



A change of direction: creating a sustainable NHS

As several of the case studies in this chapter demonstrate, capital projects offer an opportunity to increase the productivity of healthcare services. Take digital transformation, for example. Investment in frontline digitisation – which ranges from electronic patient records (EPR) to further development of shared care records and population health management platforms – is key to increasing efficiency for both the NHS and its patients. Digitisation can help integrate services across different settings and release valuable clinical time to be spent looking after patients. ICSs and trusts need capital funding to cover implementation, initial development and configuration of the system and then a run cost component (typically based on user volumes).

Case study: Electronic bed management at Maidstone and Tunbridge Wells NHS Trust

Maidstone and Tunbridge Wells NHS Trust has invested in an electronic bed management system to manage patient flow across two acute hospitals, an 80-bed community hospital, and two hospices. As a result, capacity, including community placements, is coordinated centrally. For example, the trust can redirect incoming ambulances between hospitals to minimise handover delays and waiting times. The logistics and allocations teams are based in one room, with clinical support on hand and a range of dashboards on large screens. This enables real-time, comprehensive data to be discussed live, supporting the prioritisation of activity and a joined-up approach.

Results and benefits

The new digital system has successfully improved productivity and patient care by:

- reducing A&E bed allocation time by 86 per cent
- reducing the time between confirmed to discharge and actual discharge by 64 per cent
- freed up an average of 15 additional beds per day since going live, saving £2.1 million per year
- released 2,300 hours of ward staff each month, equating to an estimate of £620,000 of savings per year.

Case study: Digitally-informed early intervention in Dorset Integrated Care System

The Dorset Intelligence and Insight Service (DiiS) links health and social care across the county, enabling clinicians to design services based on what is required, and to intervene much earlier when people need support. DiiS brings together millions of data records from settings including primary care, mental health and social care, as well as from other sources that have an impact on health; 800,000 patient records are updated nightly across Dorset, with other feeds updating every 15 minutes. An analytics team at DiiS makes this data accessible to clinicians through interactive tools and dashboards.

Results and benefits

By identifying the most pressing points of need, both for the whole community and the individual, healthcare leaders in the region can make spending decisions on a much more informed basis. This enables healthcare providers in Dorset to allocate resources with maximum efficiency across the population.

Case study: Empowering patients and maximising clinical time through Dorset Care Records (DCR)

The Dorset Care Record (DCR) is an integrated shared care record that brings together key information from health and social care partners in Dorset. It comprises an online clinical portal (DCR) that brings together information from all partners within the DCR partnership agreement, enabling health and care professionals to have a holistic view of patients' health with all relevant information at their disposal. It also empowers patients, providing a patient portal (myDCR) where patients can access their own data.

Results and benefits

On an administrative level, the DCR has saved healthcare practitioners 25 minutes per user per day compared to previous ways of working and a reduction in printing of four sheets per day. Assuming a user growth in line with the 100,000 records accessed target, this would give a gross benefit of £4.6 million for the 2022/23 financial year. More widely, the digitally-enhanced understanding of patients' needs should enable the ICS to reduce admissions, improve discharge from acute care and reduce enquiries to GPs, with much wider financial and clinical benefits.

The primary and community care estate

As ICSs look to improve allocative efficiency by providing more care out of hospital, closer to patients and at an early stage before ill health worsens, developing the primary and community care estate will be critical. The physical space for seeing patients in primary care is becoming inadequate, often relying on outdated buildings that are unsuitable for large-scale primary care. The Fuller review reported that 2,000 of 9,911 primary care premises in England are not fit for purpose, while noting that, with proper investment, ‘estates [can be] a catalyst for integration rather than a barrier to it.’ [23] New estate can expand the number of patients seen in primary care to improve access and provide appropriate modern space for services to be shifted out of secondary into primary care, where it can be delivered at lower cost and closer to the patient.

Case study: Shifting services out of hospital into modern primary care estate in Norfolk and Waveney Integrated Care System

In Norfolk and Waveney ICS, St Stephens Gate Medical Centre in Norwich was built on an old hospital site and opened in 2006. The GP partnership invested money to use all aspects of the health centre, creating a space for NHS day surgery.

This required investment in the air handling unit for the theatres and making the space fit for purpose for cataract surgery, hand surgery, hernia repair, YAG laser capsulotomy, spinal assessment, and skin lesions. Norwich and Norfolk Day Surgery Unit, known as N2S, delivers the day surgery, with GP partners owning and employing N2S staff.

The service has a collaborative arrangement with the local secondary care provider to transfer patients that are complex and require a general anaesthetic; this collaborative approach maximises the use of both spaces acting to reduce wait times and improves the patient journey. The pre-agreed tariffs for surgery are below standard NHS tariffs, making the procedures value for money while relieving pressure on secondary care. The result is high satisfaction levels from patients and staff and shorter waiting times.

