



PowerScribe® for Radiology

St. Joseph's/Candler Hospital recognizes improved turnaround times, greater user acceptance and superior accuracy by replacing an existing radiology speech recognition solution with PowerScribe®.

St. Joseph's/Candler Hospital, the premier health provider in Savannah, GA, and one of the country's Top 100 Integrated Healthcare Systems with Joint Commission accreditation, combines high-impact technology, breakthrough clinical treatments and time-honored Faith-Based compassionate care to ensure patient health and well being.

To combat their ongoing struggle to reduce radiology reporting turnaround time and maintain referring physician satisfaction, St. Joseph's/Candler made a strategic decision to implement speech recognition. Even though both administrators and radiologists embraced speech recognition technology, their initial experience was not entirely positive due to obstacles associated with their previous solution provider. That all changed when the decision was made to implement PowerScribe from Nuance which offers seamless integration with their Sectra PACS and superior speech recognition accuracy. Today, St. Joseph's/Candler generates more than 150,000 radiology reports annually with more than 90% self-editing and an annual transcription services cost savings of \$233,000.

Impetus For Change

Despite the enormous amount of time and effort spent by the radiology department at St. Joseph's/Candler to implement the previous speech recognition system, they struggled with its troublesome user interface, poor recognition accuracy and a number of integration problems. "We tried to use [our previous product], but had many starts and stops. We would use it for a while, identify problems and they would get worked on, but ultimately not to our satisfaction" says Dr. Thomas Philbrick, Chairman of Radiology. "We attempted to deploy it for more than a year before we finally gave up and realized that we just couldn't make it work. These problems created a great

Highlights

- PowerScribe for Radiology successfully replaced the existing, poorly performing speech recognition system
- Achieved productivity gains not recognized with previous solution
- Seamless integration with MEDITECH RIS and Sectra PACS
- Ten radiologists use PowerScribe to dictate more than 150,000 exams per year
- Eliminated \$233,000 in annual transcription costs
- ER report turnaround time has been reduced to less than 30 minutes



deal of frustration for the radiologists, which led to our decision to find an alternative solution, which would deliver as promised.”

Learning From Experience

St. Joseph's/Candler—while not looking forward to implementing another speech recognition solution—strongly believed that speech recognition was the only strategy that would allow them to keep up with their growing imaging volumes and expectations by referring physician for shorter report turnaround times.

Knowing that they had to select another solutions provider who could meet their needs this time, a committee was formed including system administrators, support staff, and radiologists. Their goals were to select an experienced provider who was financially secure, possessed established relationships to ensure efficient integration of existing and future technology investments, and who had the bandwidth to successfully implement a speech recognition solution.

The selection committee evaluated the offerings of front- and back-end speech solutions before making their final selection for the new system.

Choosing a provider that offered more than just speech was an added benefit. An integrated productivity tool such as the Veriphy™ solution from Nuance was appealing. “We are

really excited about the add-ons like Veriphy, which allows us to send critical results to our referring physicians. It's a Joint Commission requirement and we are very impressed with this rich functionality,” said Jeff Zehel, Director of Radiology.

After reviewing all the vendors against their selection criteria, the committee selected PowerScribe for its proven track record, partner integration experience, product functionality, high recognition accuracy, and easy-to-use interface, all backed by Nuance's extensive implementation experience. St. Joseph's/Candler further recognized the value of selecting an experienced provider; one who could implement a speech solution without disrupting the existing workflow.

Preparing For Success

Having been through this before, the administration realized that a successful implementation was dependent on careful planning. The Nuance Professional Services team prepared an in-depth analysis of the workflow and environment to build deployment strategies, which met the unique needs of St. Joseph's/Candler. The in-house support team worked hand-in-hand with the Nuance Professional Services team to implement the reporting application with the sites existing MEDITECH RIS and Sectra PACS. “Both of those systems have been integrated at other sites with PowerScribe so our process was pretty straight forward. Everyone we contacted was familiar with our existing systems and the process went very smoothly. We had several items that we wanted to customize for our site and that was a very easy process,” says Melanie Nutting, Radiology Education and Marketing Outreach Manager.

After the planning phase was completed, the next phases included testing the interfaces and establishing user preferences, macros and system settings, so that the radiologists could begin using the application on day one. A review of detailed training documentation and go live specifics were also outlined as part of the plan.

