

PowerScribe 360 Reporting: speech recognition structured reporting multi-site workflow

PowerScribe 360 Reporting is a powerful radiology reporting platform that combines speech recognition technology, peer review, data capture, multi-site workflow, and structured reporting in a single solution.

Challenge

How can the radiology department be provided with a reporting system that doesn't require the consultants to change their behaviour, lets them create structured documents with ease, efficiently captures reporting data, integrates a peer review workflow, and consolidates multiple RIS/PACS in a single solution?

Solution

PowerScribe 360 | Reporting is the number one choice of academic centres, hospitals and imaging centers with unique workflow, data-driven reporting, clinical documentation, and communication needs. PowerScribe 360 | Reporting allows radiologists

to create and turn around diagnostic imaging interpretations faster than ever before. By providing more than just dictation and report creation, PowerScribe 360 | Reporting takes radiology speech recognition reporting to the next level as the new industry standard for report creation, multi-site workflow, data capture, and communication. This new radiology speech-enabled reporting platform combines speech recognition technology, peer review, data capture, multi-site workflow, and structured reporting in a single solution. This next-generation system provides real-time speech recognition and dictation, transcription and correction workflow, printing, faxing, coding, peer review, integrated clinical content, and extensive administrative tools.

Key features

- › Dragon® Medical intuitive reporting and user interface.
- › Multi-site RIS/PACS workflow management.
- › Advanced macro capabilities and voice-driven navigation.
- › Integrated peer review.
- › Integrated clinical content for point-of-care knowledge access.
- › Custom data capture and extraction tools.
- › Flexible Web Services API for searching, updating, and retrieving data from the reporting platform.
- › Enhanced web-based administrator and end-user portal.
- › Supports Windows® Server 2008, SQL Server 2008, Windows 7, MS Cluster Services, VMware®, and 64-bit OS workstations in 32-bit emulation mode.

Key benefits

- Reduces costs, improves productivity, and increases referring doctor satisfaction.
- Eliminates manual processes, automates workflow.
- Reduces report turnaround time (TAT) from hours to minutes.
- Enhances consultant productivity with user customisable workflows and dictation options.
- Improves care through better clinical documentation.
- Fully extendable reporting platform to maintain productivity anywhere.

PowerScribe 360 | Reporting also offers a Web Services API that allows healthcare facilities and third-party solution providers to integrate applications directly into this extendable platform.

Dragon® Medical Speech Recognition

Using the award-winning Dragon Medical speech recognition engine, PowerScribe 360 | Reporting is more accurate than ever before, with up to 99% accuracy out of the box, benefiting from advanced adaptation techniques. More accuracy means less editing with PowerScribe 360 | Reporting.

Designed to Orchestrate Workflow

Share patient information, view images, and interpret cases across disparate locations and systems with built-in, multi-site radiology workflow management tools. Designed to address the needs of healthcare networks with multiple RIS, PACS, and Advanced Visualisation applications, PowerScribe 360 | Reporting Workflow Orchestrator seamlessly integrates these elements into a single worklist for consultants. The PowerScribe 360 | Reporting Workflow Orchestrator offers robust worklist creation tools as well as user workgroups and procedure mapping for worklist organisation. With this feature, PowerScribe 360 | Reporting can launch an unlimited number of supported legacy and web-based PACS viewers while intelligently returning orders to the appropriate RIS system from a single reporting workstation.

Supports All Dictation Styles

PowerScribe 360 | Reporting offers four primary dictation styles to accommodate individual doctor dictation preferences. Radiologists can switch between dictation styles on a report-by-report basis if desired. Options include:

- Speech Recognition with Delegated Editing. A combination of front-end speech recognition with transcription/correction workflow. Radiologists do not edit their own reports; instead, their speech-recognised draft report is forwarded to a transcriptionist for correction and formatting.
- Real-time Speech Recognition with Self-editing for Nearly Instant Turnaround Time (TAT). Real-time speech recognition that allows radiologists to view text as it is dictated. Edit using speech recognition, keyboard, mouse, or a combination thereof – voice commands and microphone controls are used to correct and navigate through the document.
- Real-time Speech Recognition with Auto-loading Macros. Macros may be mapped to procedure codes and can be triggered by patient age and gender modifiers. Users can voice-navigate standard text blocks, numeric fields, and pick lists – all of which are fully voice-editable.
- Real-time Speech Recognition with Auto-structured Reporting. Auto-structured reporting eliminates the need for the doctors to follow the structured format of a macro, while the application automatically structures report content using conventional structured macros.

Workflow Designed for All Users

PowerScribe 360 | Reporting has robust workflows that map to the specific users' daily routine, including consultants, fellows, registrars, technologists, transcriptionists, front-desk users, administrators, and more. This means that consultants and registrars can now create higher-quality documentation in less time. In addition to workflow enhancements that are based on user roles, PowerScribe 360 | Reporting includes new workflows such as Wet Read functionality that allows Emergency Department doctors, overnight registrars, and others to create "pre-draft" dictations for off-hour preliminary reporting.

