



## PowerScribe®

**Shields Health Care Group** Replaces an Unreliable Speech Recognition System with Dictaphone PowerScribe®, Enhancing Satisfaction of Radiologists, Referring Physicians, and Patients Alike

**Shields Health Care Group, Quincy, MA, a family owned organization comprised mainly of an elaborate network of imaging providers, is committed to unsurpassed patient care and clinical excellence. Holding true to this commitment, Shields is committed to employing technology effectively and was an early adopter of speech recognition. When its initial speech recognition system (from another vendor) proved unreliable for its needs, Shields turned to Dictaphone® PowerScribe® Speech Recognition from Nuance to enhance the efficiency of 150 radiologists throughout New England and Ohio. In so doing, Shields was able to improve service to referring physicians and the overall patient care experience.**

### **Mission to Replace Unreliable Speech Recognition System**

Prior to implementing PowerScribe, Shields utilized Agfa's TalkStation® Speech Recognition for several years. Over time, system performance degraded, leaving members of the Shields community extremely dissatisfied. "The pre-PowerScribe environment was one of great frustration," noted Patricia Whelan, Chief Information Officer. "Not only was the recognition accuracy poor, the system was also slow." This spread a feeling of uneasiness throughout the Shields community. "Having speedy, efficient, and reliable technology is critically important to us; it's not an option, it's a requirement," said Tommy Shields, Executive VP, Marketing & Administration. Executives at Shields decided that they needed to partner with a progressive company in order to promote efficient report generation and rapid delivery of results to referring physicians and patients. "We really had learned the first time out of the gate that we didn't want a vendor, we wanted a partner," said Whelan.

### **Highlights**

- 150 radiologists across a wide area network of 24 locations self edit 100% of their reports
- Transitioning from Talk, radiologists have attained average speech recognition accuracy improvements ranging from 20-25%
- Report turnaround time is now consistently under 20 hours – an average reduction of 4 to 10 hours at each facility
- Executives at Shields are now "100% confident" in the reports they are releasing to the referring community.



**Shields Health Care Group IT Team at Gillette Stadium**

Whelan's team explored several speech recognition products, bringing three systems in for radiologists to thoroughly test and evaluate based on performance, speed, and cost. PowerScribe soon emerged as the best solution for Shields. "It's the Kleenex® of speech recognition; any other alternatives were certainly weak alternatives relative to PowerScribe," noted Jeff Ronner, Chief Financial Officer.

### Why Invest in PowerScribe?

Like many organizations, Shields carefully chooses technology investments. Bill Demianiuk, Chief Operating Officer, emphasized that Shields prefers to make long term investments in technology, and rigorously examines the cost of any given product compared to the actual value the product presents. Of all other speech recognition vendors considered, PowerScribe appeared to be the most reliable product which could facilitate an extremely efficient and productive environment. Executives at Shields asserted that PowerScribe would allow them to fully leverage their most expensive asset – their radiologists. Thus, PowerScribe presented the "best value".

### Preparing to Go-Live with PowerScribe

In order to immediately reap benefits from PowerScribe, Whelan's team gleaned various implementation tips from other customers in Dictaphone's extensive network of referencable clients. Dictaphone's Professional Services group also offered valuable advice regarding best practices to follow once the system was up and running. The Shields IT team worked

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closely with Dictaphone to examine their existing processes and to make changes where appropriate in order to optimize their investment.

Most radiologists at Shields were excited about the ensuing PowerScribe implementation. "They were spending so much time editing their own reports with the previous system that it became unbearable for them," mentioned Whelan. Radiologists were ready to adopt a solution which allowed them to efficiently read exams without worrying about wasting time extensively editing their reports.

### Successful Implementation

With the help of Dictaphone, Shields was able to meet two objectives immediately which had previously been unattainable with TalkStation. First, they were able to eliminate bar coding and other laborious tasks in order to truly establish a "paperless environment". Second, successful interfaces were established between PowerScribe and Shields' McKesson® PACS as well as their homegrown RIS. "The level of expertise of the HL7 team at Dictaphone and their ability to work with my team here on integrations was of paramount importance to us. We are not an organization that likes to implement systems in silos; what we wanted was a vendor that understood the importance of integration across those systems so that we can optimize our investment," said Whelan. The integration work was efficiently completed, facilitating an extremely rapid roll-out of PowerScribe.

*“The product itself is very easy to learn and very easy to train.”*

### Outstanding Results

PowerScribe was completely rolled out to the Shields community within the matter of a few months. Peter Ferrari, Director of IT, expressed his amazement regarding the successful roll-out: “My biggest worry was, ‘how are we going to roll this out to a massive amount of physicians across multiple physician groups.’” Ferrari explained that his worry was soon eased: “The reality was we were able to do it within a two month period; we didn’t have any delays and we met our timelines.”

