

Blue Prism delivers seamless integration with NPfIT PAS for UHB's Self Service Kiosks project



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About the customer

University Hospitals Birmingham NHS Foundation Trust is the leading university teaching hospital in the West Midlands. It one of the most-consistently highest performing trusts in the NHS and has been rated “excellent” for financial management and “good” for quality of clinical and non-clinical services for the past three years by the Healthcare Commission.

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The Trust runs two hospitals – the Queen Elizabeth Hospital and Selly Oak Hospital – which provide adult services to more than half a million patients every year, from a single outpatient appointment to a heart transplant. The Trust is a regional centre for cancer, trauma, burns and plastics, and has the largest solid organ transplantation programme in Europe.

The Trust employs around 6,900 staff and is currently building Birmingham’s first new acute hospital in 70 years. The £545 million hospital opened its doors to patients in the Summer of 2010.

UHB IT Services have been driving new innovations for many years and has ISO9001 certification, demonstrating the unstinting commitment to quality that has driven the department.

The Challenge

The project objectives were:

- Ensure that the patient registration experience is exceptional: intuitive, easy to use, fast, accurate, providing queue free check-in
- Integrate into the National Program Patient Administration System (PAS), gaining access to data without compromising the security model
- Deliver the solution in very short timescales within the financial constraints of the Trust
- Meet the deadline to have systems operational by 2009, in advance of the opening of the new hospital in July 2010

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— Steve Chilton, UHB’s deputy director of IT Services



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— Dean Grinham, Program Delivery Manager, UHB IT Services

The new hospital design assumed efficiencies through centralised functions backed via technology innovation. The challenge therefore, to build self registration systems to handle large volumes of “patient flows”, was taken up by Steve Chilton, UHB’s Deputy director of IT Services.

Steve commented “the whole patient experience from the moment they enter the hospital to the point of their departure has to be as pleasant an experience as possible, given the circumstances”. Steve commented further “We had a real challenge ahead of us. How could we accurately register patients, using technology that integrates with the NPfIT PAS that helps to underpin the patient encounter”.

Steve and his team quickly decided that they needed to build self service kiosks. Steve had noted how successfully these had been used in other industries, but also that people experienced frustration sometimes when the interface was not intuitive and the date was wrong. He wanted to ensure that a high proportion of patients would use the system, be delighted with how quickly they could get registered, and for the data to be correct for the vast majority of cases. This represented a unique innovation for NHS Trusts and demonstrated how the NHS continues to strive to deliver the best patient care possible.

“I had talked to the traditional BPM and Data Integration vendors and quickly realised that they would require a deep access route into the NPfIT PAS which was not a viable option for us” commented

Steve, “but during my research I discovered that Blue Prism might be a potential fit. It looked like it would allow us to gain access to the data we needed for the kiosk very rapidly, but most importantly it would operate within the existing security model”.

Summary of business benefits

- First ever patient self-administration kiosk in a NHS Trust Hospital using the National Program of IT (NPfIT) patient Administration System (PAS)
- 50% Improvement in staff efficiency
- 51% of patients registering with self registration kiosk
- High satisfaction ratings from patients: No queuing, fast and easy to understand self registration process
- Patient flow now faster - Twice as fast for self registration versus traditional reception approach
- Rapid system integration with NPfIT Patient Administration Systems (PAS)
- Adherence to the NPfIT security policy and IT Standards
- Improvement in data quality on PAS system
- Implementation completed in less than 3 months

The Solution

Utilising Blue Prism, the project team, headed up by Dean Grinham, Project Delivery Manager IT Services, set about building the kiosks and the supporting systems. dean stated “We wanted first to pilot the kiosk in a local reception area, we needed the system to be proven and reliable for the 2010 opening so that meant we wanted the system in and working by the summer of 2008”.



This was a very tight deadline and the Blue Prism team needed to demonstrate that the integration was possible. A proof of concept conducted over a matter of days demonstrated to the UHB IT team that the solution worked perfectly. So, after proving the technology, the Blue Prism team and UHB IT set about designing, building, testing and deploying the integration process in a matter of weeks. “We were delighted with how quickly we got the data integration process working; and how we were able to design the process to fit within our security model” commented dean.

The user interface and self registration software built by UHB IT Services with Kiosk being supplied by a 3rd party. The project was delivered on time and within budget.

As part of one of the largest Healthcare construction projects in Europe, University Hospitals Birmingham is undergoing a massive transformation into one of the finest new medical facilities in the UK. Many new innovations are being introduced, in advance of the opening of the new hospital, with one of the critical areas for focus being improving the patient experience, right from the moment they enter the hospital through their whole course of treatment.

In the new hospital, a significant consolidation of reception areas is being implemented to streamline reception and registration services. This presented a significant challenge in terms of how patient registration could be effectively and efficiently managed whilst ensuring the quality of patient interaction. UHB IT Services realised that technology could be used to support the change, but they were constrained by difficulties integrating their automated kiosk solution with the NPfIT system. With Blue Prism, they found the technology partner that allowed UHB to overcome these difficulties.

The Benefits

The trial ran for 2 months. A fully operational kiosk was built and deployed in Selly Oak hospital with the supporting system running from the secure environment of UHB’s IT data centre. The results of the trial have been extremely impressed. “We are delighted with the positive feedback we have received from the patients and the receptionists” commented Chilton, “with over 51% of patients using the system and cutting registration time for both the patient and the hospital”

What has also provided a sense of satisfaction to Steve and the team is that the system have been developed without compromising the security model and that the Trust has been able to leverage the benefits provided by the central NPfIT program.



Kiosks have allowed data quality to be maintained, for the patients whose details are not correct on the kiosk, the patient is referred to a receptionist who then immediately changes the details on the core PAS system.

“Blue Prism has allowed us to meet and deliver our own business requirements in the timescales and financial constraints we needed” stated Steve, “we are very pleased with the self service kiosk pilot reflecting the innovative nature of IT Services within UHB.”

Since the solution has been in operation, several major projects are now being considered by UHB IT Services where the unique capabilities of Blue Prism technology will be deployed including processes to improve patient outcomes and continue to improve the patient experience.

Commenting on the completion of the project, Alastair Bathgate, CEO of Blue Prism said:

“The new UHB hospital project is a world class initiative, and I am very proud that Blue Prism formed such a vital link in the innovative solution that UHB IT Services team have produced. We have enjoyed working with the team and look forward to future innovations made possible by their vision and our technology”.

ABOUT BLUE PRISM

Blue Prism provides a new generation of operational agility software to 20 NHS Trusts. Blue Prism’s innovative technology also helps organisations like Barclays, npower, The Co-operative Financial Services and Shop direct manage complex business processes, rapidly and seamlessly linking people and systems together to target dynamic business goals.

About Blue Prism

As the pioneer, innovator, and market leader in RPA, Blue Prism delivers the world’s most successful digital workforce. The company’s software robots automate repetitive administrative tasks while meeting the requirements of the most demanding IT environments, where security, compliance, and scalability are paramount.

Blue Prism provides a scalable and robust execution platform for best-of-breed AI and cognitive technologies, and has emerged as the trusted and secure RPA platform of choice for the Fortune 500.

To learn more, visit www.blueprism.com and contact +44 (0) 870 879 3000 | +1 888 757 7476.