

Delivering Digital Transformation for Liverpool University Hospitals NHS Foundation Trust

Paper-Free Health Records

Digitisation in the healthcare sector has three main objectives: Saving costs, improving efficiency and gaining more quality time with patients.

Health and Social Care Secretary Matt Hancock launched an initiative in October 2018 to transform NHS Trust technology to allow adequate access to real-time data. As a direct result of this initiative, Fortrus Ltd formed a partnership with The Royal Liverpool and Broadgreen Hospital NHS Trust (RLBUHT) to provide the Trust and the citizens of Liverpool with a Paper-Free Health Record (PFHR) solution.

NHS Trust Embraces Technology Partnerships

Fortrus is a best-of-breed specialist in IT solutions, who delivers digital transformation through outcomes-based solutions embedded in a managed service. This approach reduces risk, ensures the most effective and innovative technologies, and provides guaranteed results. Their mission is to radically improve Digital Transformation in private and public sector organisations, across multiple industries and territories. Since 2016, Fortrus has been a partner of Ephesoft and uses its Ephesoft Transact solution as the main component for smart capturing – a key element of the Paper- Free Health Record (PFHR) solution.



Liverpool University Hospitals
NHS Foundation Trust

Customer

NHS - The Royal Liverpool and Broadgreen University Hospitals NHS Trust

Partner

Fortrus Ltd

Sector

Healthcare

Use Case

Electronic patient records accessible by clinicians, admin teams, patients

Results

- Structured, searchable data which is easily accessible for all users
- Support of universally accessible electronic patient records
- Streamlined processes resulting in more time for patient contact
- Successful implementation within three months
- Comprehensive customisation options for an individual solution



The Situation

The Royal Liverpool and Broadgreen Hospital NHS Trust is now part of Liverpool University Hospitals NHS Foundation Trust along with Aintree University Hospitals NHS Foundation Trust.

RLBUHT provides a comprehensive range of specialist services to 750,000 people each year within a total catchment population of more than two million people in Merseyside, Cheshire, North Wales, the Isle of Man and beyond. In the past year, they provided emergency and urgent care for over 245,000 people, over 92,000 of whom were in their emergency department. They cared for over 114,000-day case and inpatients and provided over 600,000 outpatient appointments.

With the development of a new hospital site well under way, the trust set a challenging target for paperless working, ahead of the government's 2020 target. Facing the challenges of cost saving and improving efficiency, RLBUHT was searching for a solution to increase the time spent with the patients and improve the working processes surrounding this interaction.

There will be no facilities to store health records in the new state of the art, digital hospital which has been designed to operate within a paperless environment, so it was imperative that processes were put in place to support this way of working.

The Challenge

RLBUH set out to implement best-of-breed digital technology to pioneer digital knowledge and expertise, while increasing efficiency, decreasing costs and improving patient care. The scope of the project was to develop a Paper-Free Health Record. The NHS Trust partnered with Fortrus under a fully managed service agreement that included a best-of-breed partner ecosystem, of 14+ suppliers to deliver the optimum outcome. Ephesoft was a key component of this supplier ecosystem.

The solution was implemented with the view of being a Liverpool-wide integration, engaging clinicians, non-clinical users and external organisations who required access to the PFHR.





The Solution

Fortrus provided together with Ephesoft a system that captures all relevant data and makes it searchable and usable for all hospital purposes. Historically, documents were handled in paper format with structured and unstructured data trapped in siloed repositories. Now all the input is digitalised and organised by date and patient details are easily searchable via keywords. The system also interacts with the patient administration system (PAS) to enable searches across all patients and all clinics.

Specifically, Ephesoft's patented, intelligent capture and classification solution boosted productivity and streamlined workflows. Supervised machine learning classifies, separates and sorts content without the need for human intervention. The structured data within the document is easily located and extracted, and exceptions are flagged for human intervention. Supervised machine learning incorporates validation actions to continuously improve the accuracy while getting smarter and adding value over time.