Results and benefits

The result is high satisfaction levels from patients and staff and shorter waiting times. The new estate enables patients to be given certain treatments in a primary care, rather than in

an acute care setting. The whole estate is supported with notional rent payments as the site is used exclusively for NHS activity. Supporting primary care with the capital for bricks and mortar is important, but having the flexibility and budget to increase notional rent is vital. As activity, surgical and medical moves from secondary care into primary care and the community, notional rents will need to increase; this can be mitigated with increased shift of pathways and activity, lower costs and increased patient satisfaction.

Case study: A community health hub in Devon ICS

Devon ICS developed plans for a new Cavell Centre as one of six locations involved in the national NHS England Cavell Programme pilot scheme. The £40 million three-storey building in Plymouth would have provided a community health hub, housing GPs alongside outpatient services provided by University Hospitals Plymouth NHS Trust, including diagnostics and x-ray and community services delivered by Livewell SouthWest, such as mental health, community health and wellbeing services. It would also have included a pharmacy, community kitchen and dining area, café and bookable interview and meeting voluntary sector rooms.

NHS Devon ICB and local partners were encouraged to develop the business case at pace, using £2.6 million of national funding, while national NHS colleagues sought to identify the main funding needed, potentially from underspends elsewhere in the national budget. Extensive local engagement was undertaken, expectations were raised in the local community and planning permission was achieved by the project team.

Missed opportunities

However, once the project got to 'shovel ready' stage, the ICB was advised by national colleagues that there was not any central capital funding, with a suggestion that the ICB should consider funding it through its own limited annual capital allocation. NHS Devon's capital budget for 2023/24 is fully allocated to critical and high-priority projects across the entire NHS estate in Devon, Plymouth and Torbay.

Although NHS Devon has since sought alternative ways of making the scheme happen, none have so far proven affordable or viable. Therefore, because of a national lack of capital investment, the project cannot currently go ahead and improvements in productivity and care – and an opportunity to help regenerate one of the most deprived areas in the country – have been missed.

Case study: Preventing hospital admissions in Bedfordshire, Luton and Milton Keynes through community diagnostics in deprived areas

Bedfordshire, Luton and Milton Keynes Integrated Care System developed plans for a new community diagnostic centre (CDC) in Luton and South Bedfordshire, costing just under £25 million, to address pockets of some of the poorest health outcomes nationally, particularly in the diagnosis and treatment of cancer, where many patients are often diagnosed too late to support a good prognosis.

Diagnostics is recognised as a priority in the NHS Long Term Plan and the Luton CDC development is one of the most important healthcare developments in the region, located in an area of significant economic and health deprivation and a transport hub which serves the rest of south Bedfordshire. Luton Borough Council is supportive of the proposal which aligns to the overarching strategy of levelling up within Luton and eliminating poverty.

Missed opportunities

However, given the lack of capital made available in the last Spending Review, the Luton and South Bedfordshire CDC was not able to go ahead. In the absence of a diagnostic centre serving Luton and south Bedfordshire, improvements in access, performance and health outcomes will be missed with unfavourable ramifications:

- Increased pressure will be placed on the acute trust, the Luton and Dunstable hospital, and its workforce. The hospital is poorly served in terms of public transport and does not have current flexible capacity to support growth in imaging demand or improved access.
- The additional community diagnostic centre services would separate high-volume ambulatory flows and release capacity within the acute hospital site to focus on non-elective, inpatient and cancer pathways, resulting in performance improvements and better patient outcomes. This will also support outpatient pathways to treat patients in a timely manner and support continuing delivery against the national elective access targets.
- The CDC would also support GPs to manage long-term conditions and decide on the optimum clinical pathway for patients with non-specific cancer symptoms, leading to improved access, patient experience and better outcomes.
- Access to timely diagnostics closer to the patient/communities would have a significant impact on increasing the likelihood of improving stage of diagnosis by removing the access related barriers. People in the most socio-economically deprived areas in England are 20 per cent more likely to have their cancer diagnosed at a late stage than people in the least deprived areas.
- The service could provide 64,554 additional diagnostic appointments per annum, releasing benefits equivalent to £27.6 million through factors such as reduced length of stay, early cancer detection and reducing outsourcing costs. The absence of the CDC will ultimately allow the gap in health inequalities to increase and miss vital opportunities to improve health outcomes through early diagnosis and treatment of ill health and improve efficiency.

The mental health estate

Time and again our members assert that many parts of the mental health estate are not fit for purpose. NHS Digital data for 2021/22 shows that 15.5 per cent of mental health and learning disability sites in England were built pre 1948. [24] Yet only two of the 40 successful bids for the New Hospitals Programme were for mental health facilities.

This affects patient care. Old, dilapidated estates are not therapeutic environments and do not encourage recovery, and therefore length of stays are longer. The 2018 review of the Mental Health Act stated that ‘Poorly designed and maintained buildings obstruct recovery by making it difficult to engage in basic therapeutic activities (getting outdoors or social interaction with others) and contributing to a sense of containment and control’. [25] Mixed-sex accommodation also still exists across the country, which increases the risk of sexual safety incidents and increases the need for expensive out-of-area placements.

