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Speech Recognition Technology: An e-HIM Clinical Documentation Process

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Leslie: Medical transcription is for many health information management (HIM) departments the “original” e-HIM function: enabling HIM staff and users to use technology to dictate, transcribe, store and access clinical documentation. Today, HIM professionals are taking the lead in initiating the use of speech recognition technology (SRT) to create clinical documentation cost effectively and to meet the increased demands for timely documentation.

Patty: AHIMA’s practice brief called “Speech Recognition in the Electronic Health Record” reflects how SRT is being used today. The practice brief does a nice job explaining SRT options and the things to consider when implementing SRT. It’s a must read practice brief as it explains the technology we will be discussing during our conversation.

Leslie: To get some first hand experience, let’s interview Laurie Lutz, RHIA, CHP, the director of medical records at Kootenai Medical Center in Coeur d’Alene, ID. Laurie works in a 240-bed facility with acute care, psychiatric and rehabilitation beds. There are 23 medical transcriptionists (MTs) working in the medical record department. Milda Simaitis and Lora Atha, two of Laurie’s lead MTs, will also be joining us.

Leslie: Hi Laurie, Milda and Lora. Thank you for taking the time to talk with Patty and me and our readers. Let’s start out by talking about which speech products you have. Are you using end-user or backend speech recognition?

Laurie: We have implemented both: one SRT that is self-editing or end-user based, and one that is backend server-based. The self-editing product is used by our radiology group to improve turnaround time and decrease costs associated with transcription. The server-based product was implemented to maximize transcription resources at the hospital.

Leslie: What was the compelling reason your organization wanted to implement SRT and what role did you take in initiating the change?

Laurie: We needed a better solution for our transcription function. Staffing levels were problematic and the overflow work that was being outsourced was not meeting our quality and turn around time expectations. My goal was to develop a solution that was cost effective and would result in better quality, improved turnaround time and a solid staffing plan.

I took the idea of SRT to my boss, the CFO, who was very supportive and who became the sponsor of this project. We agreed that transcription costs would most likely stay the same but that we would see a return on investment (ROI) by increased productivity and quality, and reduced turnaround time. This would be accomplished by the implementation of backend or server-based SRT. Administration and the information

technology (IT) department liked the idea of a technology driven solution and were open to trying it. Another plus was that physician behaviors didn't need to change. I worked with our vendor to develop an ROI that would guide the business outcomes of our project. I also added a systems analyst to support the implementation and ongoing use of the speech product.

Patty: Laurie, tell us about your project team. Who led the team, who was on the team and what were some of your biggest challenges?

Laurie: I provided leadership for the team, which was composed of representatives from IT, MTs, and the systems analyst. Our biggest challenges were technology related, making sure the servers were talking to each other: voice server, recognition server, text server and that the speech product was interfaced with our electronic health record.

Leslie: What kinds of transition issues did your MTs experience?

Laurie: We observed that it was harder for some of the more experienced MTs to get more comfortable with the technology, while new MT graduates seem to have an easier time.

Leslie: That makes sense because it is hard to unlearn something if you have been doing it for a long time. How did they become more comfortable over time? How did you create a safe environment for learning?

Laurie: We provided a lot of opportunities for training with our SRT vendor, and encouraged the MTs to help one another. We worked to create a high level of trust and encouraged learning. Because most of our MTs are computer savvy, they enjoyed learning SRT. The new technology has enabled them to achieve greater productivity. It also became apparent that some MTs weren't ready or interested in SRT so we matched MTs with the technology they could support. MTs either support SRT and traditional transcription or just support traditional transcription. Over time, we do expect our MTs to support SRT as well as traditional transcription. Milda Simaitis, the day lead transcriptionist, played an instrumental role in working with all the MTs.

Patty: Milda, what would you say are your biggest challenges now?

Milda: The challenges are mostly with dictation. We get the best results with physicians who speak the clearest and are generally good dictators. The MTs have learned a lot and are enjoying the variety in their workday.

Patty: It seems like the transition was fairly smooth for your MTs.

Milda: It's been a team effort. Many MTs took on leadership roles by learning the technology, helping others and sharing their excitement with those who are approaching the technology more cautiously. The excitement is catching on as people see that the technology works well and improves productivity. One of our MTs recently trained on SRT and within two months increased her combined SRT and traditional transcription productivity by 40 lines per hour! We have other success stories like this and just keep encouraging each other.

Patty: That's terrific productivity gains. In doing a literature search I noticed that productivity gains can be as much as 25 percent to 30 percent. Sounds like you are well within that range for this MT and others.

Leslie: Laurie, you mentioned earlier in our discussion that you have also implemented a self-editing product. Tell us a little about that.

Laurie: We work closely with a radiology group that is part of a joint venture with the hospital. They were very frustrated with turnaround time and had problems hiring and recruiting qualified MTs of their own. They were often two to three days behind in transcription resulting in constant calls from referring physicians who are their customers. The radiologists approached me for ideas and a solution to the problem. I recommended that they consider a Dictaphone product called PowerScribe. It's a self-editing product. This recommendation was based on our hospital's existing platforms and IT standards. The radiologists liked the recommendation and the IT department, working with the vendor and radiologists, lead the project.

Leslie: What role did the HIM department play?

Laurie: We were consultants to the project but didn't play a day-to-day implementation role. We did sit in on training and provided our input.

Leslie: What kind of change was this for the radiologists?

Laurie: The former process was to transcribe, forward the transcription to the radiologist, who manually corrected it and sent it back to the MT for edits. The MT would then send it back to them to e-sign.

Today, they dictate from a PC workstation, see their words translated into text as they speak, edit on the screen and sign their report.

Leslie: That is a huge change in physician behavior. What did you observe that made this project a success?

Laurie: The president of the radiology group was behind this project. There was also another radiologist who served as a champion. The radiologists feel like it's all equaled out in terms of their time. The time they used to spend calling people back has been replaced with the dictation and self-editing process. In addition, once the report is signed, it is automatically routed to the referring physician via fax or downloaded to his PDA. Customers are happy and the radiologists don't spend time dealing with turnaround time complaints.

Patty: That's a terrific outcome. What about the changes experienced by your MTs who previously supported radiology transcription?

Laurie: I will let Lora Atha answer that question. She is the HIM department's lead MT for radiology transcription.

Lora: There was some anxiety in the radiology pool as this new technology was being implemented. Radiology is our comfort zone and we realized that we would most likely be learning new transcription report types. We transitioned to medical/surgical documents, which were hard for us at first to learn new terminology. But we survived the transition, and we help radiologists when they don't have time to edit their own work. We also picked up radiology work from another hospital, which helped ease the transition and provided ample work for the MTs in the prior radiology pool.

Patty: Laurie, what's next?

Leslie: We are going to roll out self-editing SRT to another 10 individuals who work in the following areas: family practice, internal medicine, emergency department, surgery and chemical dependency. The chemical dependency counselor dictates reports that are often 25 to 30 minutes long!

Patty: How many physicians are using some form of SRT now?

Laurie: There are 65 physicians using SRT today out of a possible 200. We don't think we will get everyone on SRT but are hoping a good number participate. The reality is that not everyone wants to self-edit, and some dictator's speech patterns will not "qualify" because their speech patterns are not able to be recognized by the speech software. So the need for traditional transcription is still necessary. It's a nice variety for MTs. We would not have been successful with the transition to SRT had it not been for our MTs. They embraced the change and the technology and have played an integral role.

Leslie: Thank you Laurie, Milda and Lora for sharing your story with us. Congratulations on your leadership and success. We wish you all the best as you continue your journey.

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