



## PowerScribe®

**University of Virginia Health Sciences Center** Achieves Remarkable Radiology Report Turnaround Time Improvements with PowerScribe®

**One of the pioneers in technology, and a leading academic medical center, University of Virginia Health Sciences Center, Charlottesville, VA, has eagerly adopted PowerScribe. Not only is every one of UVA's 100 radiologists using PowerScribe, each is self-editing his/her reports as well. A staggering 380,000 radiology reports are completed annually with PowerScribe, and average report turnaround time for these exams has decreased from weeks in some cases to less than 24 hours. According to physicians, quality of patient care at UVA has improved through the documentation enhancements attained with PowerScribe.**

### Speech Recognition is Pursued in Response to Slow Radiology Report Turnaround Time

Prior to the implementation of PowerScribe, UVA radiologists were often waiting up to three weeks for their reports to be produced by transcription. With such a lag, radiologists found it difficult to check for content errors. "All I was doing after three weeks was grammar checking, which was very anxiety provoking," said Dr. Matthew Bassignani, Radiologist and Medical Director of UVA Imaging Center. UVA physicians collectively decided that the quality of patient care was being compromised by reporting delays, and therefore chose to alleviate their problems by implementing PowerScribe.

### Ramping Up

Immediately before the PowerScribe launch at UVA, Dr. Bassignani created a PowerScribe "tips and tricks" campaign in which he sent daily emails to radiology physicians to ease any uncertainties about the ensuing implementation. Bassignani indicates that the campaign was successful because by the time Nuance trainers arrived at UVA, physicians were already familiar with PowerScribe. As a result, UVA experienced a successful

### Highlights

- 380,000 radiology exams are conducted annually
- 100% of radiology reports are currently being self-edited
- Radiology report turnaround time has been reduced from three weeks to less than 24 hours
- Quality of care has greatly increased due to ability to proofread reports for content errors rather than simply grammar
- Turnaround time for STAT reports is now less than one hour



**Dr. Matthew Bassignani, Medical Director of UVA Imaging Center**

installation with very little disruption to normal activity. “Our turnaround time improved immensely right away,” mentioned Bassignani.

At UVA, the physician learning curve was less than a week. “Most people who are computer-facile are fine with the system within a couple of days,” said Bassignani. This short learning curve can be attributed to the fact that, with PowerScribe, physician workflow is straightforward and fast. “It’s really quite simple,” stated Dr. Bassignani. After dictating a report, “I hit the sign button and the report is available to the HIS and RIS, and it automatically faxes to the referring physician’s office,” he explained.

### **Remarkable Report Turnaround Time Improvements**

Radiologists at UVA realized the remarkable report turnaround time improvements associated with PowerScribe soon after implementation. A key measure of successful adoption is the one hundred percent use of the self-editing mode of speech recognition. As a result, an average report turnaround time of 3 weeks pre-implementation has plummeted to less than 24 hours in most cases. More importantly, the turnaround time for STAT reports is now less than one hour. “You just can’t improve on the current turnaround time and we’re quite gratified,” noted Bassignani.

### **Engineered for the Radiologist**

The browser-based PowerScribe system offers a simple dictation process in that physicians can review recognized text on screen, edit, and electronically sign the report in succession. This entire process is possible through a hand-held PC-based microphone. The microphone allows for voice navigation and voice correction within a report, and even has a built-in mouse which enables a physician to create a report without ever touching a keyboard or standalone mouse. Upon electronic signature, sophisticated routing scripts ensure that copies of the document will be immediately routed to the proper locations. This efficient process, available at any internet-connected PC, clearly explains the dramatic reduction in report turnaround time realized by UVA.

To further enhance physician productivity, features of PowerScribe, including “shortcuts”, “power normals”, “templates”, and “tokens”, are also available. For recurring reports, “shortcuts”, “templates” and “power normals” are ideal. “Some recurring reports take 3 or 4 seconds to create with PowerScribe...that’s pretty darn quick,” indicated Bassignani. This impressive report production speed is accomplished as standard text is invoked through voice commands, while form fill-in capabilities are easily activated through simple microphone button or voice commands. Users can save recognized text on the fly as a standard text block via a simple “drag and drop” procedure and then recall this text to create subsequent reports. “One nice thing about PowerScribe is that it’s flexible enough to allow microphone, keyboard or voice navigation and editing,” said Bassignani.

### **Radiology Department Becomes Extremely Efficient**

Radiologists at UVA no longer have to worry about transcription workload. “PowerScribe handles the workload, whatever it is, which is wonderful,” mentioned Bassignani. “We don’t have to worry anymore about the number of transcriptionists we have to handle this workload,” he said. Bassignani is also impressed with the accuracy of PowerScribe. “I have excellent recognition. PowerScribe usually gets 100% of my report correct,” he said.

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Further enhancing departmental efficiency, the department's PowerScribe system has been integrated with its Kodak PACS which allows for even faster report completion.

#### **The Benefits of Speech Recognition – Revenue, Billing Efficiency, Better Care**

The benefits UVA has gained from PowerScribe have positively impacted other departments in addition to radiology. “PowerScribe has made us very efficient in a number of ways,” stated Dr. Bassignani. Oncologists, for example, have indicated that since the implementation of PowerScribe, they can now see more patients. Instead of building in five or ten minute delays between patient visits in order to call the radiology reading room and inquire about results, oncologists can see patients in succession with the necessary reports in hand. Having the report and results available while seeing a patient can positively influence educated treatment decisions, therefore enhancing the quality of patient care. In addition, the ability to see more patients can plausibly translate to more potential revenue for the organization as a whole.

The billing department at UVA is “ecstatic”, according to Bassignani, because the impressive report turnaround time made possible by PowerScribe facilitates quicker bill drops, which translates to reliable cash flow. Bassignani indicates that quicker bill drops also increase the payment window, meaning that, “If there's a problem with the bill and it's rejected by the insurance company or payer, the biller has some time to correct whatever is wrong with the bill.”

**Challenge:** How to manage a rising dictation volume while decreasing report turnaround time, increasing physician productivity, and increasing quality of patient care

**Strategy:** Implement Nuance's PowerScribe speech recognition solution and encourage all physicians to self-edit.

**Results:** Radiology report turnaround time has decreased from three weeks to less than 24 hours in some cases, one hour for STAT reports. Due to remarkable turnaround time improvements, radiologists can practice with more confidence and referring physicians can now see more patients while enhancing quality of patient care.

#### **Looking Forward**

UVA radiologists are extremely pleased with the balance between report accuracy and production speed that they've accomplished via PowerScribe. With rapidly rising exam volumes, radiologists at UVA are now prepared to handle such increases. Due to brisk radiology report turnaround time averages made possible by PowerScribe, referring clinicians at UVA will also be able to continue to accommodate growing patient volumes without compromising quality of patient care.

**For product information, please visit Nuance Healthcare at [www.nuance.com/healthcare](http://www.nuance.com/healthcare) or call 800-350-4836.**

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