Case study: Powering brain research with a state-of-the-art modern mental health hospital

Oxford Health's Warneford Hospital (one of the bases for Oxfordshire's inpatient mental health provision) is one of the oldest inpatient units still in use across the entire NHS estate. The Care Quality Commission raised concerns about the quality of the estate, and the trust has therefore developed a plan to build a new state-of-the-art facility on the same site. A modern environment will give greater opportunities to improve the therapeutic care provided there, reduce lengths of stay and provide an attractive workplace for staff.

Anticipated results and benefits

The Warneford Hospital redevelopment proposal sets out the case for an investment of £213 million to build a modern mental health hospital at the heart of a new and globally significant brain health science campus at Warneford Park. With secured funding, the new estate will, among other benefits, improve therapeutic recovery and reduce hospital stay, allowing better and more productive patient flow. The trust also expect wider benefits across the rest of their services including key emergency services, police and primary care and better recruitment and retention rates of hard-to-find staff.

The NHS investment is part of a wider programme of transformation in the Warneford campus. These plans are driven by a unique collaboration between Oxford Health NHS Foundation Trust, the University of Oxford and a philanthropic donor. The public investment in a new mental health hospital

will unlock private investment from the university and the philanthropist.

This would create a research centre and post-graduate college at Warneford Park forming a brain health science campus. This supports the UK Life Sciences' ten-year vision 'to put in place infrastructure to assist the NHS in solving the most pressing health challenges of our generation now and in the future'. Research at the brain health science campus could potentially return in the region of £1.54 billion per annum to the UK economy based on a very conservative estimate; this is a benefit-to-cost ratio (BCR) of 13.55 for the taxpayer.

The acute care estate

In acute care, safety concerns relating to outdated buildings can lead to cancelled appointments, wasted resources and poor patient experience, undermining productivity.

Hospitals are looking to monitor people's health at home, through virtual wards, which have been on the rise since the pandemic. Receiving healthcare at home can reduce the risk of infection and support mobility and wellbeing, while being far more cost efficient to run. [28] An evaluation of the Croydon model published in 2021 estimated that a cost saving per virtual ward patient of £742.44 compared to treating people in hospital.²⁹ Yet virtual wards require investment in the appropriate digital technology for hospitals to safely and effectively care for patients at home to unlock these savings, which they can reinvest in patient care.

Lack of capital across different care settings, covering digital and physical infrastructure and mental and physical health, is not just leading to missed opportunities to improve productivity, but actively undermining productivity

Case study: Replacing crumbling, Victorian buildings in North West London with fit for purpose facilities

St Mary's Hospital, part of Imperial College NHS Trust, is a leading provider of clinical care, education, research and a major trauma centre in London. However, today its ageing estate, some of which is over 175 years old, is in rapid decline. Without a complete overhaul of its facilities, it will likely have to close services. The trust has developed proposals for state-of-the-art clinical facilities for adults and children across three main hospital buildings with a total of 840 beds, plus dedicated research, education and innovation spaces. This would also include a hub for primary, community and mental health services as well as social care, community and voluntary sector services. There would also be a clinical life sciences cluster in partnership with industry and research, providing flexible commercial and lab space for life sciences businesses to start, develop and grow.

Anticipated results and benefits

The development would:

- Futureproof the NHS by creating capacity for a growing population and enabling new ways of working and closer collaboration with partners across our integrated care system.
- Maximise operational efficiency by separating planned and emergency care and drawing on user-focused design and care pathways.

- Expand capacity for London's busiest major trauma centre and enabling helicopter access for the first time.
- Improve access to a wide range of healthcare for some of the most deprived communities in the UK.
- Provide a key, accessible hub for integrated care for the local population.
- Support seamless care management, diagnostics, monitoring, logistics and improved patient and staff experience through fully integrated digital technology.
- Help meet net carbon zero buildings to help deliver sustainable healthcare.
- Catalyse wider healthcare research and innovation through the development of a life science cluster in partnership with industry and academia, helping to deliver a significant economic benefit locally and nationally.

Repairing the backlog would cost £1 billion while more extensive refurbishment and some new building and a life sciences cluster would cost £1.2-1.7 billion. However, with capital funding stretched over a new electronic patient record system and expanding the same-day emergency care unit, the NHS does not currently have the capital funding available to go ahead with redeveloping the hospital. The plans remain on hold.

As well as missing out in productivity and economic growth opportunities, just maintaining the status quo is costing money which could have been spent on patient care. In the current buildings, Imperial College NHS Trust currently spends £7 million a year just on repairs at St Mary's just to stay operational, although this cannot sustain the buildings indefinitely. Additionally, due to estates problems, staff waste

providing care in airless, crumbling facilities is immeasurable.
[26,27]