

# Commissure RadWhere™ for Radiology

Structured Reporting, Workflow Orchestration, Peer Review,  
Data Capture, Integrated Content and Communication Tools

## RadWhere™ for Radiology Workstation – Multi-site, Robust Data-Driven “Once and Done” Structured Reporting

### CHALLENGE:

How can I provide my radiologists a single unified work list, create structured reports, efficiently capture report data, and integrate clinical content and communication tools into the reporting process?

### SOLUTION:

RadWhere for Radiology is the #1 choice of academic centers, hospitals, and imaging centers with unique workflow, data-driven reporting, and communication needs.

RadWhere for Radiology is a front-end speech recognition solution that provides workflow productivity tools that improve the day-to-day tasks of everyone involved in the interpretation and delivery of diagnostic imaging exams: the referring physician, technologist, radiologist and administrator.

At the core of the RadWhere for Radiology application is the latest in structured speech recognition technology optimized specifically for the radiology domain. RadWhere for Radiology goes beyond speech recognition, offering numerous dictation options to meet the unique needs of every radiologist in your department. Users may complete reports with free text recognition, standard site macros, individual radiologist macros, RadWhere for Radiology Smart Templates and Findings-only Dictation. RadWhere even lets radiologists jump between styles within the same report.

### Key Benefits

- Improves multi-site workflow
- Simplifies peer review process
- Automates manual processes
- Reduces turnaround time
- Connects to radiology content
- Audits critical communications
- Maintains productive anywhere

### Key Features

- Supports LDAP authentication
- Seamless multi-PACS/multi-RIS integration
- Integrated ACR-compliant peer review
- Procedure code mappings for auto-loading macros
- Voice-driven navigation, editing, and signoff
- Voice-driven patient and order notes
- Access to prior reports and RIS data
- Annotated “chat sessions” between users
- Custom data capture and extraction
- Integrated critical test results management option
- System safeguards and user customization
- Web-based administrative management

User-specific roles allow for customized workflow that meets your department's needs. Academic facilities will appreciate its ease-of-use with resident, attending and fellow accounts. Managing resident-attending workflow and capturing contributor data for tracking read out sessions has never been easier. Assigning administrators, technologists, and front desk specialists helps in supporting of workflow related tasks.

RadWhere for Radiology fits the active lifestyle of today's practicing radiologist. With access via .NET 2.0 technology, users can remotely connect without compromising functionality or processing speed. Reporting from a remote location is simple with VPN access satisfying all HIPAA-compliant encryption protocols.

### Designed to Orchestrate Workflow

RadWhere for Radiology offers industry-leading radiology workflow management. Designed to address the needs of healthcare networks with multiple RIS, PACS, 3D, and teleradiology systems, **RadWhere™ Workflow Orchestrator** seamlessly integrates these elements into a single work list for the radiologist.

Through the use of unrestricted Boolean logic and departmental user groups, RadWhere for Radiology can launch an unlimited number of legacy and web-based PACS viewers while intelligently returning orders to the appropriate RIS system from a single workstation.

RadWhere also provides substantial benefits for facilities that do not need the robust capabilities of multi-system workflow management. It drives RIS/PACS workflow in a single environment or can allow a third party system to handle order lists, routing, editing and electronic signature workflow.

### Supports All Dictation Styles

RadWhere for Radiology offers four dictation styles to accommodate physician preferences:

- **Real-Time Speech Recognition with Self Editing.** “Once and done” real-time speech recognition allows radiologists to view text as it is dictated. They can edit using keyboard, mouse, and standard word processing tools, or with voice editing—voice commands and microphone controls to navigate and correct the document. Radiologists also have the option of hands-free dictation—using a USB headset and foot pedal. The software immediately recognizes spoken changes and additions anywhere in the report.
- **Real-Time Speech Recognition with Auto-Loading Macros.** This offers radiologists the ability to maximize efficiency. Templates are categorized/mapped to procedure codes and trigger by modifiers such as age and gender. Auto-loading normals are established for every exam which accommodates site-wide structured defaults and/or individual defaults. Users can voice navigate standard text blocks which are fully voice editable.
- **Real-Time Speech Recognition with Auto-Structured Reporting.** This eliminates the need for the radiologist to follow the structured format of a macro. Natural language understanding (NLU) and processing algorithms automatically structure positive report content. The radiologist dictates the necessary abnormal statements and the RadWhere for Radiology applications logic assigns individual findings to the appropriate report fields. Once complete, the application presents the interpreting radiologist with a final report for review and edit. This intelligent phrase recognition and automatic organization tool can greatly reduce the time spent using conventional structured macros.

“RadWhere for Radiology is an excellent product, not only because it has excellent recognition, but also because it provides a full complement of services around the voice recognition to support what I do.”

