

Case study

Faster, smarter and easier reporting with a customizable speech-driven solution

St. Claire HealthCare, Morehead, Ky.

Organization snapshot



Community hospital with 159 beds



7 primary care locations



75,000 radiology exams per year



3 radiologists

Health system profile

St. Claire Regional Medical Center was founded in 1963 as a general acute care hospital. It expanded to become St. Claire HealthCare and serves a population of about 160,000 people in the area surrounding Morehead, Kentucky. St. Claire HealthCare provides a wide range of diagnostic imaging services, including computed tomography (CT), magnetic resonance imaging (MRI), nuclear medicine, positron emission technology (PET), women's imaging and interventional radiology.

3M technologies

- 3M™ M*Modal Fluency for Imaging
- 3M Fluency for Imaging workflow extensions for peer review and actionable findings results management
- 3M adoption services

“Radiologists don’t want to spend a lot of time trying to figure stuff out, make multiple clicks or scroll. 3M Fluency for Imaging is just so well integrated, you don’t really have to think, it kind of becomes part of you.”

– Dr. William Lewis, diagnostic radiologist, St. Claire HealthCare

Transitioning from transcription

Prior to switching to speech-driven reporting software, the imaging team at St. Claire HealthCare completed radiology reports using two to three full time transcriptionists. In 2015, St. Claire HealthCare transitioned from its legacy solution to 3M Fluency for Imaging. “We have saved a substantial amount by not having transcriptionists – I’d estimate more than \$1 million in savings over seven years,” said Dr. William Lewis, who has been a radiologist at St. Claire HealthCare for nearly 20 years.

“When I first started, I might have read 10,000 exams a year,” Dr. Lewis said. “Now, it’s probably double that. Radiologists couldn’t do this job now without speech recognition technology. I can’t imagine trying to transcribe, read through each report and physically sign off on that many exams. So having 3M Fluency for Imaging as part of our workflow is very efficient.”

Taking the work out of workflows

Artificial intelligence (AI) and natural language understanding (NLU) technology within 3M Fluency for Imaging help St. Claire HealthCare’s radiologists create higher quality reports in less time. Enabling speech recognition directly in the picture archiving and communication system (PACS) has made the reporting workflow more efficient.

“Radiologists don’t want to spend a lot of time trying to figure stuff out, make multiple clicks or scroll,” Dr. Lewis said. “3M Fluency for Imaging is just so well integrated, you don’t really have to think, it kind of becomes part of you. It’s so quick. Once you sign off on one report, the next one is up. I don’t sit there waiting. That means a lot during the day.”

At St. Claire HealthCare, Dr. Lewis experiences faster report turnaround times than with other speech recognition software he uses in freelance radiology reading. “It tires me to read using any speech product other than 3M Fluency for Imaging,” Dr. Lewis said. “I can probably dictate an exam 30 percent faster using the 3M solution.”

With accurate speech recognition and contextual language understanding, 3M Fluency for Imaging offers radiologists confidence when dictating. For Dr. Lewis, little things make a big difference. He appreciates the 3M solution:

- Uses contextual understanding to begin a new paragraph when prompted by voice command (versus typing “new paragraph” as text)
- Understands his eastern Kentucky accent
- Catches short, but significant words like: may, if, or, but
- Autocorrects numbered items in a list if he inadvertently repeats or skips a number

According to Dr. Lewis, this hasn’t been the case with other systems he has used. “This is a big deal,” he said. “In the course of a day, you can’t believe the amount of time saved by not having to go back and correct each one of those lines. You’re not going to find a more user-friendly platform than 3M Fluency for Imaging. It makes my life easy. I’m spoiled by it.”

