

# AI-powered speech recognition eases clinical documentation burden

Allina Health helps reduce provider burnout by expanding documentation efficiency and accessibility.

## Challenge

- Increase provider efficiency, convenience, and mobility when creating documentation
- Integrate front-end speech recognition with Epic

## Solution

- Dragon Medical One
- PowerMic Mobile
- Dragon Medical embedded in Epic Haiku and Canto
- Nuance Transcription Platform
- Nuance Transcription Services

## Results

- 80% speech recognition adoption in first year generates 70% of total voice-driven documentation
- 167% increase in documentation captured as providers shift away from point-and-type and legacy solutions
- Enhanced EHR experience through use of nearly 100,000 voice commands a month to more efficiently capture patient stories

## Improving the lives of patients and providers

Allina Health is a not-for-profit healthcare system comprising 12 hospitals, 65 clinics, 52 rehabilitation locations, and 23 hospital-based clinics serving Minnesota and western Wisconsin.

The Minneapolis-based organization is dedicated to providing exceptional care, preventing illness, and restoring health to make a difference in people's lives—including the lives of the providers who work to serve this community.



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**Jonathan Shoemaker**

Chief Information Security Officer, Allina Health

Allina Health conducted a comprehensive and competitive RFP process designed to select a technology partner that would deliver on several key criteria:

- Accurate and efficient front-end speech recognition
- Mobile options for versatile access from more locations
- Integration with the organization’s Epic EHR

To that end, the organization requested a hands-on demo with a core group of providers. “We wanted to address provider burnout—a major influence on providers,” explains Director of Information Systems and Transcription Services Chris DuFresne. “We also wanted to create an EHR experience where providers could complete their documentation faster than typing and use voice commands to simplify navigating the EHR.”

When DuFresne learned about Dragon Medical One, Nuance’s cloud-based speech recognition solution, he saw a good case for transitioning from Allina Health’s on-premise solution to the HITRUST CSF-certified platform. Not only could Allina Health deploy Dragon Medical One through Citrix without complex configurations, but also clinicians could enjoy portability and convenience with true cloud-based speech recognition. “We knew if there were more ‘where’ and ‘when’ options for physicians to create medical documentation, more providers would be drawn to use speech recognition technology,” he says.

Chief Information Security Officer Jonathan Shoemaker also notes, “We were looking for a scalable, enterprise-wide clinical documentation solution. Nuance not only met that criteria but also could provide a strong technology foundation to improve provider efficiency and enable timely documentation in the patient record.” The strength of the partnership with Nuance, together with the functionality of the technology—especially Nuance’s relationship with Epic—surpassed competitor offerings. Allina Health secured an enterprise license for Dragon Medical One and PowerMic Mobile and set out to meet its adoption goals.

**Teaming up with Nuance trainers skilled in Epic’s EHR drives rapid adoption**

Planning to first migrate existing Dragon Medical Network Edition users to Dragon Medical One, Allina Health offered training in multiple locations to help providers learn about the new features and functionality they would see. “We quickly found that the desire and demand for Dragon Medical One exceeded our expectations and spread to providers who had never used Dragon Medical,” DuFresne says. “It was a pleasant surprise, but it required adjusting our rollout plan to include training for new users sooner than we expected.”

Allina Health Learning and Development partnered with Nuance to develop and deliver training that would get beginners up to speed quickly. Allina Health team members gave at-the-elbow support, helping providers adapt and customize their workflows.

Currently, over 80% of Allina Health’s Dragon Medical licenses are being used every day, and users continue to use the solution for more minutes and more lines of documentation each month. Since rolling out Dragon Medical One, Allina Health has seen 167% growth in the amount of content generated by the solution as providers shift away from point-and-type and legacy Dragon Medical solutions. At the same time, Dragon Medical One use has grown to generate 70% of Allina Health’s total voice-driven documentation.

**Mobile solution differentiators set Nuance apart**

Allina Health realized that mobility enhancements such as PowerMic Mobile and Epic mobile apps—Haiku for the iPhone and Android and Canto for the iPad—were key to extending physician flexibility, efficiency, and convenience. “PowerMic Mobile turns a provider’s smartphone into a wireless dictation microphone with programmable buttons,” says Allina Health Chief Medical Officer Timothy Sielaff, MD, PhD, FACS. “Providers use any workstation at work or their computer at home, and the app automatically and securely pairs and is ready to use. Expanding access to real-time speech recognition is invaluable for supporting its use.”

“Not only do I use Dragon Medical One to document patient visits, I use it daily with other applications—creating presentation slides, emails, word documents, and spreadsheets. The accuracy and speed of the speech recognition helps me work more efficiently.”

Debbi Lindgren-Clendenen RN, MN, GNP-BC, AGPCNP-BC  
Allina Health

An optimized audio channel means Allina Health can ensure portability and reliability, while web-based central controls allow administrators to configure and manage user accounts and preferences within any thin- or zero-client infrastructure.

Allina Health providers can experience familiar, accurate speech recognition within Epic Haiku and Canto while creating voice-driven notes and letters on the go. Use is steadily growing among Allina Health providers, and the addition of AI-powered virtual assistant workflows for Epic Haiku will further enhance the experience by presenting patient information, lab results, medication lists, and visit summaries upon command.

**Real-time, quality documentation at the point of care**

Providers dictate notes with difficult medical terminology directly into the EHR without editing content or training the speech engine. Faster turnaround times make the notes more readily available to other providers and the patient.

“We want our providers to be able to detail their thoughts and words in the EHR in the most expedient way. If we can demonstrate the efficiency of speech recognition, we all win.”

**Mary Lambert**

Information Services Director, Allina Health

Allina providers value Dragon Medical One for improving their EHR experience. “By using speech recognition and my multistep commands, I spend less time documenting my visit notes and greatly improve their quality and readability,” says Ramsey Peterson, MD. Debbi Lindgren-Clendenen RN, MN, GNP-BC, AGPCNP-BC has experienced similar benefits: “Not only do I use Dragon Medical One to document patient visits, I use it daily with other applications—creating presentation slides, emails, word documents, and spreadsheets. The accuracy and speed of the speech recognition helps me work more efficiently.” The pathology group has taken productivity gains a step further by setting up global specialty commands within Dragon Medical One that they share with fellow specialists.

**Looking toward the future at Allina Health**

Moving forward, Allina Health will continue its focus on provider adoption of Dragon Medical One with Epic and expand the availability of speech recognition beyond its core group of providers. “We want our providers to be able to detail their thoughts and words in the most expedient way,” says Mary Lambert, Allina Health Information Services Director. “If we can demonstrate the efficiency of speech recognition, we all win.”

Allina Health aims to help more providers save time and increase efficiencies. DuFresne concludes, “We truly appreciate the partnership we’ve had with Nuance over the years. They’ve stayed with us throughout, helping us achieve our goals and better serve both our providers and our patients.”

**About Nuance Communications, Inc.**

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