
Voice-to-Text Made Easy with Amazon



Amazon continues its expansion into the healthcare sector. On 2 December, Amazon Web Services (AWS), the company's cloud computing arm, announced at the Re:Invent conference in Las Vegas the launch of a voice transcription service for physicians.

The new service, called Amazon Transcribe Medical, is designed to make clinical documentation more efficient by transcribing spoken medical dictation for primary care into text and incorporating it into a patient's medical record.

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The new service can be integrated into any device or app. However, since it deals with protected health information (PHI) covered by the US Health Insurance Portability and Accountability Act (HIPAA) of 1996, AWS is making the service only available to those using its cloud. In other words, it will be obligatory for customers to sign a business associate agreement with AWS and encrypt all PHI.

Amazon Transcribe Medical is a development on two Amazon's products, [Amazon Transcribe](#), launched in 2017 as an automatic speech recognition service, and [Amazon Comprehend Medical](#), rolled out a year later. The latter allows developers to identify medically relevant information, including diagnoses, symptoms, treatments, etc. in an unstructured medical text.

According to AWS, Transcribe Medical addresses the current challenges physicians face when confined to using a recorder to dictate notes, which are then manually transcribed – an expensive and time-consuming procedure. A special feature allows correct annotation of 'domain specific language and abbreviations', commonly used by primary care professionals.

"Thanks to [Amazon Transcribe Medical](#), physicians will now be able to easily and quickly dictate their clinical notes and see their speech converted to accurate text in real-time, without any human intervention," says Julien Simon, an Artificial Intelligence & Machine Learning Evangelist for EMEA, [in his blog](#).

Amazon's partners for Transcribe Medical are [Cerner Corp.](#) and [Suki](#), a voice-based digital assistant for doctors. With the new service, Cerner is in the 'initial development' stage: the company linked Amazon's API into a voice-scribe application and is trying to develop a digital tool that transcribes physician-patient conversations during a patient's visit into text, by 'listening' in the background.

For Transcribe Medical, which is currently available in US Northern Virginia and Oregon, Amazon charges [\\$0.0004 per second](#).

Clinical speech recognition is a rapidly developing area, in which Amazon is competing with Microsoft and Google. The former is developing a similar technology [jointly with Nuance Communications](#), while the latter [has partnered](#) with Suki to facilitate doctor-patient interaction by using voice assistants.

Just as for other tech giants, for Amazon healthcare is one of the priority areas. Last year it bought a digital pharmacy PillPack (now [part of Amazon Pharmacy](#)). In July 2019, UK's NHS [announced](#) Amazon Alexa to be officially used to deliver health advice to patients in the United Kingdom. September 2019 saw the launch of Amazon Care, a healthcare programme for employees, which combines virtual and in-person care, and a month later Amazon acquired a [digital diagnostics and triage firm Health Navigator](#). The company has also entered into research partnerships with healthcare groups to study how AI and voice services can improve patient care.

Image credit: AWS