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Dr. William Lewis,
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St. Claire HealthCare

Giving radiologists time back in their day

3M Fluency for Imaging enables faster report creation with:

- Accurate speech recognition
- Seamless integrations
- Sophisticated NLU and AI-powered insights
- Minimal mouse clicks
- Quick load times
- Customizable macros and standard templates

Complete and compliant reports in less time

The ongoing pressure of rapid reading continues to cause burnout. With 3M Fluency for Imaging, the radiologists at St. Claire HealthCare can get through their worklists quickly and efficiently. Customized reporting templates and macros are critical time savers; they also facilitate accurate and compliant documentation, which prevents over or under coding and helps secure proper reimbursement.

“I can click on a macro, and it fills in the blanks, which saves a lot of time and energy,” Dr. Lewis said. “When it comes to billing, you can construct a template that represents all necessary fields that you’re required to mention. This ensures elements that are required for you to receive top billing don’t get missed or down-coded. 3M Fluency for Imaging ensures those fields are filled before I sign off on it. It keeps me from having to go back and re-dictate things or add addendums.”

Templates also help with standardized reports that support patient care and relationships with referring physicians. “The standardized language we use for macros is the same language that the American Board of Radiology wants you to use,” Dr. Lewis said. “So anybody reading a report from our facility is going to see the same thing, which brings so much value to our referring physicians.”

3M Fluency for Imaging also supports compliance with built-in, AI-powered computer-assisted physician documentation (CAPD). This functionality enables St. Claire HealthCare’s radiologists to receive proactive, real time and automated nudges to review laterality if there is a mismatch within documentation during report creation. “When you say right foot on one line and left foot on the other line, it helps you catch that before you sign off,” Dr. Lewis said. “It definitely has reduced our error rate and also helps with reimbursements.”

Real results

With 3M Fluency for Imaging, St. Claire HealthCare has achieved clinical, operational and financial benefits, including:



An estimated
\$1 million
in cost savings since
2015 as a result of
transitioning from
transcription to
speech recognition
software



Consistent
report turnaround
time of
2.5 hours



**Fewer
clicks**
to create
a report



**Lower
error rate**
and fewer
unnecessary
addendums



Improved report
**accuracy
and
compliance**



Better radiologist
**experience
and
satisfaction**

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Making the most of technology to support care

St. Claire HealthCare has invested in additional 3M workflow extensions integrated within 3M Fluency for Imaging, including solutions for peer review and actionable findings results management.

Implemented recently, these solutions are already yielding workflow improvements. St. Claire HealthCare moved from a manual process to an automated one by integrating peer reviews into routine reporting workflows. “It’s seamless in that you’re sitting there working and a couple times a day, it’ll pop up and ask you to review a report,” Dr. Lewis said.

David Bailey, senior systems analyst at St. Claire HealthCare, has been working with care teams on the process for the 3M actionable findings solution, which enables radiologists to communicate incidental findings at the time of diagnostic interpretation. “It’s very easy for our care team and patient navigators to use,” Bailey said. “They love seeing their patients on the worklist and can click the details to add whatever they need to do as far as follow up and acknowledgement.”

Ongoing support and time savings

The 3M adoption services and support teams have been integral to the success story at St. Claire HealthCare. “Since implementation back in 2015, we haven’t had a lot of issues,” Bailey said. He continues to have monthly check-in calls with his 3M representatives to discuss any issues and system updates.

“Any time there’s a new update, it’s very seamless,” Bailey said. “3M works around us, or we do it in the evening. So it really doesn’t affect the radiologists and we don’t have downtime from it. As for my role supporting the application, it’s nice that I don’t have to do much as far as issues and headaches.”

Even when something does go awry, 3M is quick to help. “The team is so good to respond,” Dr. Lewis said. “Most things are resolved within 20 minutes.”

For radiologists, every second matters in the reading room. Being in the field for two decades, Dr. Lewis is thankful for every minute he gets back in his day.

“Any extra time spent dictating is extra time away from family. Saving time on each exam adds up. Over the course of a year, I get to spend a lot more time with my family. I get to leave work earlier. I get enough time for a workout. I probably have days to thank 3M for.”

– Dr. William Lewis, diagnostic radiologist, St. Claire HealthCare



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