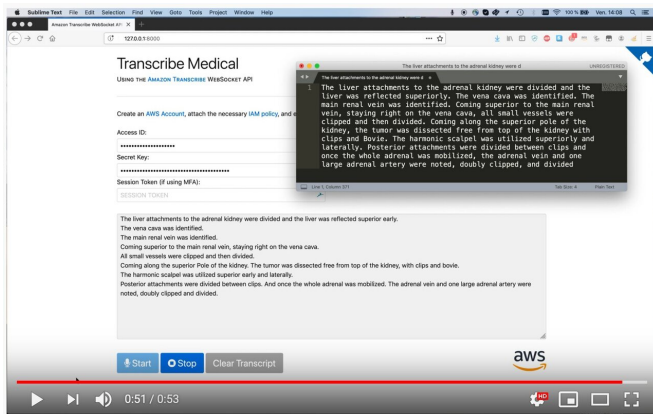


Amazon launches Transcribe Medical for doctors to dictate speech to text

4 December 2019, by Nancy Cohen



Credit: Amazon

Amazon is wasting no time in pursuing the opportunity to apply their voice technology expertise to the medical sector, which indeed has a need for voice to text transcriptions. With Amazon's service, the doctor can dictate clinical notes and speech into accurate text, resulting in transcriptions real time.

The new entry in their lineup of Amazon services: "[Amazon Transcribe Medical](#)."

"In 2017, we launched Amazon Transcribe, an automatic speech recognition [service](#) that makes it easy for developers to add speech-to-text capability to their applications: today, we're extremely happy to extend it to medical speech with Amazon Transcribe Medical," said Julien Simon, with a title of "Artificial Intelligence & Machine Learning Evangelist for EMEA," earlier this week. The announcement was made at the AWS re:Invent conference. AWS stands for Amazon Web Services, which is the company's cloud platform.

The company launched Amazon Transcribe

Medical at Amazon Web Services' re:Invent conference on Tuesday. A brief explanation of what it does: Amazon Transcribe Medical transcribes doctor-patient interactions and sends the text into the medical record.

[TechCrunch](#)'s Sarah Perez pointed out some details that make the new ATM service special. "Unlike some services, the physicians won't have to say things like 'comma' or 'full stop.'" They speak normally during the dictation process. Text can be "fed to downstream systems, including ER systems or AWS language services, like Amazon Comprehend Medical for entity extraction."

[[Amazon Comprehend Medical](#) is a natural language processing service that AWS introduced earlier on; it makes it easy to use machine learning to extract relevant medical information from unstructured text. Amazon Comprehend Medical makes it possible to gather information, such as medical condition, medication, dosage, strength, and frequency from a variety of sources. Those sources range from doctors' notes to [patient health records](#).]

In this latest launch, Amazon made use of expertise outside the company in the development stage. Matt Wood, vice president of artificial intelligence at AWS was quoted in a report from CNBC. The technology was developed with the help of some AWS customers, including Cerner and Suki, a transcription startup.

"Amazon is increasing its investments in the medical space—particularly in terms of the intersection of voice technology with medicine," said Perez. She walked readers through a number of significant moves Amazon has made recently to woo this sector.

"Last week, for example, Amazon launched a medication management service for Alexa that allows consumers to make voice requests for refills

and get medication reminders. The company also made it possible for Alexa voice apps to be HIPAA-compliant, acquired health startups like PillPack and Health Navigator, launched its own healthcare service for employees, Amazon Care, and has been piloting the use of Alexa in a hospital environment."

Check out the "Amazon Transcribe Medical Demo." which is a [video](#) that captures what they have done. One can appreciate quick creations of transcriptions from medical consultations between patients and physicians. The demo was created using medical text from MT Samples, real-life anonymized medical transcripts.

The promotional message behind all this is that here is a service where doctors can free up the grunt work time spent on note taking to better serve patients or just get much needed rest.

Cynical patients who perhaps have spent too many hours waiting to be seen in waiting rooms filled to the brim might doubt the note-taking service will bring much change. One [reader's](#) comment in *TechSpot*: "The suggestion that this will 'free up more time for the doctor to visit with the patients' is a complete hoax. In reality it will allow the doctor to pack their schedules even tighter in order to bring in more \$\$....."

Nonetheless, the Amazon Transcribe Medical site pointed out that "In many hospitals and clinics, physicians will use a recorder to dictate notes that are sent to a third party who manually transcribes the voice file, an expensive and time consuming process that takes multiple days to complete... Some organizations have tried to use existing medical transcription software, but complex medical language can be difficult to transcribe, leading to inefficiency."

Julien Simon, whose parents were both medical doctors, can attest to the time spent taking notes.

He remembered them both spending evenings "recording letters and exam reports with a microcassette recorder, so that their secretary could later type them and archive them. That was a long time ago, but according to a 2017 study by the

University of Wisconsin and the American Medical Association, primary care physicians in the US spend a staggering 6 hours per day entering their medical reports in electronic health record (EHR) systems, now a standard requirement at healthcare providers."

Then there is the question of workflow and accuracy throughout the pipeline and the potential benefits of the new service. "A workflow can include the conversation between a physician and patient, entering the prescription into an electronic health record (EHR) system, and electronically sending the order to the pharmacy. It's critically important that this information is accurate."

The service was trained to understand the terminology and style of clinical language, said Amazon, as it was "built for medical language using state of the art machine learning models. This means that a statement like 'patient suffered a plantar fibroma' will be captured accurately."

More information:

aws.amazon.com/blogs/aws/amazon-transcribe-medical-demo/

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