

FROM PAPER NOTES TO ELECTRONIC PORTAL

SUCCESSFUL PROOF OF CONCEPT STUDY

“Portals are the way forward to help increase efficiency, improve treatment, diagnosis and patient safety. It will make the paperless clinic a reality which is long overdue.”

Professor Patrick Chu
consultant haematologist

The Royal Liverpool and Broadgreen University Hospitals 
NHS Trust

Proof of concept evaluation by Royal Liverpool and Broadgreen University Hospitals NHS Trust into using a clinical portal to replace paper notes in clinics. Delivered by CSC, in collaboration with Carefx.

TRUST BACKGROUND

The trust is among the largest and busiest teaching trusts in the north of England with an annual budget of over £400 million, more than 5,500 staff, including 300 consultants, serving almost one million patients a year. It provides general hospital services, specialist and emergency care including a full range of medical, surgical, diagnostic, rehabilitation and therapy services. It is a leading organisation for research and education and is unique in hosting a UK National Institute for Health Research Biomedical Research Centre and a Clinical Research Facility and a Biomedical Research Unit for Pancreatic Diseases.

THE PROBLEM

Dependence on paper case notes in the trust's clinics was a source of numerous issues including delays and inaccuracies in patient information:

- Half of all case notes were on loan when clerks needed them for a clinic
- Obtaining a complete view of a patient's overall health condition required clinicians to access and navigate multiple clinical systems, so paper case notes were perceived as being more convenient
- Up to 60% of clinic clerk time was spent trying to locate case notes that were being moved around various clinics
- Files out on loan to other clinics meant 12% of notes were temporary
- Clinicians often had to work without case notes, increasing risks to patients
- Tests were duplicated because results were missing
- Hand-written notes could be difficult to read and were sometimes incomplete

THE PROJECT

The trust decided to use a commercially available clinical portal solution, from CSC, to test whether paper-free clinics were possible and assess the advantages. The proof of concept evaluation ran for 60 days between June and September 2010 and was used in smaller clinics with an average of 15 patients each. Working with CSC, the project managers devised full assessment criteria against which results could be measured and opinion of clinicians assessed. CSC partnered with Carefx, a leading interoperability platform provider, to deploy the portal which was built on Carefx's Fusionfx platform.

Portals are a cost-effective way to replace paper-based systems with fast, accurate electronic patient information presented on a single screen. Patient information simply has to be stored electronically, on any of the organisation's existing systems, and the portal can call it up and put it together in seconds. Portals protect existing investments by avoiding the need to 'rip and replace' and long deployment processes.

The uniqueness of the CSC portal solution, based on Fusionfx, is that it creates a virtual electronic patient record that provides healthcare staff with simplified access to real-time information that can show the entire patient journey - including up-to-date records as soon as a patient walks into a clinic. Being based on global clinical context standards, the portal cuts time having to navigate between different systems and applications, therefore improving the quality, safety and efficiency of patient care.



DRIVING EFFICIENCIES

The trust tested the portal with patients needing services from its dermatology and haematology departments. The early results were so good that its use was extended to cardiology, renal departments and across larger clinics and more complex cases. Clinicians were asked to provide feedback on whether it met their needs.

THE RESULTS

The portal successfully collated information from disparate clinical and administrative systems such as the PAS (patient administration system), orders and results and PACS (picture archiving and communications system). Consultants, their registrars and specialist nurses were able to consult with patients by viewing patient medical history, key treatments, referrals, diagnosis and test results electronically rather than by paper case notes.

The evaluation reports showed it was a complete success. All of the targets set have been met or exceeded. For example, the aim was that 75% of patients seen at the clinics in the pilot should have their consultation using the portal: in fact the number was 98%. Feedback from clinicians was extremely positive. The problems linked to traditional case notes were eliminated.

Perhaps the most impressive figure to come out of the proof of concept study was that the efficiency of the portal meant clinic times were cut by an average of 30 minutes.

Just as significant was the saving in nurse time: not having to move files saved 12 minutes per 25 patients. Clinic clerks previously spent 60% of their time tracking down files in order to prepare case notes. It is anticipated this will be solved.

PATIENT BENEFITS AND THE FUTURE

The greatest advantage of the portal was the improvement in the speed, efficiency and safety of patient services. Diagnosis and treatment could be delivered more quickly and with greater confidence. Less time and money was wasted on duplicating tests because the results could not be found. Another benefit is that the infection risk from moving files between people and departments was ended.

Following the successful proof of concept, the trust has now confirmed that it will deploy the CSC clinical portal solution across all its clinics. By creating a bridge between applications, the portal will enable the trust to extend the life of existing systems that might otherwise need to be upgraded or replaced. It will initially be licensed for use by up to 2,500 staff across the two hospital sites and will ultimately support access to data from over 17 existing systems. The first phase of the rollout will give the trust's 300 consultants instant access to a range of patient data including test results, medical images and letters.

Andrew Spence, CSC's UK director of healthcare strategy, said: "The pilot demonstrated how clinical staff can benefit from portals. By making access to relevant data simpler as part of their workflows, clinicians can spend more time concentrating on their patients. I believe the work at Royal Liverpool and Broadgreen University Hospitals NHS Trust will ultimately benefit other trusts. It is clear that portal technology can drive efficiencies and provide a more seamless service for patients."

"Missing case notes were a big frustration, though I had reservations about whether a portal was the answer. But it's brilliant and makes it so much easier to deal with patients properly."

Dr Janice Harper, renal specialist



WANT TO KNOW MORE ?

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