



# AI-powered speech recognition aids successful roll out of EPRs

A review of the key benefits to speech-enabling an electronic patient record (EPR) platform.



# Maximising the EPR value.

Empower your clinicians to capture more comprehensive notes directly in the EPR while also cutting their time spent on documentation and freeing up more time for patient care.

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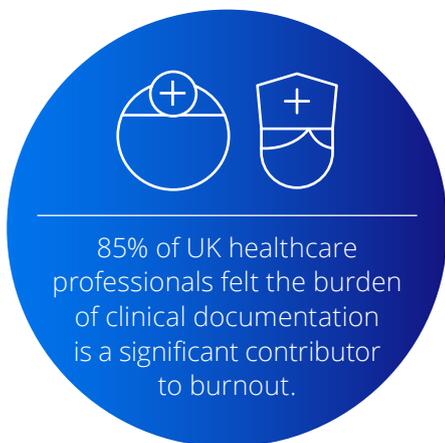
A key goal of the Integrated Care Systems (ICS) is to document patient data more fully and accurately across their region to help address local population needs and improve health outcomes. Accurate documentation in the EPR promotes effective communication and coordination among healthcare professionals, aids in clinical decision-making, and accurately portrays the patient's condition, treatment, and outcomes.

In February 2022, the Health Secretary set a deadline for NHS Trusts to have EPRs in place within 22 months. With a goal of having 90% of all NHS Trusts implement EPRs by December 2023, there was significant pressure. However, it was crucial that the technology met the needs of both clinicians and patients.

## Surpassing the government's target, the NHS achieved this milestone ahead of schedule.

The NHS Long Term Plan's target for all trusts to reach a core level of digitisation, including the implementation of EPRs, by 2024 is a part of a broader initiative, aiming to improve the efficiency and effectiveness of healthcare services through the use of digital technology.

**Successful adoption of EPRs is vital for information sharing, better data collection and improved joint working, but the technology must not be a burden to those who use it.** A Nuance survey found 85% of UK healthcare professionals felt the burden of clinical documentation is a significant contributor to burnout. An article published (April 2021) in the Journal of the American Medical Informatics Association also links clinician burnout to increased documentation, following the adoption of the EHR (Electronic Health Record) in the US.



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While the EPR system is essential for efficient information sharing, significant challenges and barriers have been highlighted in terms of the length of time that it can take clinicians to use the system. Updating EPRs is time consuming, and it is estimated that clinicians spend an average of 13.5 hours a week on clinical documentation.

Nuance's Dragon Medical One, speech recognition solution works with EPRs to support the capture of more detailed, accurate notes and documentation in real time. It is fast becoming one of the most used solutions to help embed and improve adoption of EPR systems.

# Healthcare is becoming ever more complex, and the amount of time needed to be spent on clinical documentation is increasing, which is cutting into time spent on patient care.

A Nuance patient survey indicated that while patients understand and are comfortable with the growing role of IT in healthcare, they are less accepting if it interferes with their conversation time with their clinician.

With less time to fill in notes, information can often be incomplete, posing challenges for when clinicians need to review notes. Around 3.5 appointments a week are spent on resolving issues from missing information which can lead to delays in care, cancellations and impacts on length of stay.

AI-powered, cloud-based speech recognition offers a reliable solution to the challenges posed by the introduction of EPR systems, ensuring trusts can meet turnaround time targets for documentation as well as enabling clinicians to provide complete and accurate patient notes, anytime, anywhere.

## Speech recognition offers greater efficiency and improved communication

One of the main reasons recorded by clinicians for not fully updating notes is limited time. Unless there is a substantial increase in numbers of clinicians available, it is not feasible to spend more time on documentation, so it is vital to look to other solutions.



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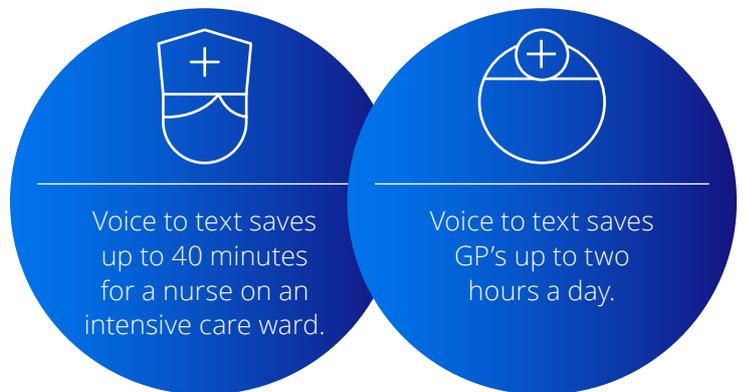
“We’ve invested in the latest proven technology. The Dragon Medical One speech recognition engine, utilising artificial intelligence, is super-fast and accurate making life for our clinicians easier... We’ve seen considerable month on month cost savings as we replace our transcription services with real time speech recognition. We have also saved expenditure by not having to invest in additional hardware or recruit scarce and expensive technical resources to run the software day to day.”

— Paul Adams, Head of Clinical Information Systems, Homerton University Hospital

Dragon Medical One helps the clinician to provide the structured information in a streamlined way in the EPR while also adding quality clinical detail in the content of a note, without taking time away from the patient consultation and without the need for time-consuming and costly transcription.

