UnBLOCK the Chain

How can automation improve outpatient care while reducing costs?

The new role of hospitals and the triple aim challenge

Rather than being an unaffordable luxury, automation can quickly deliver an impressive return on investment.

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The list of advanced technology and automation in healthcare is growing, from using Amazon Echoes to provide adult social care (**paconsulting.com/our-experi-ence/argenti-using-technology-to-drive-social-care-transformation/**), to automating genome sequencing. Automation improves quality, decreases costs and reduces human error. It's an especially valuable tool as healthcare systems focus more attention on patient outcomes—a practice referred to as value-based care. Yet the opportunities of automation aren't well understood, slowing

the pace of adoption.

Healthcare often sees automation as a luxury—very few healthcare organisations are exploiting the benefits that automation has to offer. In fact, only a few of the UK's 152 acute National Health Service (NHS) Trusts have started to use new forms of automation such as robotic process automation. But as it has the potential to reduce staffing costs and improve quality and efficiency, more organisations should see it as a valuable opportunity during this time of financial challenges. Robotic solutions for finance and human resources functions, for example, can be launched quickly and rapidly generate a good return on investment and improve insight into process performance.

While these technologies have clear application in the back office, some of the biggest benefits of automation may be for front office processes such as outpatient appointment management.

> " CREATED CAPACITY FOR 80 ADDITIONAL HOURS OF OPERATIONS AND 430 OUTPATIENT APPOINTMENTS A MONTH "

Improving the booking process

Automation is perfect for improving the booking process, which in many Trusts is a cumbersome, manual process. For example, a software robot could gather empty slots and clearly present them to schedulers for rebooking. Or it could automatically move patients from a cancelled clinic to the next suitable available one based on defined rules. We're developing such a smart booking system with an NHS Trust with the aim of improving appointment attendance.

Speeding up customer service

Chatbots are more advanced than ever and are being used by a variety of businesses around the world. So why not replicate this in healthcare? A patient with a query about their outpatient appointment could initially speak to a chatbot that handles all basic questions by following rules. When there are more complex problems, or instances where the patient wants to speak to a person, the chatbot transfers them to the human team. We have seen the effective use of chatbots in apps such as Your.

MD, which is taking the idea further by using AI and machine learning to provide personalised health information. It uses algorithms trained on validated medical literature, allowing the chatbot to learn common symptoms and provide care recommendations to the patient.

Managing capacity more effectively

By looking at historical data around peak times for appointments, the use of advanced analytics, where the system is automated to examine large data sets to generate recommendations, can tell when and where healthcare organisations are likely to need more capacity. Organisations can then tweak the capacity to ensure the most people are helped in the most cost-efficient way. PA Consulting applied this in recent work at Hillingdon Hospitals NHS Foundation Trust (**paconsulting.com/our-experience/saving-10-million-by-managing-time-and-resources-with-care/**) New software was used to improve systems for scheduling surgery and booking outpatient clinics by giving a clearer view of the time and capacity available. This created capacity for 80 additional hours of operations and 430 outpatient appointments a month.

Bring automation to healthcare

Looking at outpatient processes through the lens of automation highlights immediate opportunities in the front and back office. Rather than being an unaffordable luxury, automation can quickly deliver an impressive return on investment. ∎

KEY POINTS

✔ Automation can improve outpatient care while reducing costs. It is an especially valuable tool as healthcare systems focus more attention on patient outcomes

✔ Looking at outpatient processes through the lens of automation highlights immediate opportunities in the front and back office

✔ Rather than being an unaffordable luxury, automation can quickly deliver an impressive return on investment