

Reprinted with permission from [Speech Strategy News](#), January 2009 issue

Nuance healthcare business continues to prosper

Nuance announces new releases and productivity statistics for speech recognition

Nuance has built a healthcare business with \$282 million in annual sales in its last fiscal year ended September 30, with diverse products that could probably support an independent company if they decided to spin it off (*Speech Strategy News*, November 2008, p. 6). Despite marking the 100th anniversary of the Dictaphone brand that they own (in 1881, Alexander Graham Bell invented the first recording device, which was later branded Dictaphone), Nuance now prefers to call the healthcare business Nuance Healthcare, according to a spokesperson. Nuance Healthcare is the leading provider of speech recognition solutions for the healthcare industry. Nuance now estimates that Nuance Healthcare will have revenues of \$360 million in the current fiscal year and says that Healthcare is Nuance's fastest-growing division. The products and services of Nuance Healthcare are used at more than 5,000 hospitals and by more than 400,000 providers.

John Shagoury, president, Nuance healthcare business, said, "We are celebrating Dictaphone's 100-year anniversary to remind people of events that have changed our lives over the past century and to educate them on Dictaphone's presence in healthcare today...Dictaphone has been in the middle of many technological landmarks and now is part of the initiative to transition the healthcare industry into a paperless environment."

The electronic medical record (EMR), with many of the records created efficiently using speech recognition, enhance productivity and reduce medical costs. But, perhaps more importantly, they improve the quality of medical care by aiding in communicating information quickly and accurately and by providing decision aids for physicians. The documentation of patient treatments and outcomes not only helps individual patients, but can be useful in evaluating the effectiveness of medical treatments and allowing data-based healthcare decisions.

An example of benefits from speech-enabled reporting

Nuance's on-premise Dictaphone Enterprise Speech System (ESS) components support recording the dictation audio, managing the audio and the resulting transcription process, transcription document distribution, and online reporting. One option of the ESS is "background" speech recognition, where the transcriptionist can receive a text version resulting from speech recognition processing of the dictation and review it while listening to the audio, making any necessary corrections. The resulting report is routed by rules (e.g., for sign-off by the physician if a transcriptionist is involved) or is available on a secured web site. Web-based overview reports are available, including the status of specific reports, overall volume, etc.

In a press release, Nuance said that the top 25 Dictaphone Enterprise Speech System customers are processing 86% of their transcription volume with speech recognition and are realizing productivity rates that are 98% above the industry average (347 lines per hour versus 175 lines per hour). Another way of looking at these results is that it takes about half the time for a transcriptionist to edit speech-recognition-produced text than to

create that text from the audio directly. Additionally, top performing medical transcriptionists at Dictaphone Enterprise Speech System sites are producing 180% beyond industry standards (493 lines per hour), Nuance reported. Eight surveyed facilities reported a combined annual savings of more than \$1.9 million in the first year of use. Documentation turnaround time improved; eight surveyed facilities decreased the average time it took for “non stat” medical reports to be completed by 53% from 42 hours to 20 hours.

The latest version of Dictaphone Enterprise Speech System (Version 7.5) introduces an enhanced transcription software application that further improves MT productivity and makes the transition from full transcription to editing easier. Additional updates include new support for Microsoft Office 2007, the Microsoft Windows Vista operating system, and Microsoft SQL Server 2005. The new solution has been tested and qualified for use in a virtualized environment running VMware, an IT infrastructure solution used in some institutions.

Pauletta Burchett, operations manager for transcription at St. Elizabeth Medical Center, said, “We process about 3.9 million lines per year...The biggest functionality value is that this system remembers edits and corrections via its Smart Rewrite feature, eliminating the need to make the same corrections over and over again.”

Mercy Memorial Hospital, a Michigan-based, 238-bed, full-service community hospital, upgraded to the Dictaphone Enterprise Speech System from its previous version in January 2008. Within two weeks, the facility transitioned from 23 doctors who were using background speech recognition to 36. Since January, Mercy Memorial Hospital has achieved 95% physician speech recognition utilization.

