A DIGITAL JOURNEY

2020 heralds the arrival of a new decade. For the NHS it brings a renewed commitment to deliver the digital hospital, but embedding technology into the hospital's operations is not just about investing in the latest scanners and other medical equipment. Pulse finds out why managing patient flow efficiently has to be at the heart of any digital hospital model.

Think for a moment about how travel services have changed in the last five years. At major airports the check-in process and bag drop has been automated, information is communicated via big screens, or increasingly via an app on the customer's phone, physical tickets are disappearing and even passport control is an automatic process for adults with a new, digital passport. Why then do so many hospitals still rely on the patient arriving with a piece of paper that has to be handed over to a receptionist, who may then have to direct them through a labyrinth of corridors to arrive at their appointment - or series of appointments - where they are asked to take a seat but given no information about waiting times, and then when they are called in they find the doctor does not have their notes?

In his first keynote speech since the recent general election, Secretary of State for Health and Social Care, Matt Hancock renewed his commitment to the digitisation of the NHS, saying: "We're going to double down on the tech agenda and bring the NHS into the 21st century."

To accelerate this programme he announced the introduction of a digital aspirant programme and confirmed that the CQC's inspection regime will assess hospitals "against good use of high-quality technology."

Efficient portering

Portering services are at the heart of efficient patient flow through the hospital, being instrumental in ensuring patients, beds and other equipment are in the right place at the right time.

Just a few minutes lost on individual portering tasks as a result of failure to communicate full information about the task, (for example, whether a wheelchair is needed by the patient), or the porter control not knowing the location of all porters at any given time can, over the course of a day, add up to the loss of many hours of clinical time. Multiply that over a week or a year and it's a sizeable problem. These wasted hours represent time that could have been spent in productive patient care. It is therefore perhaps surprising that portering services have not received more attention from suppliers offering solutions to bring greater efficiency.

Richard Iveson, Business Development Manager Healthcare at GlobalView Systems is acutely aware of the increasing challenges faced by staff within the NHS. "The facilities department, in our opinion, has been mostly undervalued in the past but it can play such an influential role in the effectiveness of every hospital and most importantly, positive patient outcomes."

GlobalView Systems specialises in designing and developing two-way radio software, originally for use on boats. The company became aware that its software could be useful for the NHS after helping Hull and East Yorkshire NHS Trust to integrate its new two-way radios with its MiCad Backtraq FM software. The aim was to enable portering tasks to be automated by linking with the existing portering task management solution. GlobalView Systems had the software to facilitate this and worked closely with MiCad to deliver a solution for the Trust.

GlobalView Systems spent some time researching the needs of the healthcare market and developed MyPorter as a specific tool to improve efficiency across the high volume, time critical portering service. MyPorter provides real-time data, including the current location of all porters, to improve decision making and ensure resources can be correctly allocated to avoid bottlenecks and delays. Its dashboard is equipped with all the tools necessary for the operator to make informed decisions. This results in improved patient flow and bed turnaround rate.

