Case Study

York Hospitals NHS Trust

WORKFLOW FOR YOUR EXISTING RIS

CLASS LEADING VR

RADIOLOGY REPORTING IN AN EPR ENVIRONMENT

"The departmental transition to voice recognition was smooth and straightforward. Operationally, it transformed our functionality - report turnaround time has gone from weeks to hours and I'm delighted that York Hospital can report a 100% VR adoption."

Dr Dan Petty, Consultant Radiologist

An advanced reporting system & 100% VR adoption brings workflow advantages to York Hospital

Reporting

York Teaching Hospital NHS Foundation Trust has 10 hospital sites and offers a range of clinical specialities.

The Trust provides a comprehensive range of acute hospital and specialist healthcare services for 800,000 people in North and North East Yorkshire and covers 3400 square miles - one of the biggest geographical areas in the country. In 2011 the Trust adopted a regional approach by managing the community-based services in Selby, York, Scarborough, Whitby and Ryedale and, to further broaden their services, acquired Scarborough and North East Yorkshire Healthcare NHS Trust in 2012; bringing Scarborough and Bridlington Hospitals into the organisation.

York Teaching Hospital NHS Foundation Trust works alongside regional Clinical Commissioning Groups (CCGs) and local authorities to ensure that their services are continuously developed to meet patient's needs - from the expected high-standards of treatment and point-of-care conduct to more behind-the-scenes but vital HIS (Healthcare Information Systems) development which supports the required accuracy levels of EPRs (Electronic Patient Records) within a hospital's many departments and clinical disciplines.

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TRUST-DEVELOPED EPR NEEDED WORKFLOW SUPPORT

Located in the centre of the city, York Hospital is the Trust's largest hospital. Its radiology department allows direct access to radiology imaging for GPs as well as radiological and imaging services - such as diagnostic X-ray, ultrasound scanning, CT/MRI scanning, nuclear medicine scanning, breast imaging, a bedded vascular imaging unit (which provides cardiology, vascular and interventional radiology procedures) and emergency X-ray services. The department supports the vast array of clinical tests, procedures and administration using a series of software and workflow platforms with which they can enter, record and store imaging processes for their patients.

Dr Dan Petty, Consultant Radiologist for York Hospital, has been with the Trust for over 10 years and was privy to the technological advances which had been brought to the hospital by increasing patient needs, national sector requirements and growing amounts of paperwork. The Radiology department previously used a workflow system which was mostly paper-based in its orientation and relied on a basic dictate, transcribe and verify process by the department's radiologists and audio secretaries. This process was supported by CPD; an electronic patient record (EPR) platform developed by the Trust to support clinical care and administrative processes - including inpatients/outpatients, waiting list management, theatre scheduling, pathology and radiology results. Alongside a digital dictation system from G2 Speech and an imaging interface from PACS provider, Aspyra, Dan and his team had a functional but slow process of reporting radiology tasks. The G2 Speech system created dictation worklists for the secretarial team who audio-transcribed the files directly into CPD which then relayed them back to the radiologist for checking.

This approach created a disjointed reporting flow with several solutions being used by different personnel and when workloads were strained, significant delays in document turnaround occurred. Dan comments:

"These delays emerged in both the transcription and verification stages; transcription backlogs were apparent due to an imbalance of typing supply and demand and poor digital organisation of transcribed files – often not in priority or chronological order – increased workload pressures on radiologists where it was not obvious which file needed immediate attention."

RENEWAL OF PACS PROVIDES NEW OPPORTUNITIES

The impending renewal of MedView, the Asprya PACS system, was the catalyst that York Hospital needed to invest into a dedicated reporting platform. After opting for Carestream PACS, Dan and the Radiology team decided that key elements of workflow needing addressing – predominately the untimely audio transcription stage and reliability of the legacy digital dictation system.

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The criteria for the assistive system was clear – York Hospital needed a fully-fledged reporting system with an intuitive workflow offering. The solution had to provide accurate VR (voice recognition) to replace the "tiered" process of audio typing and therefore quicken document turnaround and, importantly, had to integrate seamlessly with the Trust's HIS, CPD. After evaluating several vendors, York Hospital chose Reporting+ from UK and Australia based Radiology Information Systems (RIS) solutions developer, Soliton IT.

Reporting+ is a clinical reporting module extracted from Soliton's leading RIS solution, Radiology+. This singular module can be applied into Trust's respective RIS (in York's case, the CPD system) to bring benefits of a modern reporting workflow with fully functional VR. Typically used within Radiology, Pathology and Cardiology departments, Reporting+ offers extensive workflow monitoring as well as practically extending the capacity of a pre-installed RIS within a Trust by supplying additional reporting features to a site which is not in a position to replace their existing RIS.

OPTIMISED WORKFLOW AND VR WITH REPORTING+

York Hospital was impressed with the application and deployed the solution into both their York and Scarborough Radiology departments. Users found that the platform interface was particularly easy to use and perfectly functional with workflow monitoring live dashboards for departmental management overviews. The statistics element was also a key feature; interactive graphical statistical analysis allowed the Radiology department to draw on customisable reports to calculate and display divisional operations and performances.

However it was the extent of measurable workflow organisation allowed by Reporting+ which proved most beneficial. Prioritisation and organisation of pending tasks meant that records could be fast-tracked intra-departmentally to prioritise patient tests/screening and secretaries could continue to administer clerical tasks within Reporting+ by applying their own context adaptions accordingly. The new VR engine, SpeechMagic formulated by Nuance, optimised the department's functionality with its voice-to-text function and therefore eliminated the time restraints of the previous audio transcription process. The VR application provided accurate and clinical contexts – UK Radiology terminology - were pre-embedded into the software to enable even quicker creation of reports and the technology is now used by over 100-staff throughout the Trust.

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REPORTING+ - KEY BENEFITS

- Proven integration with Carestream PACS
- Flexible, modular and adaptable to individual user and site requirements
- Optimised for remote reporting
- Configurable workflows via live dashboards
- Intuitive and easy to learn
- Interactive graphical statistical analysis
- Mobile application
- Full audit trail
- Support for larger environments
- Fully integral voice recognition
- Real time HL7 integration

FEATURED PACS PARTNER

Carestream

York Teaching Hospital NHS
NHS Foundation Trust

Reporting

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