

Dragon Medical Fires-Up Turnaround Times at NHS Plymouth

Site profile:

- Histopathology Laboratory headed up by Dr Dean Harmse
- Supported by a team of Biomedical Scientists

Challenge:

- Backlog of approximately 600 patient reports
- Lagging government Turnaround Time targets
- Reports needed more information and accuracy

Results:

- Laboratory's backlog of cases was cleared completely
- Turnaround of new cases was boosted
- Improvements helped Histopathology Laboratory win a £50,000 NHS Innovation Award

Dragon Medical Fires-Up Turnaround Times at NHS Plymouth

In the spring of 2012 the Cellular Pathology Department at Derriford Hospital in Plymouth, headed up by Dr Dean Harmse, was facing a big challenge. The department was struggling to meet the national RCPATH Turnaround Time (TATs) standards for cancer reporting. Changes to the workflow were trialled by Dr Harmse, with the help of two Biomedical Scientists in the laboratory, and then implemented in the Department. These changes transformed the working practices of the department and rapidly took the unit from failing, to award winning status in 6 months.

Underpinning the changes to the workflow is Nuance Dragon Medical, along with TalkingPoint for Pathology. Dragon Medical is Nuance Communication's front-end, real-time, speech recognition solution for healthcare. In Plymouth's case, it worked with Nuance approved integration partner TalkingPoint, which is experienced both in speech and integrating it with existing Healthcare IT systems to ensure any change management or technology-related challenges are addressed effectively.

A success that speaks for itself

Following the deployment of the speech recognition technology – thought to be a UK first in a cut-up department – the turnaround of new cases was boosted from the previous 40% within 10 days, to more than 80% in 10 days – thus exceeding national targets – while the Histopathology laboratory's backlog of approximately 600 cases was cleared completely. The department is also enjoying savings that equate to one assistant per session, or the equivalent of seven man-hours per day. Other time saving achievements result from the automatic entering of data into the hospital's Laboratory Information System, saving pathologists approximately 45 minutes a day. Formerly, Turnaround Times of more than ten weeks were typical, resulting in delays in the diagnosis of cancer – the sooner a histological diagnosis can be made, the sooner the patient can receive not only the next level of treatment, but also the right treatment. A key factor in ensuring the right treatment is the accuracy and amount of detail included in the patient report.

Dragon Medical's recognition accuracy rates and noise cancelling microphones means it can still be depended on to transcribe reliably even when being used in busy and noisy environments.

Post deployment, the dramatic improvements that the workflow has driven in productivity and patient care achievements, has helped the Histopathology Laboratory win a £50,000 NHS Innovation Award, which Plymouth has invested to further improve its department.

The path to success

The success was achieved by the Pathology team restructuring the workload and streamlining cases into red, yellow and green, (with red being most technically difficult or complicated and green the least). Each stream was assigned specific personnel on a day to day basis to manage, order and prioritise individual workloads and ensure standards and targets were met. The key to the success was to establish daily flow in the Green Stream with a dedicated Consultant to report the Green Stream cases from the previous day and move to a FIFO (first-in-first-out) system for the Yellow stream to ensure that the seven-day target for these cases is met. A digital in-house template was developed and this played a significant role in the streamlining of the reporting process in the quest to cut reporting times. The creation of the digital template allowed specimens to be digitally described macroscopically at the cut-up stage, and instantly embedded on the electronic database without the need for secretarial transcription.

The evolving secretarial role

In addition to helping improve TATs, Dragon also influenced a change in working practices in the department. As secretarial roles became less defined by typing, this freed them up to evolve into more of a PA role. Secretaries within the department are certainly less relied upon to type, and instead can support pathologists in more administrative duties, including diary management and meeting preparation. This in turn frees up pathologists to concentrate on core work, and allows them to work more independently from their secretaries, shaping and planning their day according to their own work patterns. The key benefit is that the pathologists are able to report and authorise cases in the absence of secretarial support. This gives pathologists the flexibility to report cases out of 'office hours' and report at times which are convenient for them given other daily duties like meetings etc.

In day to day use, pathologists benefit from speech recognition being time neutral; detailed reports are now created both accurately and in real-time, which makes the process much more convenient for them. Unlike previously, there are no delays waiting for a secretary to type up the report, preventing a typing backlog from building up. The secretary is then

free to conduct tasks that ease the burden on the pathologist, allowing them to concentrate on the important issue of reporting of cases, rather than on administrative tasks.

Working hands free

Dean states that speech recognition has become an invaluable tool for Plymouth's pathology department. He states: "Rollout rapidly became self-propagating because, when pathologists see the ability of the voice recognition workflow system, it becomes a "no brainer". It is invaluable in today's need to work smarter." Such is his belief in the technology, he goes as far to state, "I would not consider taking a post in any laboratory that does not have voice recognition, or has a real commitment to introduce it."

However, he also advises that "the introduction of voice recognition reporting should be planned very carefully. It must never be introduced piece meal. It requires changing the way of working for a number of staff and therefore can meet resistance. To mitigate this, ensure you choose the right system. Don't go part way by putting digital dictation in first and trying to convert later. Ensure it works on a small scale initially before rollout, and make sure training and in-house support is implemented and available continuously."

Positive impact for patients, no impact on cost

Despite the extensive and transformative benefits the technology has had on the Histopathology Laboratory's patients through the greatly improved Turnaround Time, the changes introduced at Derriford were cost neutral – no additional staff or consumables were required and the improvements have been achieved in a climate where it had a £1.54M saving target for the directorate.

Derriford Hospital in Plymouth

uses Dragon Medical Practice Edition 2 from Nuance Healthcare, provided by Nuance Healthcare Connections partner, Talking Point:

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