"The main issue is to prioritise jobs
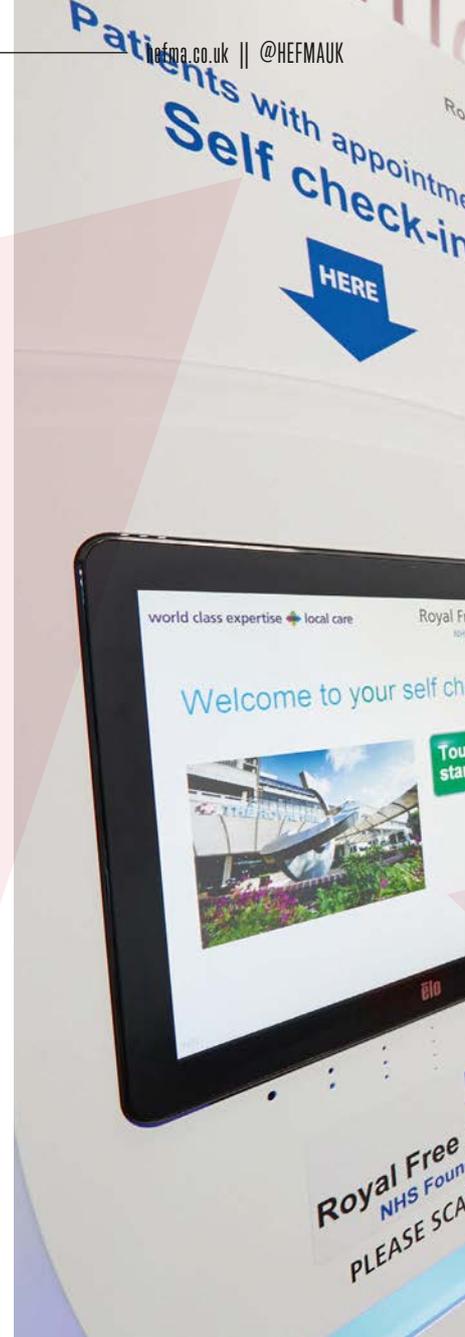
"Transforming patient flow into a digital model involves integration and interoperability across systems and processes"
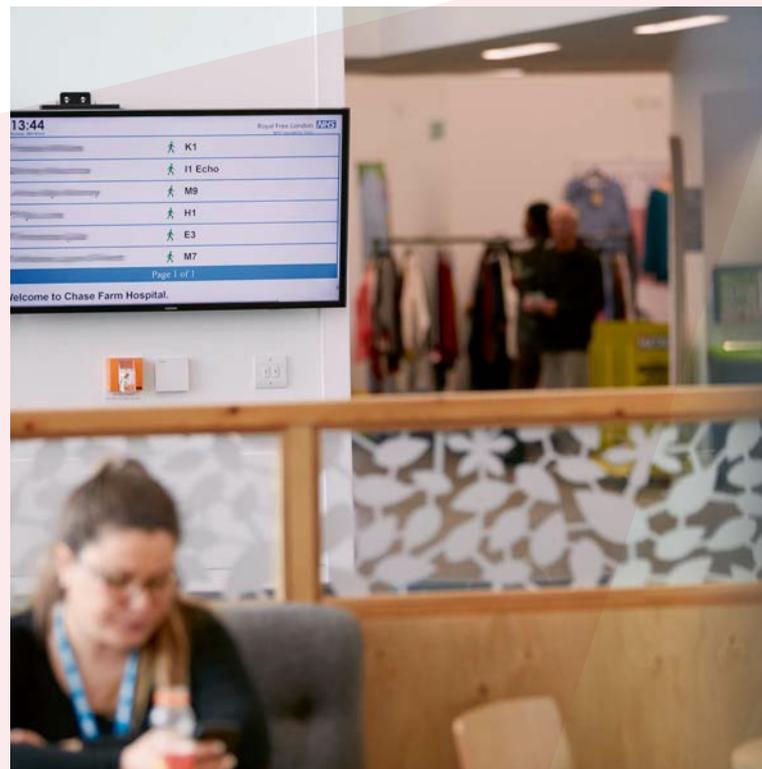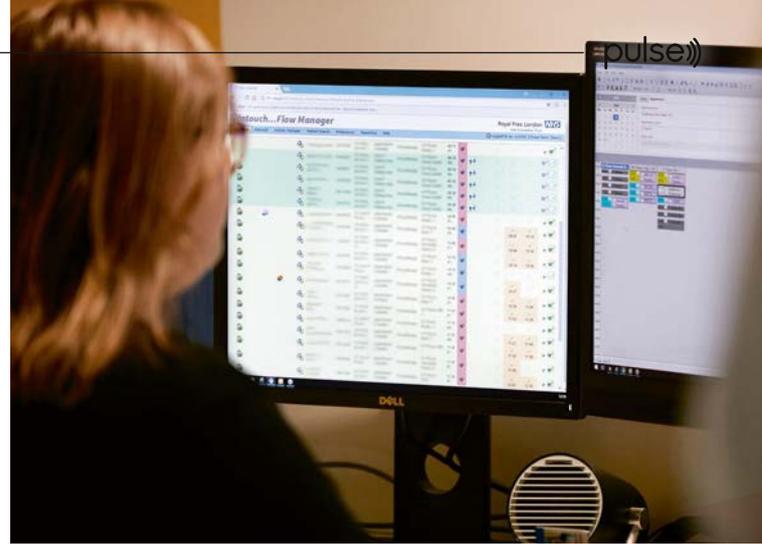
and then make the right decisions about which porter to send where," Richard tells Pulse. Using MyPorter, communication of tasks to porters is via two-way radio. This is simple to use, proven and robust technology that works even in parts of the hospital where Wi-Fi fears to go - often the very areas where facilities and support staff are working. Nor is it vulnerable to malware and virus attacks.

