

Speech Recognition

Stand alone or embedded, natural-language technology to drive productivity.



Whether seamlessly integrated to third-party systems or embedded in the eRAD platform, eRAD's Speech Recognition enables radiologists to achieve faster turnaround times—a key measure for the health of your practice.

In imaging and radiology practices nationwide, productivity, patient satisfaction, and reimbursement are all closely tied to timely, accurate reports. Speech recognition technology drastically improves report generation workflow with faster turnaround and lower costs.

eRAD brings an industry-leading speech recognition engine—M*Modal—to your practice, so that radiologists can quickly create finalized reports. M*Modal combines eRAD's speech and natural-language understanding technology to contextually understand the physician narrative. Radiologists can achieve unparalleled, out-of-the-gate accuracy and performance. You gain measurable improvements not only in report turnaround time and cost effectiveness, but also in quality and patient outcomes.

FEATURES

► Natural language understanding

eRAD Speech Recognition adapts to how radiologists naturally work—going beyond word string translation to sophisticated speech understanding. The radiology-specific lexicon self-learns, not only from your speech but from thousands of radiology clinicians worldwide, which adds up to hours saved in report turnaround times.

► Embedded or stand-alone dictation

Dictate directly into the eRAD reporting workflow while you scroll or manipulate images. Physicians can record, edit, and complete their own documents or send for editing / transcription, via eRAD's robust editor's workflow.

► Voice navigation

Radiologists gain speed, accuracy, and control by using voice commands to automate frequent tasks, such as inserting text, navigating report blocks, and using pick-lists. Voice commands can be customized and organized by modality and body part. Microphone buttons can be customized to align with many functions.

► Anywhere narration

Cloud-stored profiles roam with the user, so any user-defined changes auto-populate on any workstation—no more loading from a thumb drive. A secure RIS client enables radiologists to connect without VPN hassles, making remote collaboration easier. Direct access is supported from any workstation that can connect to the internet.

► Reporting templates

Consistent quality is achieved with system-wide or user-specific templates that can auto-load based on CPT code or other defined rules. Custom digital forms can be pulled into diagnostic reports to address unique needs.

"As a result of Speech Recognition, our turnaround time is cut in half, at least. Within 24 hours of implementation, all of our doctors were self-signing. The first day we rolled it out, we were getting STAT reads back to our clients within 20 or 30 minutes. We actually had half a dozen clients call to ask us what had changed. It's a straightforward way to increase our efficiency while decreasing our costs."

Brian Huff

IT Director

Southeastern Overread Services
Greensboro, NC

"We had quite a list of criteria for our next system, and in our evaluation eRAD stood out as one of the few able to satisfy our needs. One of the biggest factors was that eRAD had previous interface experience with Athena, and they had the dictation, transcription and speech recognition built right into the PACS viewing software—so we didn't have to purchase a third-party system and go to the trouble of integrating and supporting it."

Martha Mastroberti

Manager

Healthcare Informatics at VMG

UNDER THE HOOD

Speech Recognition

The M*Modal Speech Understanding advantage

Once the gold standard, conventional speech recognition is no longer sufficient for today's clinical documentation challenges. That's why we created a more intelligent alternative. eRAD's Speech Recognition is based on M*Modal's advanced speech technology which transcends simple health speech recognition to achieve true medical Speech Understanding™. Developed over a decade ago and refined through steady technological advancement and the accumulated experience of 200,000 physicians, M*Modal Speech Understanding technology is much more than automating voice-to-text rendering. Unlike simple speech recognition, Speech Understanding recognizes the meaning and syntax of the dictation, not just the individual words or word strings. With the benefit of contextual understanding of a document's meaning, physicians can dictate in a normal, "conversational" mode—without needing to follow particular speech structures or provide verbal cues to the engine.

- Available as a cloud-based solution
- Conversational speech with the highest accuracy
- No need for restrictive voice commands for punctuation or formatting
- Out-of-the-box effectiveness from day one
- Automatic and continuous learning system
- Creating structure from the narrative
- Information-driven workflows
- Unstructured data analytics

FEATURES



Portability

Users get fully integrated eRAD Speech Recognition via both cloud and local VR engines. The cloud server enables roaming profiles, i.e., users access their profiles at login from anywhere. eRAD's Speech Recognition is easy to install and access from its self-contained web-client for remote access from any workstation connected to the Internet.



Integration

eRAD's Speech Recognition integrates with third-party RIS or PACS systems using Web Services and HL7 platforms. It supports multi-site architecture with a modern user interface.



Performance

Users can report using full interactive mode or—for those not ready to make the leap to self-editing—in batch mode, where recognition is done in the background and sent to an editor for review. Report templates are provided, as well as macros for on-the-fly customizations. eRAD's Speech Recognition allows speech mic buttons and external keyboards to be mapped to user-defined commands.