Positive results were achieved immediately. Since the radiologists were already well versed with speech recognition, they were easily able to learn a new system. “The product itself is very easy to learn and very easy to train,” said Whelan. Average recognition accuracy improvements compared to their prior system ranged from 20-25% for radiologists. As Whelan points out, “By implementing PowerScribe we were able to return radiologists to the work they truly enjoy doing.” Additionally, Shields achieved a reduction of 4-10 hours off of report turnaround time at their facilities. Now, report turnaround time never exceeds 20 hours across the Shields network. “This year will be the most efficient year by far for the radiologists; certainly PowerScribe is contributing to that,” stated Ronner. Ronner also mentioned the radiology reports are much more accurate with PowerScribe, and Shields can now be “100% confident” in the reports they are releasing to the referring community. Referring physicians now receive reports more quickly, and therefore can treat patients more effectively – with more evidence to make informed patient care decisions.

**Challenge:** Replace an unreliable speech recognition system by partnering with a vendor that actively engages in providing the very best cutting edge technology.

**Solution:** Rapidly roll-out Dictaphone PowerScribe Speech Recognition to numerous radiologists in multiple physician groups.

**Results:** PowerScribe is being used by 150 radiologists at 24 locations in 100% self-edit mode; average speech recognition accuracy improvements (compared to prior system) range from 20-25%; report turnaround time never exceeds 20 hours; confidence in report quality is evident throughout the Shields community.

### Key Differentiating Features

In addition to the previously highlighted benefits of PowerScribe, which include improved report turnaround time, better speech recognition accuracy, and enhanced report quality, PowerScribe also exceeds Shields’ prior speech recognition system in other areas.

Sherry DeSousa, Clinical Applications Engineer, enthusiastically discussed the administration module of PowerScribe. “From an administrative perspective, PowerScribe is great. Obviously, as an administrator, you want to be proactive, not reactive; this module allows you to do that.” DeSousa explained that the administration module is organized in a way in which it’s easily accessible and navigable. “You click on your menu options, see your configuration, change your configuration, and you can do it all in one window,” said DeSousa. She contrasted this module with that of their previous speech recognition system, noting that manipulating any data from the backend in TalkStation had to be done on a SQL database level, which “was not ideal at all.”

Ferrari pointed out that previous latency issues inherent in their old speech recognition system no longer exist with PowerScribe. No matter where physicians are within Shields’ large network, they can efficiently use PowerScribe. Ferrari mentioned that PowerScribe is a much “lighter footprint” on the Shields network, freeing up additional bandwidth that was once required to support their previous system.

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**Shields Executive Team: Tommy Shields, Executive VP of Sales; Bill Demianiuk, COO; Jack Shields, President; Patricia Whelan, CIO; and Jeff Ronner, CFO.**

One key product feature which members of Shields are ecstatic about is PowerScribe “Power Normals”, or templates. “With TalkStation, radiologists had to insert a macro with a voice command or go to a drop down menu. With PowerScribe, your Power Normals are on the right side of your dictation window...You can insert them with a voice command or simply click, drag, and it’s in your dictation window and you’re ready to move on,” said DeSousa.

**Dictaphone Service & Support: Exceptional**

The IT department at Shields praises the service and support they’ve received from Dictaphone; a stark contrast to the unreliable service and support offered by their previous speech recognition vendor. Dictaphone support personnel have continually provided Shields with rapid solutions to any issues that have arisen. “If PowerScribe reports aren’t available, patients aren’t being treated; Dictaphone understands this,” Whelan pointed out.

**Prospering Despite Extreme Competition**

Most industry analysts would agree that the outpatient imaging market is extremely competitive. The growth rate of new imaging centers throughout the past five years has nearly reached 50%. In this environment, Shields executives know they need to excel in all aspects of their business in order to remain ahead of the competition. “Before, the whole imaging pie was growing so everyone was well fed; today you have a fixed pie and you have to compete for someone else’s piece of the pie...You do it on service, you do it on quality, and you do it on efficiency and

accuracy of your reporting,” said Tommy Shields. The Shields organization feels that PowerScribe has significantly contributed to their ongoing competitive advantage. Demianiuk puts it succinctly, “Having the report available immediately after the radiologist dictates is an unbelievable power.”

**PowerScribe: Conducive to Founder’s Vision**

According to Whelan, the Shields founder, Thomas Shields, believes in two overriding principles that healthcare providers should uphold. The first is to truly care for the patients, and the second is to strive to be easy to do business with. “One of the things that makes Shields easy to do business with is PowerScribe,” proclaimed Whelan. Jack Shields, President, conveys the reputation of Shields in his eyes, “Our name brand stands for excellence in service, imaging, and physician interpretation. With the help of PowerScribe, we have quick report turnaround time and that augments our great service, great technology and fantastic radiologists and it helps differentiate us from the rest of the field.” That combination is proving to be invaluable for Shields.

**For product information please visit Dictaphone Healthcare Solutions at [www.nuance.com/dictaphone](http://www.nuance.com/dictaphone) or call 888-350-4836.**

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The experience speaks for itself™