

Patient Room Voice Charting

Speech recognition systems augmented with AI/machine learning technology support doctor and nurse interaction with the electronic medical record and other clinical software systems via the spoken word. Doctors and nurses use their voice to navigate through display screens and transcribe text directly into the electronic medical record.



Speech recognition technology has significantly advanced in the last few years, with context-aware AI systems providing an additional layer of error checking and correction.

—PHIL CROMPTON, PARTNER

NEED

In most clinical environments, medical staff interaction with the electronic medical record (EMR) and other clinical software applications is through a computer, keyboard, and mouse in or near the patient room. These traditional mouse and keyboard data entry methods are slow, subject to error, and offer poor user-interface design. The use of speech-recognition technologies allow clinical staff to interact with the EMR and transcribe notes directly into the record in a more natural way by using their voice.

BENEFIT

Voice charting systems, whether independent or as a supplement to traditional interfaces, increase staff satisfaction by improving workflow, speed, and convenience. Patient safety increases as the use of real-time transcription reduces the likelihood of a medical error due to a delay in data entry. Artificial Intelligence (AI)/machine-

learning systems will continue to improve voice recognition technologies, providing context-sensitive assistance to improve accuracy and reduce potential errors.

RISK

The voice charting system must be able to confirm that the individual speaking to it is authorized to do so. Patient privacy and HIPAA compliance must also be considered, because using the spoken word to enter data means that those nearby may be able to overhear. The voice charting system must be able to accurately understand spoken commands and data entry.

Value



Staff Satisfaction



Patient Engagement



Clinical Outcomes



Risk