– Andrew Litt, MD  
Chief of Staff and Associate Professor  
NYU Medical Center  
New York, NY

- Real-Time Speech Recognition with Transcriptionist Editing.** A combination of front-end speech recognition with transcription workflow and editing, it may be used in conjunction with any of the above reporting styles.

### Custom Data Capture and Extraction

RadWhere for Radiology offers easy access to radiologist-driven custom data entry as well as web-based technologist data entry.

RadWhere for Radiology's web-based technologist portal allows for data capture, which can be linked to a patient and automatically merged during the radiologist's dictation. For example, a technologist can enter data relating to radiation dose values for a particular patient. When the order is retrieved by a radiologist and opened, the predefined values are automatically inserted into a standard report macro, requiring only the radiologist's dictation to be added.

RadWhere for Radiology's client workstation interface allows the radiologist to enter custom values for later extraction and analysis. For example, a radiologist may want to flag teaching cases, clinical trials, or record data relating to technologist QA and image quality.

### Integrated Context-Aware Clinical Content

RadWhere for Radiology offers integrated radiology knowledge with automated context aware searching. Information is delivered via natural language understanding

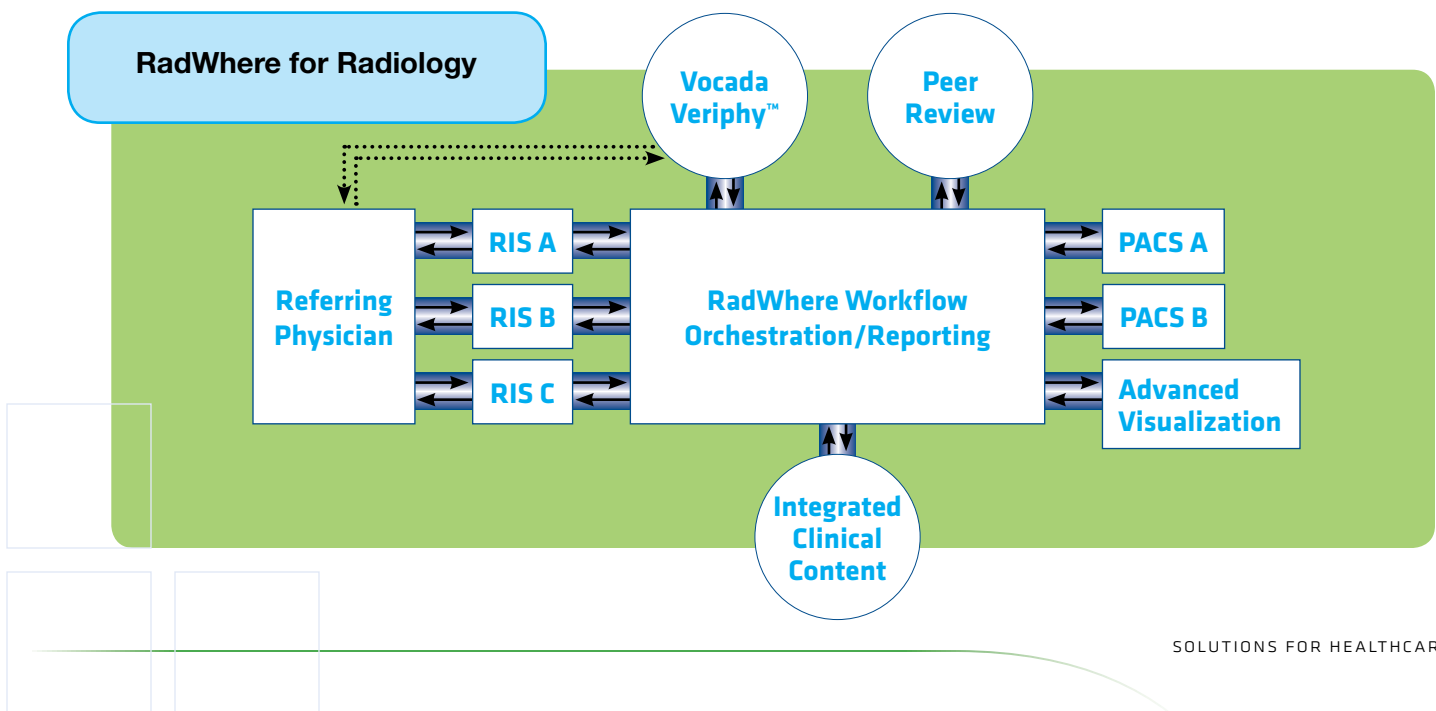
with instantaneous access to disease details, anatomy, differential diagnoses, radiology and anatomy e-books, medical image searches, Internet content, radiology search engines, annotated anatomical atlases, and more. In addition to standard content, third-party integration supports direct access to additional resources. For example, integration with Amirsys® STATdx™ provides an additional content offering.

