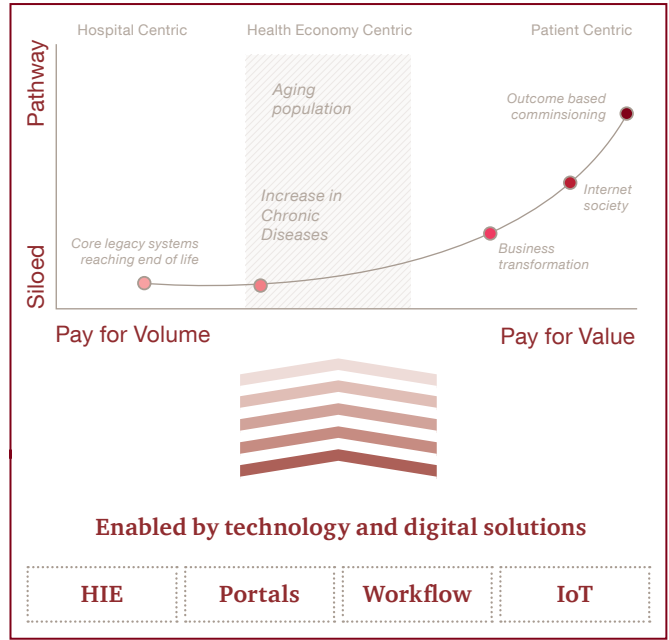
The only solution is transformational change. And technology will play a central role in delivering it. Of course, that transformation can't happen overnight. But with the right approach, technology can help health organisations deliver both short-term needs, such as improving efficiency, as well as longer-term goals to fundamentally change healthcare delivery and achieve significantly better patient outcomes more effectively. Overall, the right technology interventions could deliver net benefits between £8 and £13bn by FY20/21.



Efficiency gains



Transformation



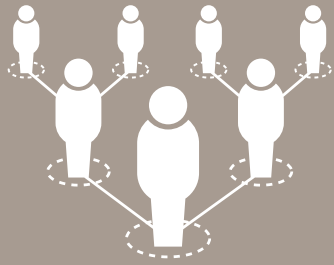
A two speed approach

Technology is already transforming how people live, work and play, but the healthcare sector has, to date, not been able to take advantage of these developments. In many cases, it's playing catch up with other industries. Some of this is down to under investment and some to the failed legacy of previous IT programmes such as the National Programme for IT.

The recently published Wachter Review makes it clear that technology is a key driver in delivering the change that's required to improve services, as well as help in reducing costs. The Wachter Review's recommendations are important, but the report does not make it clear how organisations can manage the day-to-day cash flow pressures alongside the need to invest in the future. However, if properly integrated into an organisation's overall strategy, technology can enable reform across the system which can, in turn, contain costs, improve access and save lives. Whether that is system change such as moving to the cloud (which can offer up to 30% savings) or clinical reforms, such as home monitoring or telemedicine, there is a compelling case for health organisations to harness technology to deliver lasting and positive change.

To be effective, reform needs to take place at two speeds. A short term focus on taking costs out must sit alongside the drive towards more transformational initiatives. The first speed ensures stability and keeps 'the business' running. The second is more of a sprint for new ideas, technologies and methods. This dual process enables technology change that reduces costs, can be introduced at speed but is also evidence-based and, most importantly, is developed around the needs of patients and clinical staff.





'Connected healthcare'

is going to create huge opportunities. In the UK it could be worth as much as £2bn, and by 2020 we expect it could reach \$61bn globally,

an increase of **33%**
from this year.

3 in 5 
*use technology to
monitor their health*

Total spending



on healthcare, wellness and fitness is forecast to be

£209bn
in 2020.

We see technology transforming healthcare in three key areas: care delivery, care logistics, and care management. Taken together, these support the realisation of a healthcare system that can meet the challenges of the future with confidence.

- ⊕ **Care delivery** uses technology to communicate and monitor patients' health in new ways. Using wearables and apps, for example, to keep patients informed and in control of their own health, particularly for chronic conditions. Virtualisation of consulting can enable clinicians to manage a higher number of patients without the need for physical presence.
- ⊕ Technology enabled **care logistics** can transform the efficiency of managing patients through the health system, for example by automating referrals and notifications, managing appointments and treatment schedules online and digitising forms.
- ⊕ **Care management** technologies are able to focus on empowering patients to manage their own health and wellbeing, giving them control through information, apps and online communities that can improve preventative actions and lifestyle choices.

Our experience

PwC is a leading provider of consulting services across the UK healthcare sector. We combine unrivalled understanding of the specific challenges facing different parts of the health system with an approach to technology that provides the strategic support and insights required to deliver short and longer-term goals.

We understand that the need to contain and manage costs is a pressing concern, and we are able to support organisations to address their technology strategies to deliver better value. We can work from the initial design and planning stages of any transformation, or help turnaround existing programmes that are not delivering to original expectations.

