



PowerScribe®

Henry Mayo Newhall Memorial Hospital Uses Dictaphone PowerScribe Speech Recognition to Attain Striking Improvements In Report Turnaround and Radiologist Productivity

Radiologists at Henry Mayo Newhall Memorial Hospital, Los Angeles, CA, now use Dictaphone PowerScribe® Speech Recognition from Nuance to generate over 100,000 exam reports annually. PowerScribe is used to complete over 90% of these reports, turnaround time has been reduced from days to minutes, and the hospital-wide transcription workload has decreased by 50%.

“Archaic” Technology and Methods Drive Henry Mayo Toward Speech Recognition

“Prior to the implementation of PowerScribe, we were dictating on cassette tapes and those were taking as long as two or three days to be transcribed,” said Dr. Gerald Roth, Radiologist and PowerScribe Project Leader. “We were also still printing out films, and lugging jackets around,” he noted.

Dr. Roth and other radiologists were occasionally reading soft copy images on a very “archaic” PACS, but were unhappy with the limited information and flexibility offered. Due to the absence of a viable work list, there was no way of knowing that an exam was read until it was actually transcribed and appeared on the hospital information system. “We were very inefficient,” Roth stated. The inability to turnaround reports quickly caused a demand of several duplicate reads each day. Seeking to improve report turnaround time and radiologist productivity, Henry Mayo turned to Dictaphone’s PowerScribe from Nuance.

Outstanding Report Turnaround Time Improvements

According to Roth, the main attraction of PowerScribe was the ability to “get the reports out immediately.” Roth mentioned that, “Radiologists get paid once for reading a study, they don’t get paid the second or third time.” Roth indicated that in a busy hospital environment, patient information needs to be available almost instantaneously for physicians to properly care for their

Highlights

- 90% of radiology reports are presently being self-edited
- Hospital-wide transcription workload has decreased by 50%
- Radiology report turnaround time has been reduced from 3 days to as few as 10 minutes
- Duplicate “reads” have been virtually eliminated
- Physician “primary read” capability is now available from any location, inside or outside of the hospital



Dr. Gerald Roth, Radiologist and PowerScribe Project Leader

patients. “It’s really important to decrease that turnaround time, and what are seen as good benchmarks sometimes aren’t good enough,” Roth noted.

The browser-based PowerScribe Workstation offers a simple process in that physicians can review recognized text on screen, edit, and electronically sign the report in succession. Dictation is captured through a PC-connected, hand-held ergonomic microphone. Upon electronic signature, sophisticated routing scripts ensure that copies of the document will be immediately sent to the proper locations.

Henry Mayo has seen drastic improvements in report turnaround time as a result of speech recognition. “The referring physicians and outpatient doctors are thrilled because they’re able to get reports almost instantaneously,” mentioned Roth. “On a good day we can literally get a report turnaround time of 10 or 15 minutes after the study was done.”

Getting Up to Speed

PowerScribe was rolled out to Radiology, Cardiology, Pulmonology, and EEG Lab physicians at Henry Mayo. Adoption in Radiology was exceptional, as evidenced by the fact that over 90% of all reports are currently physician-edited.

“The learning curve is relatively short,” stated Roth. As part of implementation, Radiologists read 20 stock reports; then they started dictating. As use continues, recognition accuracy further

improves, and a “train-a-word” feature allows physicians to easily add individual words or phrases that are not being readily recognized by the system. Roth and his colleagues soon realized that with PowerScribe, “The little effort you put in on the front end gets recouped on the back end in terms of less calls inquiring about the results of an exam.”

The institution also fully interfaced PowerScribe and spent time setting up other key system productivity tools. Physicians have made extensive use of tokens and “Power Normals”, for example. “Tokens pull information from the RIS, so when I dictate a case, the procedure description, date and time of the examination, and the reason for the study all flow into my report,” explained Roth. “I don’t have to dictate those pieces of information which is one time savings,” he pointed out.

Roth also is extremely happy with the benefits of “Power Normals”, a feature that allows for the creation of standard reports, with variable fields, for frequently dictated studies. Standard text is invoked through a single mouse click or voice command, and the variables are easily filled in through tokens, simple microphone button commands and voice input. “I use a lot of ‘Power Normals’, and these are keyed into the actual procedure description, so I’m able to take a case, hit the ‘Power Normal’ button and a framework of a dictation appears. I then can easily add details specific to the case at hand and go on, so I’m able to more rapidly get a case dictated than I was able to before,” Roth said. Roth is also thrilled that report review is simplified, as standard Normal report text does not have to be re-read each time.

PowerScribe® – Much More Than a Speech Recognition System

“Dictaphone sells their product as a Speech Recognition system, but what they’ve done is also added some nice features for us” noted Roth. Henry Mayo has effectively transitioned from an arduous courier method of document delivery to sophisticated and instantaneous PowerScribe routing scripts. “Even if I signed a report that morning, the physician probably wouldn’t receive it until the following morning,” Roth indicated,

“The referring physicians and outpatient doctors are thrilled because they’re able to get reports almost instantaneously...”

describing their past courier system. Now, Henry Mayo takes advantage of the auto-fax capability of PowerScribe in which pre-established destinations are set-up within the system. As soon as a report is signed, it is automatically routed to the desired recipients without any delay. The report is also available via the hospital’s information system, web-based physician portal and the PACS.

Physicians at Henry Mayo also appreciate the order-centric workflow features of the PowerScribe system. “PowerScribe has become our de facto RIS,” said Dr. Roth. He is thrilled with the way that PowerScribe offers physicians a unified source that indicates reports needing dictation, completion, etc.

Faster and more sophisticated report delivery and overall workflow create improvements in Radiologist productivity and efficiency, as fewer physician interruptions and calls for results occur throughout the day. Dr. Roth points out that rapid report delivery, “has markedly cut down the number of phone calls we get in the reading room simply to ask for the results of studies.”

Visible Success, Satisfied

PowerScribe has established a firm and very positive foundation at Henry Mayo, as indicated by the comments of their Chief Operating Officer, John Schleif, excerpted from a recent hospital press release:

The Digital Dictation System, operational now for the past five weeks, has been a resounding success. Radiologists

Challenge: How to manage immense dictation volume while decreasing report turnaround time, increasing physician productivity, and improving report distribution.

Strategy: Implement Dictaphone’s PowerScribe® speech recognition solution allowing rapid transition to new, more flexible self-editing model

Results: Hospital-wide transcription workload has decreased by 50%. Radiology report turnaround time has been reduced from three days to as few as 10 minutes. Time consuming duplicate “reads” have been virtually eliminated. Due to the browser-based nature of PowerScribe, primary reads can be conducted anywhere inside or outside the hospital.

have been using voice recognition software to dictate and transcribe their reports; dramatically reducing the time that it takes for final reports to be available to referring physicians. Radiologists are dictating and self-editing more than 90% of the exams. Kudos to the Radiologists for being open to changing the way they work. And while phase one is a resounding success, phase two is also showing incredible results. Cardiologists, Neurologists and Vascular Surgeons are concluding their education and have begun using the system.

Henry Mayo looks forward to increased productivity by not only radiologists, but other specialists as well, as speech recognition is more prevalently adopted by physicians. Evident at Henry Mayo is the strong physician support and satisfaction with the product. “Once I’ve gone home, all my reports are already finished; I don’t have to log on later on that night and try to sign my reports,” declared Roth. Through the benefits of PowerScribe, Henry Mayo continues to uphold its commitment “to improve the health of our community through compassion and excellence in health care services.”

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

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