### Integrated Critical Communications


RadWhere for Radiology integrates **Vocada Veriphy™** CTRM directly into the reporting process to provide a user-friendly enterprise communication system for critical test results management. This system eliminates the need for the radiologist to pick up a telephone and call a referring clinician. The reporting application automatically populates the appropriate data and audio is captured directly from within the application. The recorded findings are delivered to the referring physician and a JCAHO-compliant confirmation receipt is created. Individual user and administrator management round out this tightly integrated critical communication component.

### Advanced Support for Customization

Radiologists can customize vocabulary, dictation preferences, report styles, macros, layouts, shortcuts, and more. Administrators can customize management options, site-defined rules, system workflow, peer review validations, exception/communication log tracking, and system protocols.



## Dictaphone Healthcare Solutions

- **Commissure RadPort™ for Radiology**—A secure, web-based decision support application for appropriate diagnostic image order entry that satisfies pre-certification requirements.
- **Commissure RadWhere™ for Radiology**—A data-driven, front-end structured speech recognition reporting application designed for multi-site workflow orchestration.
- **Commissure RadCube™ for Radiology**—A comprehensive, yet flexible, data warehouse for multidimensional business analysis and visualization.
- **Dragon® NaturallySpeaking® Medical**—A front-end real-time speech recognition program that works with virtually any Windows®-based EMR system for efficient report completion, and easy navigation and adoption of the EMR. 
- **Enterprise Workstation®**—A front-end browser-based solution that offers physicians flexible input and editing options, to reduce report turnaround time and the costs associated with transcription.
- **Enterprise Express® Products**—Dictation, transcription and back-end speech recognition solutions that offer some of the most sophisticated technology and advanced editing capabilities. EXSpeech® is a key option, which recognizes physicians' dictation and routes it to a transcriptionist for final editing.
- **iChart® Managed Services**—A flexible ASP solution that integrates world-class speech assisted transcription services and advanced speech recognition technology to meet each organization's unique document completion needs.
- **PowerScribe® for Radiology**—A web-based, front-end speech recognition solution that can help radiology departments significantly reduce report turnaround time and lower transcription costs by as much as 75%-100% a year.
- **PowerScribe® for Pathology**—A front-end web-enabled workstation designed with special pathology-specific features for efficient hands-free reporting—from gross description through electronic signature.
- **Vocada Veriphy™**—A critical test results management solution that enhances patient care, increases physician productivity, improves risk management and automates compliance.

Powered by LEXIMER. Lexicon Mediated Entropy Reduction (LEXIMER) is a patented Natural Language Processing (NLP) engine designed for the medical imaging domain. LEXIMER provides data mining algorithms which extract, structure, and classify unstructured radiology report text in real-time as well as via batch processing.

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## Fits Your Workflow, Integration, and Data Reporting Needs

RadWhere for Radiology offers integration into your existing radiology workflow, from a single multi-site worklist to automated structured reporting to voice driven navigation, editing, and electronic signature. A shared HL7 data stream eases the process of analyzing data, performing trend analysis, and measuring exam productivity.

HL7 interfaces to leading PACS/RIS vendors means all order information is delivered to RadWhere for Radiology and consolidated into a single worklist. After selecting an order from the unified worklist, the data is pulled from the appropriate RIS, images are launched on the appropriate PACS, and RadWhere for Radiology-dictated reports are uploaded back to the appropriate RIS system.

The RadWhere for Radiology database is fully integrated with the **RadCube™ for Radiology** data mining and analysis tools. RadCube is a powerful, yet easy-to-use radiology-specific reporting and analysis platform which enables users to create customized queries and visualize the results using charts and graphs with no programming skills needed. The RadWhere for Radiology database is automatically exported to an OLAP cube ready for analysis. A number of predefined projects are included (patient/exam metrics, report metrics, productivity metrics, template statistics, exact findings), providing access to a wide variety of queries.

RadWhere for Radiology represents the next step in the expansion of the Dictaphone family of radiology solutions, offering multi-site, multi-RIS/PACS workflow in a closed loop environment.

## About Dictaphone

Dictaphone Healthcare Solutions is a division of Nuance Communications, Inc., the world's leading provider of speech and imaging solutions. Today, Dictaphone provides the most comprehensive family of speech-driven clinical documentation solutions available anywhere. Our vision is to accelerate the adoption of EMR systems, helping providers maximize the return on their technology investments.

To learn more about Dictaphone Healthcare Solutions, please contact us at **888-350-4836** or visit [www.nuance.com/dictaphone](http://www.nuance.com/dictaphone).