The approach is a continual process that enables the PFHR to evolve over time and constantly meet the needs of future changes, whether that addresses NHS Trust compliance regulation changes or meeting the needs of the organisational drivers for RLBUH and its clinicians. Fortrus' managed service contract has been in place for the last 4 years and continues to evolve. There are currently 6,500 users using the PFHR solution provided by Fortrus, including Ephesoft Transact across two sites and as of June 2019. Fortrus continues to provide a managed service to digitise all paper records ahead of the move to the new hospital site.



The Results

The key to success of this project was creating an intuitive, easy to use user experience. Fortrus engaged users through a research and development approach whereby user research was conducted at the point of care. Also, crucial to the success of the project was the willingness of the Fortrus supplier network to integrate exchange information to ensure interoperability and ease of access to critical information.

"From the outset, it was obvious that RLBUHT was interested in a long-lasting, trusted relationship to achieve their digital goals. Using industry specific knowledge from the Fortrus and Ephesoft teams, along with a deep understanding of the specific needs of the trust and its staff, it was clear that the supplier relationship management was critical to the on-going success of this project." Jonathan Lofthouse – Improvement Director - Liverpool University Hospitals NHS Foundation Trust.

There are a number of benefits that have been realised over the course of the PFHR project, which include reduced storage costs, eliminating lost case notes and more efficient access to data. The historical main records library is centred in Liverpool, with physical storage facilities also at Broadgreen hospital and several smaller satellite sites where records are currently held. However, these locations will soon close once all legacy documents have been scanned and deep stored in line with BS10008. Then, the physical records will be destroyed in line with NHS Trust's destruction policy.

After implementing Ephesoft, RLBUHT was able to minimise manual data entry and make lost documents a thing of the past. By empowering the staff to work more efficiently, Ephesoft was a key part of the solution that delivered significant cost reductions in healthcare document handling.

Digital records are more secure than paper records because they can be protected with role-based access and other rules that protect sensitive information from being accessed when it shouldn't be. With Ephesoft in place, Fortrus created an electronic health record that can be securely shared between primary care offices, specialists, hospitals and nursing homes.



The Medical Records library staff gained immediate efficiency savings in tracking, pulling, re-filing, preparing, auditing and locating the health records. The automation of this file tracking process also released clinical staff from this administrative chore and thereby making more patient-facing time available. Becoming paper-free involves a huge organisational change. It involves bringing new technologies together alongside new ways of

working to meet a defined strategic outcome that delivers a wide range of benefits, including improved patient outcomes and experience through an increased quality of patient data. Allowing real-time clinical data capture to support clinical improvement is another important part of the process, especially by the reduction of duplicate data collections and increased support enabling collaborative working between clinicians.

“Undertaking a digital transformation project on this scale in a constantly changing environment, and without compromising patient care, is no easy task. Strong leadership and regular communication with the project stakeholders kept the Fortrus team regularly informed and up to date on the RLBHHT strategy and plans to ensure success. The outcomes were not only beneficial internally to hospital staff, but it will improve the overall patient experience and quality of data and records.”

Jonathan Lofthouse – Improvement Director - Liverpool University Hospitals NHS Foundation Trust.

The Future

Fortrus will continue to work with Ephesoft to support the PFHR project through their managed service and the records digitisation process is set to continue throughout 2019 and 2020. In addition to PFHR, Fortrus is providing the EPR archiving project to allow the migration of legacy data from over 10 legacy systems to be ingested into Unity accessible alongside the digitised patient record.

The future roadmap will support RLBHHT moving many key applications into a secure cloud environment aligning with their 5-year cloud strategy beyond 2020.

All of these projects are being delivered through an outcome-based approach and procured through the new OJEU compliant– Digital Transformation Framework - hosted by Countess of Chester Commercial Procurement Department.



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