Nancy Tanguay, transcription supervisor, health information management at Mercy Memorial Hospital System, noted that they lost some of their transcriptionists just before the system was installed and the new system allowed them to maintain acceptable report turnaround. She said they were “unsure” of what the new system would do to report turnaround time. “The reality was shocking,” she said, increasing productivity dramatically.

Nuance radiology solution integrated with DeJarnette’s Intelligent Router

Nuance’s healthcare products have to work with other healthcare software and databases. An example of that synergy is a recent announcement Nuance of a new technology integration between its RadWhere for Radiology speech reporting solution and **DeJarnette’s** PACSware Intelligent Router. (PACS is Picture Archiving and Communication System, the industry’s term for software managing digital images from medical imaging equipment.) The solution allows radiologists a single point of access to patient information and images across multi-site facilities and disparate systems.

RadWhereRadWhere for Radiology is a “front-end speech recognition” solution for academic centers, hospitals, and imaging centers with unique workflow, data-driven reporting, and communication needs. Radiologists view and correct their reports directly, without the involvement of transcriptionists.

Together the PACSware Intelligent Router and RadWhere for Radiology can now direct all diagnostic information to a single workstation of choice. RadWhere integrates

multiple Radiology Information Systems, PACS, 3D, and teleradiology systems into a single worklist for the radiologist.

New version of web-based radiology “decision support system”

Nuance goes beyond speech recognition solutions in its healthcare operations. In December, the company announced RadPort for Radiology 2.0, the latest version of its web-based, “decision support” solution for managing high-cost diagnostic imaging utilization. RadPort for Radiology is offered as a standalone application or is available for integration with most computerized physician order entry (CPOE) systems to reduce potentially medically unnecessary exams by providing physicians with an appropriateness/exam utility score when they order an exam.

As an example of the RadPort for Radiology process, if an ordering physician orders a knee CT scan and—based on the entered patient information—the system determines that the appropriateness for the exam has low utility, RadPort for Radiology will provide an option for alternative procedures that better suit the indications, such as a knee MRI, knee X-ray, or knee bone scan. The physician can then select the recommended procedure or override the system’s recommendation. The system’s utility scores and recommended alternative exams are not based on cost; appropriateness ratings are determined by clinical outcome data that is tracked within RadCube for Radiology.

Reseller agreement with Amirsys enhances Nuance’s radiology reporting offering

Nuance Healthcare works with other companies to cooperate in offering customers integrated solutions. An example is a recent reseller agreement with **Amirsys**, a provider of imaging informatics. Amirsys and Nuance are offering customers an integration from Nuance’s PowerScribe for Radiology speech-recognition reporting solution, to Amirsys’ STATdx Premier, an on-demand radiology reference system for clinical decision support with thousands of diagnoses, case examples, and anatomical images. Amirsys’ STATdx Premier clinical decision support is now available for purchase as an add-on to PowerScribe for Radiology.

Nuance adds hosted “critical test result management” solution

Another recent announcement is an example of how Nuance solutions go beyond report generation. Nuance’s new on-demand offering, Veriphy 3.0, is a Critical Test Result Management (CTRM) solution that enables healthcare provider organizations to comply with **The Joint Commission**’s accreditation requirement for the way patients’ critical test results are communicated. (The Joint Commission, an independent, not-for-profit organization, evaluates and accredits more than 15,000 healthcare organizations and programs in the United States.) Veriphy 3.0 is an end-to-end healthcare enterprise solution that automatically tracks provider-to-provider shared patient messages, indicates the severity of patients’ findings, and, through its notification and message delivery process, does not “close the communication loop” until message receipt is verified by an authorized caregiver.

Nuance eScripton provides on-demand background speech recognition

For customers who don’t want the speech recognition in-house, Nuance provides eScripton, a hosted solution that can return text for review by on-site or outsourced transcriptionists. On December 19, Nuance announced that eScripton received a 2008

Best in KLAS award. KLAS is a research firm specializing in monitoring and reporting the performance of healthcare vendors. With this award, eScription is now one of only six other products to have achieved Best in KLAS five years in a row since 2004.

Reprinted with permission from [Speech Strategy News](#), January 2009 issue