



Vive la révolution

When it comes to health technology, the focus is often on fixing the symptoms of poor patient flow or scheduling, rather than addressing the root causes. However, a burgeoning market for operational technology may provide some welcome relief

The healthcare sector has been slow at adopting technology compared to other industries, but this is changing fast. Technology is now considered an additional resource that can offset the burden of an increasing patient population with more complex needs and the rising cost of treatment. However, barriers remain, blocking the wide-scale adoption of innovative technologies.

Over the years, time and money have been poured into patient-facing technology, but the technology-based, decision-support tools that improve operational effectiveness in other sectors haven't been fully embraced in healthcare. On the whole, care providers have been slow to invest in technology unrelated to treatment and diagnostics, or required for management and administration. However, the drive for healthcare providers to operate more efficiently day-to-day, and to deliver a more effective service, is opening up a new space for innovation and investment in this technology. This category has been identified by David Issott, partner at Hg, as the "mid-office" in the hospital.

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Three tiers of technology

There is a tech-revolution afoot – one that goes beyond (or between) the front and back-of-house systems. Technologies that benefit operational systems and patient outcomes and control cost fall into a new tier, termed the 'mid-office' by the team at technology investment firm, Hg.

Partner David Issott explains: "If you take the hospital setting as your example, you can divide it into three areas: front-of-house, the technology you have in place to deliver care, back-of house, which is the technology used to run the hospital, such as HR or finance systems, and then you have what we call mid-office, which enables the delivery of better care and improved patient outcomes."

Mid-office systems facilitate operational activity – including processes involved with recording procedure performance, enabling procedure completion, flowing

patients efficiently through the hospital from admission to departure, staff management, and ensuring interoperability across the multiple technology platforms used in the care setting.

In a sector crying out for improved efficiency and outcomes, this mid-office revolution may just hold the key and is certainly one to watch.

Room for one more

There are a number of factors that have led to the emergence of a mid-office space for technology within healthcare. For Martin Clark, healthcare operating partner

at global investment banking and asset management firm Alantra, it is partly due to the evolution of a sector which is calling for improved rates of productivity and efficiency.

The market for back-of-house systems, Clark says, is a "mature commoditised segment", and the front-of-house market is at competitive capacity, serviced by a monopoly of larger companies that can absorb the risk and cost involved in investing in clinical interface processes. This has left room for a middle ground to emerge – the mid-office.

The technology that sits within this mid-office segment is designed to release time and increase productivity by focusing on employee activities and exploring how these can be completed more effectively. Clark takes Perfect Ward, the quality inspection app, as an example of mid-office innovation, whereby the developers saw an opportunity in the labour-intensive preparations required for Care Quality Commission inspections in hospital wards, which was eating into nursing time. Instead of senior nurses spending time collecting information on infection control, Perfect Ward automates the process so it can be done by non-clinical staff, freeing up nursing staff.

Where clinical staff are becoming scarce, mid-office technology is releasing valuable clinical time and improving healthcare operation – and "high-quality operations mean better care," Issott adds. ▶





► Ripe for investment

“The mid-office segment is ripe for investment precisely because there are a lot of small and medium-sized enterprises entering that space,” Clark says. This, he suggests, is because the front and back-of-house segments have already been heavily invested in. He adds: “As an investor, I’d say this is potentially a high-growth area, because you can see more and more non-clinical activities being pushed out to technology, and technology companies coming in and delivering solutions in that mid-office ground.”

Issott agrees that the sector is attracting significant investment. An area of particular interest to investors might be the capacity for growth of the SMEs entering the market. “These are growing companies that become more valuable over time,” he says, something Hg has experienced with its own investments in the sector.

According to Issott, there’s a shift in healthcare funding and greater opportunities in this mid-office market.

In fact, the company predicts that the operational technology market, that is, the technology in the mid-office segment, is worth £10 billion in the US, a figure Issott says is based on talking to the sector.

Taking the US market as an example, Issott says there’s been high investment in front-of-house systems with groups of hospitals buying the very best systems on offer. Under the ‘meaningful use’ regulations, part of the Affordable Care Act (Obamacare), the US went through a refresh cycle of investment in patient administration systems and electronic medical records. Now, as investment in front-of-house systems slows down, current funding is freed up, allowing

further investment in the mid-office segment.

Issott says this pattern can also be detected in the UK market. The opportunity for operational technology in the

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UK market is augmented because of how it is structured: “Compared to other developed geographies, in the UK we have developed larger hospital operations earlier. This has driven the need for software to support operational processes compared to other markets,” Issott says, adding that the bigger the operation, the higher the level of complexity, and the greater the need for advanced technology solutions to help operations flow more easily.

High-tech and low-touch

Mid-office technology is a market in its infancy, with new entrants attracted by the need for innovations to relieve non-clinical burdens and create operational efficiencies, and investors recognising good investment opportunities. The current staffing shortage within the healthcare sector is one area that operational technology can lend a helping hand. Clark says: “With a limited workforce and value-based healthcare in the spotlight, conversations around high-tech and low-touch solutions are increasingly important.” Operational technology has the capacity to address issues around staffing shortages but also to reduce expenditure by providing a substitute to an expensive labour workforce.

Issott points to the Allocate scheduling software, which manages workforce rostering and compliance workflows, and monitors and reports on safe staffing levels. Allocate’s product, he says, automates and optimises the scheduling of staff while reducing expenditure – ensuring the delivery of quality care despite limited personnel resources.

Staff engagement and communication is an important factor in this and Allocate’s ‘Me’ app is an example of mid-office technology bridging this. It provides organisations with a holistic picture of its staffing resource, allowing staff to see who’s on the roster on given days, their capabilities, and identifies gaps in shifts that staff can book themselves into. The idea is to cut down on expensive agency staff costs by optimising existing staff resources.

Health secretary Matt Hancock’s agenda has technology at its heart of it and he has promoted digital solutions and talked about a “tech-driven” NHS. Issott says that investing behind operational technology offers – through increased automation – efficiency across processes and improved data and analytics on operational performance to aid decision-making and improve patient care through improved operations. ■

