

# Speech recognition helps East Kent streamline clinical documentation.



“Dragon helps our clinical staff create a more accurate and complete record of patient consultations, and ultimately that will lead to better outcomes and experiences for the people we care for.”

— Andrew Barker, IT Director  
East Kent Hospitals University NHS Foundation Trust

## CHALLENGE:

Due to a shortage of hospital admin support to help with clinical documentation transcription, East Kent Hospitals University NHS Foundation Trust needed to streamline processes, eradicating costly outsourcing while ensuring the production of accurate and detailed patient notes, to meet NHS seven-day turnaround guidelines.

## SOLUTION:

AI-powered speech recognition software was introduced; an end-to-end solution creating accurate and detailed notes that integrate with electronic health records.

## RESULTS:

Around 80% of transcription workflow is now handled through speech recognition. This has provided financial savings as well as improved patient care. Predicted savings over five years are £2.3m and documentation turnaround times are an average of under five days. Instant documentation is leading to better communication with GPs, multidisciplinary teams and patients, and fewer delays to care.

## Speech recognition ends costly reliance on outsourcing clinical documentation

Health sector pressures such as staff shortages, increased demand and regulation meant that clinical documentation processes at East Kent Hospitals University NHS Foundation Trust were coming under strain. The organisation serves more than 695,000 people across five hospitals and community clinics.

Without enough support to transcribe patient notes or write follow up letters, the Trust was relying on outsourcing to costly transcription agencies. Hard copies, printing and mailing added to the costs and delays in receiving important information.

An innovative solution was needed that would free up more time for clinical staff to provide care, while also minimising costs. The need for accuracy and a turnaround time within the NHS seven-day guidelines was paramount. The solution also needed to be quick and easy for clinicians to use to ensure an adoption rate of more than 70 per cent.



## Using AI powered speech recognition to drive up efficiency and reduce costs

The need for greater efficiency at less cost, led to the integration of Nuance’s Dragon Medical AI-powered speech recognition, enabling clinicians to securely capture patient notes at the point of care. Being able to promptly record information ensures their input is as accurate and detailed as possible, providing a more complete picture of diagnoses and care plans.

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— Andrew Barker, IT Director  
East Kent Hospitals University  
NHS Foundation Trust

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Before the software was fully deployed three goals were set:

1. Reduce reliance on outsourced typing to make cash releasing savings
2. Reduce average document turnaround times
3. Achieve utilisation rates by Trust staff at 70% or beyond

With Nuance as its technology partner, a dedicated team was able to help with implementation, advisory and training support as well as providing monthly dashboards which tracked the roll-out and key metrics relating to the project goals. These metrics plus regular touchpoints with Nuance helped to guide the next steps of the project as well as ensuring return-on-investment (ROI).

### **Successful implementation means better patient care**

The successful implementation of the programme saw the trust exceed its targets in less than a year. By targeting those clinicians who used outsourcing the most, the trust was able to quickly reduce costs and show the usefulness and effectiveness of the system.

The software is deployed in 26 clinical specialties including haematology, trauma and orthopaedics. From February to December 2019, the spend on outsourcing was £564,985 which reduced to £111,541 between January 2020 and November 2020. Over a five-year period, the trust is predicted to make £2.3m in savings as a conservative estimate.

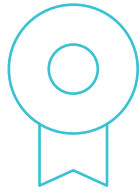
In 2020, clinicians dictated over five million lines of text using Dragon Medical. Andrew Barker, IT Director at the trust says: “That’s a marked increase on the number of lines that our transcription agency could handle. We have freed up financial resources that can be invested in other areas of the trust, especially for teams that are delivering direct patient care.”

While the target was 70% of trust staff to be using the system within a year, 100 per cent of targeted staff have taken it on with more than 500 licences being issued and in use.

Some specialties such as Neonatology found that nurses were easily able to integrate speech recognition into their documentation flow, even though not included in the original implementation scope. This helped to roll out the programme more broadly across the trust.

The turnaround time of documentation is now on average less than five days, with 60 per cent of those dictated, finalised and distributed in less than two days.

The quality of documentation has also improved, along with communication between hospital staff, GPs, and patients. Patient letters are available instantly in the trust’s web portal and can be automatically distributed to the relevant people.



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The project has brought the trust a **“Highly Commended”** in 2021 UK IT Industry Awards as **“Best Healthcare Sector IT Project of the year”**.

### Next steps

The success of the project, which also led to the trust being highly commended in the UK IT awards for Best Healthcare Sector IT project of the year, is leading to a wider deployment of speech recognition, allowing clinicians to add their notes directly into the patient records. The trust’s medical records are hosted, shared and edited using Allscripts Sunrise EPR system, which, due to a partnership between Nuance and Allscripts, are fully compatible with Dragon Medical speech recognition solutions.



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### About Nuance Communications, Inc.

[Nuance Communications](#) (Nuance) is a technology pioneer with market leadership in conversational AI and ambient intelligence. A full-service partner trusted by 77 percent of U.S. hospitals and 85 percent of the Fortune 100 companies worldwide, Nuance creates intuitive solutions that amplify people’s ability to help others.