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Initial Reactions

With planning and testing completed, the focus shifted to training the administrators, radiologists and transcriptionists to ensure a seamless transition. “The startup process really was pretty simple,” says Philbrick. “Within the first few hours of training, the radiologists were very eager to use PowerScribe. The interface was significantly better for them as was the degree of recognition (over the previous system).”

According to Zehel, the radiologists were “lucky if they achieved 70% recognition with the previous system. Now with PowerScribe, the accuracy rate that they are achieving is at the high 90% recognition level.”

Compared to the previous solution, more radiologists are self-editing their reports. This trend can be attributed to better accuracy across the board. Nutting states, “All the radiologists are thrilled they can read more exams in a much shorter amount of time.” This translates into less dependency on transcription services and faster report turnaround.

Challenge: Replace an existing radiology speech recognition reporting application that was unable to fulfill a departmental need for cost savings and productivity gains.

Strategy: Build upon the “lessons learned” from the first speech-recognition selection process and rigorously evaluate all available solutions using a committee of radiologists, administrators and support staff to select the best available option.

Results: After extensive assessment of options, the strategic decision was made to implement PowerScribe because of its superior accuracy, intuitive user interface, and seamless integration with existing IT infrastructure. The results: improved recognition accuracy, which led to a higher rate of self-editing; dramatic improvements in report turnaround time; improved quality of care; and annual transcription cost savings of \$233,000.

In addition to an enhanced user interface and improved accuracy, PowerScribe’s added functionality allows the radiologists to do more without having to ask for intervention from an administrator. For example, radiologists are able to fax out any STAT, preliminary or critical test result immediately to the referring physician, all in an audited manner.

“We have 10 radiologists and we all do things in a somewhat different way. PowerScribe’s user interface provides a real advantage to our staff and was one of the key drivers for selecting it over other available solutions,” says Philbrick.

Saving Transcription Headcount

One promise of speech recognition is the dramatic cost savings associated with decreasing or eliminating radiology’s dependency on transcription. When the previous system was in place, the reliance on transcription was actually much greater than anticipated. In fact, St. Joseph’s/Candler hired additional transcriptionists to cover the high volume of reports being sent for correction. Inevitably, it created delays in turnaround time and cost the department more money than before they implemented their first speech recognition system.

With PowerScribe, this was no longer the case. Says Zehel: “The level of recognition accuracy is significantly greater (with PowerScribe), which results in less reliance on transcription. Of those cases sent for correction, the delegated editor function is much better than what was



available previously. As a result, we have lowered costs dramatically—by \$233,000 annually—while improving report turnaround time. What's more, the improved turnaround time leads to getting the patient through the department faster and thus reduces the length of stay. This is a huge issue for hospitals nowadays, and PowerScribe certainly has helped us address this issue.”

Referring Physician Satisfaction

An added benefit of PowerScribe is that it offers St. Joseph's/Candler a way to provide better service to referring physicians. By completing reports so quickly, the referring physicians can diagnose, treat and get patients on their way much faster.” Philbrick notes, “The report is available online within in minutes. In fact, these results were recognized from day one. Within just hours of implementing PowerScribe, a few referring physicians called the radiology department and were absolutely amazed that the report was available on the system, within PACS, and live within minutes of the exam being completed. They were extremely happy with that.”

According to the delighted chairman, “the ER physicians know that within about 30 minutes maximum after a study is done they can look in the hospital information system and the report is there and available. That is very significant.”

In addition to the promptness of report turnaround, St. Joseph's/Candler referring physicians also commented on the improvements in document quality which can be attributed to the new system.

Conclusion

For St. Joseph's/Candler, PowerScribe is the ideal replacement for an inadequate speech system. A proven track record, extensive implementation experience, vast partner integrations, superior product functionality, improved recognition accuracy and an easy-to-use interface were more than enough impetus for change. The benefits were immediate: minimal disruption for the radiologists, less workload for transcription, faster report turnaround, significant annual cost savings of \$233,000, high 90% speech recognition accuracy, more satisfied referring clinicians and productivity gains across the board. Now, everyone from the radiologist to the referring clinician can take advantage of the increased efficiencies that PowerScribe provides.

St. Joseph's/Candler further recognized the value of selecting an experienced provider that places a great deal of emphasis on research, development and engineering. “We knew our investment in Nuance Healthcare was safe and that's a very secure feeling,” says Zehel.

For product information please visit Nuance Healthcare at www.nuance.com/healthcare or call 800-350-4836.

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