Documentation such as patient letters, admission and discharge notes, ward round operation or procedure notes can be created at the point of care, helping to reduce documentation backlog. This also enables NHS organisations to meet turnaround targets and provide higher quality clinical documentation. The more comprehensive notes captured with speech recognition enrich the EPR providing better population data for strategic decision making and improving patient safety. It also helps coders to complete their HRGs faster, improving reporting and possible income for the Trust.

Studies have estimated that Dragon Medical speech recognition can save up to 40 minutes for a nurse on an intensive care ward and two hours in a typical day at the surgery for a GP. In the ED setting an independent study found that speech recognition was 40% faster than typing notes.



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Trusts which are extensively using Nuance's speech recognition solutions have all seen a reduction in documentation backlogs, turnaround times and costly transcription services. Clinicians are able to spend more time with their patients and less time on completing documentation or trying to find the right information. 5

Of the clinicians involved in the pilot, 86% agreed that using speech recognition enabled more complete patient notes and 90% said it saved time as well as improving the quality of notes and increasing the speed of communication with others.

## Putting speech recognition into action in the NHS

Dragon Medical was used in an emergency department to help speed up treatment and discharge pathways. The reported average time saving of 3 minutes per patient, when extrapolated across all ED clinicians over a year, is equivalent to freeing up 389 clinician days per annum or gaining almost two full-time ED clinicians.

Oxford University Hospitals NHS FT and Homerton University Hospital NHS FT both speech-enabled their EPRs with Dragon Medical One as part of their digital transformation programmes.

Prior to rolling out Dragon Medical One, Oxford University Hospitals NHS FT were using off-site transcription services that were not integrated into the EPR, suffering with administrative staff shortages, and incurring considerable costs associated with delays and complex workflows. It was also having difficulty meeting the 10-day target (now seven days) for outpatient letter turnaround.

Following a three-month pilot period in the renal outpatient department, Dr Paul Altmann, CCIO, says the differences the trust experienced were “quite spectacular”. The workflow was much faster, with the option to send letters instantly without secretarial input, if none is required or laboratory results are not pending. Letter turnaround time has been reduced from an average of 12 days to just three. Also, Dr Altmann explained, the Dragon template has standardised what goes out, which is useful for time-poor GPs. Costs were also significantly reduced as speech recognition helps eliminate the need for outsourced transcription services.

Other benefits the trust has seen include being able to capture patient information at the point of care and enter it directly into the EPR – this means no reliance on memory and, consequently, letters are more accurate. This has facilitated improved quality and speed of communication and improved patient safety.

Additionally, the Nuance cloud infrastructure offers many advantages around speed of deployment, costs, return on investment, and also means staff can access the software wherever needed, including from home. This has been particularly helpful for clinicians during the COVID-19 pandemic.

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Similarly at Homerton University Hospital NHS FT, Dragon Medical One speech recognition is reducing transcription costs, speeding up clinical correspondence and freeing-up time to care.

Following the implementation of Dragon Medical One, letter turnaround times reduced from 17 days to two, and clinicians no longer had to spend extra time after clinics catching up on paperwork. Patients were able to benefit from faster, personalised communication and there were fewer lost or missed appointments. There was also less duplication of notes and less time checking administration.

Several trusts, including Frimley Health NHS FT and Guy's and St Thomas' NHS FT, have also experienced the benefits of Dragon Medical One. In the past, Frimley Health NHS FT had relied on transcription services and handwritten reports for document and letter creation which was slow and inefficient.

**“In my practice, letter turnaround is now measured in minutes rather than weeks and every letter is sent on the same day it is created.”**

— Dr Graham Smith, Chief Clinical Information Officer, Frimley Health NHS FT

The trust :

- implemented Dragon Medical One to allow clinicians to use their voice to capture notes directly in the EPR.
- reduced document turnaround times, eliminated transcription costs, and enhanced care quality.

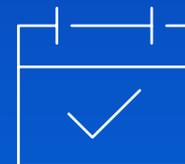
Comparable results have been recorded at the dental department of Guy's and St Thomas' NHS FT, Dragon Medical One reduced the average letter turnaround times from 4 weeks to 5 days and improved significantly the quality of clinical documentation. Unlike some other speech recognition engines Dragon Medical One recognises complex dental vocabulary and is highly accurate even within the loud setting of the dental hospital.

**“Dragon Medical One has been revolutionary for our dental department. The accuracy is excellent, even when writing long letters with complex clinical text and instructions.”**

— Richard Manthorpe, Dental Assistant General Manager, Guy's and St Thomas' NHS FT



Following the implementation of Dragon Medical One at Homerton University Hospital NHS FT, letter turnaround times reduced from 17 days to two.



At Guy's and St Thomas' NHS FT, Dragon Medical One reduced the average letter turnaround times at the dental department from 4 weeks to 5 days.

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At Worcestershire Health and Care NHS Trust, Dragon Medical has helped to support remote working and reduce clinical documentation workload, with the goal of freeing up healthcare workers to focus on patient care. The roll out was prioritised for specialists such as paediatricians, psychiatrists and community and mental health nurses as well as AHPs who tended to make more extensive notes to explain the patient story.

After introducing Dragon Medical and benefiting from Nuance Professional Services to help roll out the system, the trust caught up on a two-year backlog in just three days enabling patient records to be updated within work hours leaving clinicians more time to care with an improved patient experience.

# Top 6 reasons to speech-enable your EPR



Improve clinician satisfaction and wellbeing



Eliminate outsourced transcription costs



Speed up documentation turnaround times



Improve quality and depth of patient records



Improve EPR usability and accelerate adoption



Accelerate ROI on EPR investment

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