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Speech-Recognition System Saves Time Spent Writing Notes
by Jeff Berman, Health-IT World

Physicians and nurses entering patient notes through a voice-recognition platform is now standard procedure at the North Bronx Healthcare Network (NBHN). Beginning last month, NBHN physicians began using VoiceOver, a desktop speech-recognition application from Voicebrook, with the network's Misys CPR (electronic health record) and CPOE system (formerly called Patient1), enabling them to directly enter voice notes into the Misys system.

The desktop VoiceOver platform allows NBHN physicians to verbally enter and update patient progress, which can save time and money for diagnostic and billing processes. VoiceOver is being used by six departments at NBHN, including the ambulatory adult and pediatric outpatient centers, which account for 70% of the facility's patient population. Other departments using VoiceOver include urology, women's health, NICU, and sports medicine.

Entering patient notes verbally is a significant upgrade over handwritten documentation, NBHN's former method for patient record keeping. "Our previous system was very inefficient," said Daniel Morreale, CIO at NBHN. "On a typical day, we would handwrite notes for 1,800 patient charts, with the only salient information [in the charts] being patient progress notes. Now physicians can enter these notes verbally, saving a lot of time."

Having immediate access to legible patient information, with speech-entered notes translated to text, has also increased quality of care and patient safety. Verbally entering progress notes at the point of care has provided clinicians with instant access to more legible and accurate documentation for patient treatment and diagnosis. "With the new system, [patient] charts do not need to be physically transferred," Morreale said. "Physicians can now download the patient's record, get diagnosis information immediately, and treat accordingly."

Along with advances on the clinical side, NBHN has also seen financial returns for its billing department by being able to capture more patient visit charges, which are then transferred through the Misys application into NBHN's in-house billing systems. Patient visit charges are captured by diagnostic and procedure billing codes based on physician-entered progress notes.

"By recording patient data through a speech-recognition application, insurance claim denials are down, and it positions us to better respond to inquiries from insurers because all relevant clinical and billing information is immediately available," Morreale said. Insurance claim denials are down 32% in all six NBHN units using the voice-recognition platform. Morreale expects a significant ROI from this integration due to improvements in billing processes.

VoiceOver is a desktop-based application that interacts with larger enterprise solutions such as Misys CPR (electronic health records) and CPOE. Speech-recognition files are on the Misys server and can be accessed by a physician's tablet PC. By adopting the Misys system, VoiceOver improves the acceptance of the CPR and CPOE solution.

"The NBHN deployment is one of the largest implementations of speech-recognition technology on the front end," said Ross Weinstein, president of Voicebrook. "Benefits [of using speech recognition] can reduce clinical errors and improve efficiency for medical billing. By dictating notes directly into an integrated system, transcription services are no longer needed; and notes, which were previously handwritten, do not need to be re-entered. This makes documenting notes and capturing charges more manageable." Nearly 300 physicians and 100 nurses at NBHN are using the application.

Weinstein would not disclose the pricing model for VoiceOver but said clients typically see a quantifiable ROI within three to nine months after implementation.