



SpeechMagic

A Major Turnaround: Implementing MediSpeech powered by SpeechMagic™ across an entire UK Trust

Three years ago, Northumbria Healthcare NHS Foundation Trust set out to become the first in the UK to introduce an entirely speech recognition-based dictation and transcription system to improve document management. Its primary objective was to achieve trust-wide report turnaround times within 48 hours.

Geographically, Northumbria is one of the largest trusts in the country providing healthcare to over half a million people. It is composed of ten hospitals, including three general hospitals and seven community hospitals. With correspondence backlogs of up to 13 weeks, the trust faced a major challenge. No trust in the UK had attempted to initiate this technology on the scale the trust was planning.

“You've got to be brave if you're aiming for a real change,” says Ann Wright, the trust's executive director for elective care and surgery. The trust implemented the new system using G2 Speech's MediSpeech powered by SpeechMagic™ from Nuance. “I saw it as a totally different way to produce correspondence,” says Ann.

Transparent benefits

Over the next three years, the trust introduced the new system into 29 different departments across all ten hospitals. The system focuses on backend speech recognition in which the dictated sound file is transcribed digitally and a secretary then proofreads, edits and corrects this text in order to produce the final document. At present, 309 secretaries now use the system to cater for dictations from 684 people, including senior and junior doctors.

Highlights

- First UK trust to introduce speech recognition in 10 hospitals
- Reduced report turnaround time from 13 weeks to 48 hours (improved by 98%) in some departments
- Significantly improved secretarial workload, data accessibility
- 684 doctors dictating
- 309 secretaries

SpeechMagic

CASE STUDY | NORTHUMBRIA HEALTHCARE NHS FOUNDATION TRUST



Top 5 benefits of speech recognition

Compiled by Denise Patterson, Senior Secretary at Wansbeck General Hospital

Speed

Transcription is twice as fast. Information is available when needed for treatment and GPs receive letters more quickly.

Management

Workload is immediately visible. Easier staff planning during holiday/sickness. Priority settings identify urgent dictations.

Accuracy

Identical orthography of medical terms throughout all documents. No disruptions through lost or damaged tapes.

Transparency

Work list identifies backlogs and free capacity. In-house staff are on one central system.

Service

Fast and reliable quality of patient care. Reduced waiting times for patients.

Denise Patterson, senior secretary in orthopaedics, finds she can manage the team much better with the transparency of SpeechMagic™. With the old system, tapes containing unknown quantities of work piled up, and were eventually shared between secretaries to try to clear the backlog. However, the transparent work list in the new system identifies areas of backlogs. "Work can now be shared quickly and colleagues are happier to take on a known number of files, rather than a set of tapes that may contain dozens of notes," says Denise.

A new flexibility

Implementing the speech recognition system has significantly improved turnaround time and workload. "If a consultant changes the patient medication and the GP receives this information twelve weeks later, then we have a problem," explains Jen Henderson, Service Improvement Lead, Medicine and Emergency Care, "but the fast turnaround in the new system means these details can be sent out a lot quicker." That's why she is a strong supporter of speech recognition: Pain Management was one of the first departments to meet the turnaround target of 48 hours. Compared to a previous time of 13 weeks, turnaround time has improved by 98% in this area.

Having a central database of digital dictation records has also improved the access of this information to consultants and secretaries across the trust. With the old system, many part-time secretaries at community hospitals did not have direct access to previous



Many said trust-wide availability of patient documentation within 48 hours is impossible.

But it's not.

Jen Henderson, Service Improvement Lead, Medicine and Emergency Care

SpeechMagic™ is the foundation of information-driven medicine. It is at the heart of an IT infrastructure that allows us to deliver the perfect experience of care.

Ann Wright, executive director for elective care and surgery

dictations or correspondence, which were sent to the main hospital in Northumberland for transcription.

The new system has been particularly useful in Orthopaedics and Surgery, where consultants from the general hospitals travel to each of the community hospitals for clinics and procedures. Dr. Simon Jones, the orthopaedics project lead, says that he can now work flexibly, anywhere throughout the trust from his Philips Digital Pocket Memo. This enables him to take a clinic at Alnwick Hospital, dictate the notes at Alnwick and dock the dictation machine there. These dictation files are then uploaded to the main server farm in Northumberland, where they are accessed by a secretary. "Files don't leave the clinic anymore, tapes don't unwind or go missing, and urgent files can be easily prioritised," he says.

Champions take the lead

"In the beginning, it can slow you down," Jen points out. "The secretaries listen to the digital dictation and their fingers automatically start typing. She emphasises exposing new users to the system 'little and often' so they can fully understand the whole speech recognition process in a familiar routine. Gradually, as the files are processed faster, a total switch can be made.

Jen also recommends identifying a 'champion' in each department. "When I would go in and demonstrate the speech recognition system, at least one person in every department would be very enthusiastic about it, and realise how much this could help manage their workload. I would hone in on that enthusiasm, and develop that person as a 'champion', giving them extensive training

over two or three weeks. Each champion then trained other colleagues in the department, and became the first point of reference for any problems."

Essential IT Support

For large-scale institutions looking to introduce SpeechMagic™, Jen advises. "Get your infrastructure and support networks in place before you start. From supplier, to IT, to training – everybody should be briefed, prepared and ready to go."

Several Northumbria staff, including Ann Wright, spoke of MediSpeech powered by SpeechMagic™ as the trust's foundation for electronic records. The trust is planning to continue to develop G2 Speech's MediSpeech and use the benefits to continue to improve patient care across the trust.

G2 Speech is proud to have achieved the UK's first large scale roll out of speech recognition using MediSpeech powered by Speech Magic™ from Nuance. NHS Northumbria is proving that there are major cost, workflow and efficiency benefits from using speech recognition in such a large number of departments.

Henry Gallagher, Managing Director of G2 Speech UK Ltd.

The experience speaks for itself™

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