



PowerScribe®

The Health Care Authority for Medical West, an Affiliate of the UAB Health System, Replaces a Problematic Speech Recognition System with Dictaphone PowerScribe® from Nuance

The Health Care Authority for Medical West, an Affiliate of the UAB Health System, Bessemer, AL, is a 300 bed community medical center serving West Jefferson County. Medical West strives to uphold the reputation of its world renowned parent organization by maintaining a strong commitment to quality care for every patient. It is with this commitment in mind that Medical West adopted speech recognition for its radiology department. When its original speech recognition system became increasingly problematic, Medical West sought a better solution. Medical West then seamlessly transitioned to Dictaphone PowerScribe® Speech Recognition from Nuance to enhance radiologists' efficiency, increase departmental cost savings, provide high quality service to referring physicians and improve overall quality of patient care.

Needed to Replace Problematic Speech Recognition System

Prior to implementing PowerScribe, the radiology department of Medical West utilized Agfa's TalkStation® Speech Recognition. From inception, the system proved to be problematic. "The system just did not perform. The speech recognition accuracy was very poor and the equipment didn't seem to be very consistently operating," noted Joe Thornton, Director of Imaging Services. As a result, only one physician in the radiology department was using the system; the others reverted to a traditional transcription workflow.

Since a plan had been instituted to redistribute transcription resources from the radiology department and maximize cost savings, Thornton needed to establish a solution whereby all radiologists could self-edit their reports. Talk clearly was not fulfilling this objective, so Thornton reexamined other key players in the speech recognition market, including Nuance. "We were looking for a product that was web-enabled, had very low impact on IT, and is easy to administer... We viewed the Dictaphone PowerScribe demo and it was clearly evident from the demo that it was the superior product right off the bat," said Thornton.

Highlights

- 80,000 radiology reports are generated annually via PowerScribe for 200 referring physicians.
- Transitioning from Talk, self-editing penetration rate rose from 20% to 100%
- ROI obtained in under 11 months
- Recognition accuracy and radiologist efficiency rates improved immensely
- Average report turnaround time is now consistently under 6 hours
- Referring physicians and patients are experiencing better service and quality of care



Smooth Transition, Outstanding Results

Medical West chose to immediately implement PowerScribe and, with the help of the Nuance engineering team, was able to establish proper interfaces between PowerScribe and their PACS and RIS. Interfacing was a challenge with Talk, but proved to be a smooth process with PowerScribe. Now, the radiology department of Medical West is “paperless”. Each radiology report is initiated via the PACS. “When an image is invoked, the order is automatically ‘dropped in’, which facilitates a very seamless, very efficient process. It lessens the interruptions to radiologists,” said Thornton. An added bonus is that successful interfaces across a wide area network enable radiologists to read exams and generate reports remotely.

“PowerScribe recognition is highly accurate.”

Although radiologists were reluctant to try another speech recognition system, due to their poor experience with the prior system, all radiologists are now self-editing 100% of 80,000 annual radiology reports via PowerScribe. Thornton noted that radiologists’ satisfaction with PowerScribe became increasingly high as they realized the time saving benefits of productivity tools included in the system. One such tool is “Power Normals” which allow radiologists to insert narrative text with simple voice commands. Power Normals can have bracketed fill-in

fields which can be easily tabbed through. Some reports only require a radiologist to dictate one or two words.

In addition to time savings tools, the improved recognition accuracy rate radiologists are experiencing with PowerScribe further facilitates rapid report completion. “I think the big difference between Dictaphone PowerScribe and Talk, and really any speech recognition product for that matter, is the ability for it to recognize the radiology concentric language... PowerScribe recognition is highly accurate,” said Thornton.

Multiple Benefits

The radiology department of Medical West has reaped several other benefits from PowerScribe. Thornton mentioned that one of the top benefits is cost savings. “Obviously, the bottom line is that we’re offsetting a huge amount of cost now. Our return on investment was just under 11 months, which was a big win. Even with the small maintenance cost that’s involved, we’ve maintained a nice positive cash flow,” said Thornton. Thornton also emphasized, that due to the countless benefits of PowerScribe, it presents an extremely “good value for the cost”.

A decrease in radiology report turnaround time at Medical West is another top benefit identified by Thornton. Average report turnaround time is now under 4 hours from the time an exam is ordered. This impressive turnaround time has helped the radiology department of Medical West to remain competitive within an increasingly competitive imaging market. “There are several other imaging centers and hospitals nearby. My product is not so much the images as the written report. The key in this competitive market is to deliver that report as quickly as possible to the referring physician,” said Thornton. Thornton concluded that the 200 physicians the radiology department serves “feel like service has been elevated and now have a higher level of expectation.”

Thornton particularly emphasized the impact of PowerScribe on the emergency room at Medical West. “ER physicians are rapidly able to receive a faxed copy of the radiology report and

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instead of saying ‘I just got off the phone with the radiologist and this is kind of what he/she said,’ the ER physician has exactly what the radiologist said in his/her hand. That’s a big plus,” said Thornton.

Extremely Positive Outlook

Thornton feels that his facility has received exceptional support from Nuance. He contrasted this support to that which they received from their previous vendor. “I think the key failure point between the two products was really support. Dictaphone PowerScribe tends to support their product very well both in the way of training, after and before the sale, and Talk really failed in that piece.”

Looking ahead, Thornton feels that this exemplary support will continue, and will facilitate further use of PowerScribe within the imaging market. “When you’re looking at two products and where they’re going, you can see that PowerScribe seems to be going in the right direction as far as really evolving to a point where its going to become a routine part of the business and it’s going to be something that you’re going to have to have in order to compete,” stated Thornton.

Expansion Possibilities

Thornton feels that there are many other areas across the UAB Health System that could benefit from using PowerScribe.

“It’s pretty indicative of our success if you look back on the past 18 months or so. We’ve probably grown about 10% in

Challenge: Replace a problematic speech recognition system with a system radiologists will actually use.

Solution: Rapidly roll-out Dictaphone PowerScribe Speech Recognition to the radiology department interfaced with PACS and RIS.

Results: PowerScribe is being used to generate 80,000 radiology reports annually for 200 referring physicians. Radiologists, who now self edit 100% of all reports, have attained significant improvements in recognition accuracy and overall efficiency. Average report turnaround time is under 4 hours, significant cost savings have been attained, referring physicians are thoroughly impressed with newfound high level of service, and quality of patient care has been enhanced.

exam volume and yet we haven’t elongated our turnaround time with more volume and haven’t added more radiologists either. The radiologists are still working productively even though they have seen these gains in exam volume.”

With a strong contribution from PowerScribe, Medical West has been able to optimize their radiology department and enhance quality of patient care which has undoubtedly had a profound impact on the rest of the community. “One thing about radiology is that we tend to impact 99%-plus of every patient that walks into the hospital, so a small, incremental change here can make a big impact on the overall organization,” Thornton noted. Thus, the radiology department of Medical West is certainly helping the UAB Health System meet its objective of maintaining a strong commitment to quality care for every patient.

For product information please visit Dictaphone Healthcare Solutions at www.nuance.com/dictaphone or call 888-350-4836.

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