Integrated Peer Review

Integrated with a quality assurance program, PowerScribe 360 | Reporting Peer Review can automate quality improvement initiatives in your department or practice. The consultant can evaluate prior reports while viewing and interpreting images via automated prompting or manual invocation using a standardised four-point rating scale (or facility-customised descriptions) with clinical significance

IT Platform Support

- ▶ MS Windows Server 2008
- ▶ MS SQL Server 2008
- ▶ Microsoft Windows 7
- ▶ Internet Explorer® 8.0
- ▶ Microsoft Cluster Services (MSCS)
- ▶ VMware®
- ▶ 64-bit OS Workstations
(in 32-bit emulation mode)

indicators. The final Quality Assurance (QA) data can be reviewed, managed and exported from the PowerScribe 360 | Reporting Administrator Portal.

Integrated Clinical Content

PowerScribe 360 | Reporting offers an integrated radiology knowledge application with voice-driven and automated context-relevant searching. Information is delivered instantly and provides access to disease details, differential diagnoses, radiology and anatomy e-books, medical image searches, Internet content, radiology search engines, annotated anatomical atlases, and more.

PowerScribe 360 Reporting Assisted Diagnosis

PowerScribe 360 | Reporting Assisted Diagnosis runs in the background and will not interfere with your consultants' interpretation process: users can simply say a voice command to initiate reference searches. PowerScribe 360 | Reporting Assisted Diagnosis also makes it easy to bookmark your favorite websites so they are always within reach.

Custom Data Capture and Extraction Tools

PowerScribe 360 | Reporting's built-in access to a configurable data entry tool allows consultants, technologists, nurses, and administrators to capture information when it is needed most. A custom field interface in the client application allows consultants to enter custom data elements for post-reporting

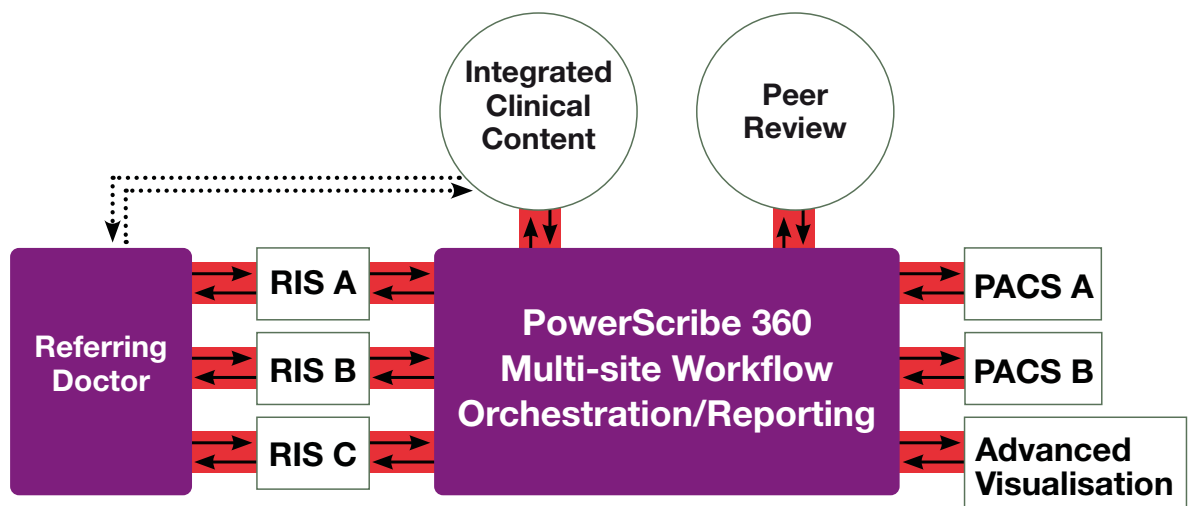
extraction and analysis. Sample uses include recording radiation exposure, documenting contrast dosing and reaction, flagging interesting cases, recording technologist or registrar QA, marking cases for follow-up, evaluating study appropriateness, or flagging pertinent findings. Additionally, other healthcare professionals involved in the care of patients can enter data, which may be linked to a study and automatically merged into a consultant's reporting template.

Flexible Web Services API

PowerScribe 360 | Reporting is a fully extensible reporting platform with a flexible Web Services API that provides a standard mechanism for searching, retrieving data, and updating information in the database, allowing programmers to create applications that access the PowerScribe 360 | Reporting database.

Web-Based Administrator and User Portal

PowerScribe 360 | Reporting is managed by a secure web-based portal so your consultants and administrators can access and monitor critical system and patient information from anywhere in the hospital network. In addition to administration tools, a separate end-user portal provides web-based access to key system functionality. This allows consultants, fellows, and registrars to edit reports and electronically sign preliminary and final interpretations on the web.



„The turnaround times for radiology reports went down from 3 days to a few hours. Most of the physicians converted to speech recognition within a week. We are paper-less and have total control of the outcomes of our radiology services“

„We have a multi-cultural, multi-linguistic environment. Nevertheless, 90% of my colleagues have acquired recognition accuracy in English of 85 to 90% accuracy within one week. And the system keeps on learning and adapting. That is the most important part.“

– Dr. Yousif Makkawi, nuclear medicine physician and PACS administrator at Sheikh Khalifa Medical City (SKMC), Abu Dhabi, UAE

About Nuance Healthcare

Nuance Healthcare, a division of Nuance Communications, gives doctors access to voice recognition technology anywhere, any time, on any device. Nuance Healthcare empowers healthcare provider organisations and individual doctors to accurately capture and transform the patient story into meaningful, actionable information in 22 languages. Today, over 10,000 care giver organisations and 500,000 users worldwide trust Nuance voice recognition technology to deliver higher quality care, improve financial performance and enhance compliance efforts.

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