Outpatients

Transforming patient flow into a digital model involves integration and interoperability across systems and processes. The airport model already referenced has minimised human interventions. Applying this approach to the hospital, Intouch with Health has monitored patient flow in the outpatients department to first identify where the pressure points are and then highlight areas within that patient

journey where time could be saved and efficiencies introduced.

Intouch with Health specialises in supporting the transition to digital hospitals with a holistic solution for outpatient services. It manages more than 15 million outpatient appointments every year, and is in use by around 110 hospitals across some 60 NHS Trusts. Flow Manager is the hub at the heart of the Intouch with Health system, which pulls information in and pushes data out to patients and clinicians. Flow Manager provides a patient flow management dashboard, which allows users to view and manage all patient workflow requirements on the patient journey - from arrival to discharge.

Secure, digital check-in reduces queues and administrative time. Using their mobile phone, patients can interact and manage appointments. Walk-in patients can register for non-booked

appointments using either a self-service kiosk or their mobile, a feature that could be used to direct minor injuries away from A&E. Dynamic management of clinic waiting times is enabled by making information available to staff. Patients are directed to their designated waiting areas when required and automatically advised of delays which, if lengthy, mean they could choose to wait in a more comfortable area of the hospital, perhaps a café or coffee shop. Wayfinding is improved by allowing digital maps of the hospital to be viewed via kiosks located around the site or on a mobile phone via an app.

Flow Manager is only part of the digital hospital solution from Intouch with Health, which also offers Activity Manager to plan and manage clinical activities, as well as new pre-operative assessment system Synopsis iQ.

Improving the flow of outpatients improves clinical efficiency by enabling a smooth movement of patients and more effective use of space leading to efficiency gain of 10-20%. It improves the patient experience by reducing queues and providing better communications. It can also have financial benefits - Intouch with Health reports return on investment can be expected in 6-12 months through the ability to redeploy reception staff and better data quality offering proof of performance.

Chase Farm Hospital and Aintree University Hospital have both embarked on digitisation programmes that have included patient flow management innovations.

The new Chase Farm Hospital, which opened last year, is one of the most digitally advanced hospitals in the country. The hospital initiated a complete patient flow project to

MyPorter Screen Tasks per hour

MyPorter Screen Task status

improve the patient experience and drive efficiencies for hospital staff.

Working with Intouch with Health, Chase Farm has transformed the way it manages its outpatient services, utilising kiosk technology to remove the need for a main reception and a digital central hub used by clinical staff to identify a patient's arrival in a given waiting area or sub reception.

Among the efficiencies achieved through the new patient management system are: the elimination of queues; clinicians can see where the patient is in the system; staff no longer repeat tasks unnecessarily; live data means staff can respond quickly; and more patient-facing time has been released.

In addition, the number of receptionists in outpatients has been reduced from 28 formerly to just two. As the NHS faces a workforce crisis across all disciplines with staff shortages cited as one of the biggest

problems for Trusts across the country, this is a perfect example of the use of technology providing an opportunity to redeploy staff into other operational areas of the hospital.

Chase Farm is a new hospital and it's harder to introduce digital transformation into older buildings - harder, but not impossible.

Aintree University Hospital has also optimised the patient's journey with a complete end-to-end integrated pathway that begins with Dr. Doctor, uses Flow Manager, Synopsis and follows up with electronic letters utilising Synertec. The outpatient flow at the hospital is now quieter and slicker.

Overcoming challenges

It will come as no surprise to most that people are said to be the biggest challenge for digital transformation. People are afraid of change and in the

NHS they are often afraid of making those decisions that will introduce change. The advice from those who have led this process of change at Chase Farm and Aintree University Hospital is to share your vision, be honest and engage at every stage of the process and senior management then need to hold their nerve and not allow doubters to sway their vision.

Ensure that in all communications and marketing of these changes are positioned as measures to improve the patient experience, care and safety and not as a cost improvement programme, which makes it more attractive to clinicians.

Don't be put off by suggestions that patients - particularly the elderly - may struggle to understand and use the new technology, because both Chase Farm and Aintree University Hospital report that this has not been a problem.

A final word of advice from Peter Beaumont, Sales Director of Intouch with Health: "Don't just invest in the solution because it looks good but because you believe in the benefits and don't just introduce the technology and then move onto another project - the benefits need to be managed."

Next steps

In our increasingly virtual world it is hardly surprising that the future is likely to include virtual solutions - such as virtual consultations - and increased deployment of artificial intelligence to enable the wealth of data that is being collected to be processed and used for the benefit of patients. ◗))

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