In our work with clients across the sector, from Foundation Trusts and private providers to whole health and care systems, we are using our integrated practical experience, industry knowledge and consulting capabilities to help deliver short and longer-term goals of a technology-enabled, cost effective and patient centred health system.



Acute health trusts have a priority to take out costs from across their operations. We help them achieve this in a number of ways.

1. We act as a partner to review and renegotiate existing IT contracts to maximise opportunities to save money and improve service.
2. By assessing the potential to move towards ‘as a service’ models, we’re able to identify more efficient ways to deliver IT that can make significant savings.
3. With electronic patient records likely to be the single largest technology investment that a hospital makes, we can help trusts identify the most suitable solutions for this key technology, and support the end-to-end business case & procurement process. If an EPR programme has run into trouble, we’re able to help get it back on track.

⊕ Our work in action

We’re working with a large NHS Foundation Trust to support its eHospital transformation, with a focus on improving its existing EPR solution. To do that, we’ve worked closely with clinical staff and administrators – as well as the CIO and CCIO – to find out how the solution can best meet their needs. By identifying some key technology fixes we’ve been able to support benefit realisation for financial recovery, patient safety, clinical quality and regulatory compliance. In addition, a refreshed training and compliance programme will drive greater and more consistent use of the EPR solution.



Accountable care organisations increasingly need to drive much greater integration between health and social care systems so that patients' journeys between the two are as effective and efficient as possible, achieving the optimal outcomes at the lowest possible cost. Technology is the key enabler to bring the two together.

1. Accordingly, we can help health and social care providers to design solutions that by sharing common information can support clinicians' work and enhance the patient experience.
2. What's more, we can help providers gather, aggregate and analyse data that can be used to shape policies that will have beneficial health impacts across whole populations.
3. Of course, making data available through shared systems also creates greater vulnerabilities. With patient data security and privacy sacrosanct, we can help organisations to design the technology infrastructure that they need to achieve the benefits of sharing without compromising security.

+ Our work in action

The responsibility for delivering the Health and Social Care Strategy has been transferred to Greater Manchester (GM) from April 2016. PwC helped GM to understand how the health and social care estate is reconfigured to support their Strategic Plan and how the extraordinary capital investment needed can be funded. As part of the project, we worked with the GM Executive to create the 'art of the possible' for how Digital and Technology can help re-shape how Healthcare in a Devolved Smart city can operate.

Private providers are in transition. They face the need to cut costs in their operations in order to achieve the margins that investors demand, but at the same time they need to expand capacity so that they can accommodate additional work from the NHS, and meet the growing demand from private payers.

1. We help private providers develop new business strategies to engage with health consumers in the digital age, delivering the same types of interaction and responsiveness that they are accustomed to receiving from a broad range of other service providers.
2. In addition, we can support private providers to harness the right digital technologies that will improve the efficiency of their back office functions.
3. We work with providers to help them explore new avenues to back office efficiency such as moving services to the cloud, and improving their current ERP systems to drive savings.

+ Our work in action

We've worked with a significant private healthcare organisation to reform its back office function. We redesigned requirements across all lines of business in readiness for migration to a new, consolidated ERP solution designing a blueprint and roadmap to the new platform that will support more efficient, responsive and future-ready business processes.

How we can help

Technology's potential to transform healthcare is immense. But understanding where to start can be daunting. PwC will act as your partner in delivering technology change, whether that's developing strategy or managing comprehensive systems reform. As specialists in healthcare we have a deep understanding of the issues and pressures facing the sector. To that, we bring technology expertise that can help identify, design and procure the optimal solutions. In all cases, we focus on delivering outcomes that make a real difference to costs and patient outcomes.

We are used to delivering work using different commercial arrangements. This may include Time and Materials, but is more often capped T&M or fixed price. We also use different value based pricing models where we tie elements of our fees to the outputs we deliver.

As we work with a number of technology and other specialist partners, we're able to help select and manage teams of experts specifically to meet the needs of every client



Our team



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Tomorrow's healthcare today

We all want better healthcare, sooner and the potential is there to make it happen.

New technology, new breakthroughs, new ideas. But while there are opportunities, there are challenges too: constrained budgets, an ageing population and an increase in chronic conditions. At PwC we're working with clients to steer a course to success in this new health economy so we help improve healthcare for all.

We're working with the NHS, nationally and locally, as well as the private sector and the pharmaceutical and life sciences sector to deliver real, workable solutions to today's challenges. We're delivering transformation and integration projects with patient outcomes at their heart. And we're supporting organisations through testing financial times, often developing bespoke operational and digital systems. We give strategic support to organisations across healthcare and pride ourselves on convening different parts of the system to solve problems.

We also bring insight and expertise to healthcare as well as engaging in the public policy debate.

For more information, subscribe to our Health Matters blog to receive regular insights at:

www.pwc.blogs.com/health_matters.





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