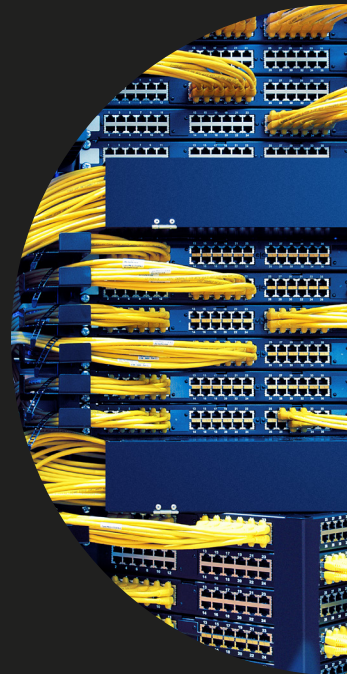merative™

No time for downtime

How HealthPartners optimized patient care with
an enterprise imaging solution

When physicians order radiology exams, they need the results within allotted timeframes. At HealthPartners, a "stat" radiology order must be carried out immediately, and the report delivered within 30 minutes.

For patient-waiting and inpatient orders, delivery time extends to two and four hours, respectively. These turnaround times are tight but crucial to helping diagnose and treat patients, especially when they are seriously ill or injured.

The Medical Imaging team at HealthPartners manages imaging for eight hospitals and more than 90 clinics in Minnesota and western Wisconsin. To help the enterprise provide superior patient care, the team must maintain strict turnaround times. "We understand the domino effect of imaging," explains Niel Tsuji, Senior Application Analyst and Developer on the team. "After a technologist completes a patient's imaging, the radiologist reads the images before sending the final report to the clinician. If the process is delayed or breaks down, there is a delay in care. That could mean extra hours to a patient's hospital stay and added anxiety to the patient."

As part of HealthPartners' long-term strategy for enterprise-wide imaging, Tsuji helped manage a multiphase project to consolidate and standardize the organization's multivendor radiology picture archiving and communication system (PACS). The team began by deploying standalone VNA and PACS solutions from Merative, one of HealthPartners' established IT providers. Its plans included gradually transitioning to a more holistic, integrated implementation. The project was ambitious, especially since HealthPartners performs between approximately 1.75 – 2 million radiology exams every year. Yet the payoffs could help streamline imaging access and management, reduce associated costs, and enable quality patient care.

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Niel Tsuji
Senior Application Analyst and Developer,
Medical Imaging, HealthPartners

However, because of backup requirements for the standalone environments, system performance and stability suffered. Radiologists couldn't quickly upload a patient's prior studies for comparison with new images, and physicians didn't receive the reports within allotted timeframes.

"Anytime there was a breakdown, we would hear about it," comments Tsuji. "I don't like talking to a neurologist who's mad that he hasn't received images that were scanned four hours ago. They expect quick return times." To improve performance, the team decided to move forward and develop an enterprise-wide imaging solution to support radiology workflows.

Creating new synergies with enterprise mode

Merative proposed that HealthPartners adopt the Merge PACS enterprise mode (often referred to as integrated mode), which supports a seamless connection with the IBM iConnect® Enterprise Archive (by Merative) solution. In enterprise mode, the Merge PACS solution operates without an imaging cache, and the vendor neutral archive (VNA) delivers all image storage functions. Enterprises that capitalize on this configuration can decrease their IT stacks and costs without sacrificing performance.

The HealthPartners team collaborated closely with Merative to build and deploy a fully replicating imaging environment designed for high availability. Requiring tireless teamwork, the project proved an unequivocal success. "Trust was a big thing, and we learned that Merative had our best interest at hand," says Tsuji. "Strong project managers, incredible implementation engineers, a forward-thinking solution architect, VNA and PACS support — all these people made this a success. We had weekly calls to discuss the project, and we held one another accountable. We perfected a go-live command center, and it was all hands-on deck. Because of the countless hours of combing through our configurations, planning and asking questions, it made for smooth go-lives."

With the IBM iConnect Enterprise Archive solution, HealthPartners has a best-in-class, security-rich VNA that supports interoperability across all imaging modalities; Digital Imaging and Communications in Medicine (DICOM) and non-DICOM formats; and mobile and multiple other data sources. Clinicians can rapidly access patients' longitudinal records from a single location, and the organization can more efficiently comply with industry requirements for image storage. With the Merge PACS solution, HealthPartners has a centralized, AI-ready workflow platform for reading and managing huge imaging volumes. The organization also facilitates collaboration with the IBM iConnect® Access (by Merative) solution, a zero-footprint web viewer for real-time image viewing across browsers.

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HealthPartners is among the first to take advantage of the Merge PACS automatic comparison study retrieval tool, nicknamed the full-folder-on-the-fly capability by the Merative team. This feature significantly reduces the time required to retrieve a patient's comparison studies from the VNA whenever a clinician submits a new order or study. As a result, a patient's historic images are loaded and ready for viewing when technologists, radiologists and other clinicians need them. In addition, once a new study is fully completed, a link to the study appears within the patient's Epic Systems chart.

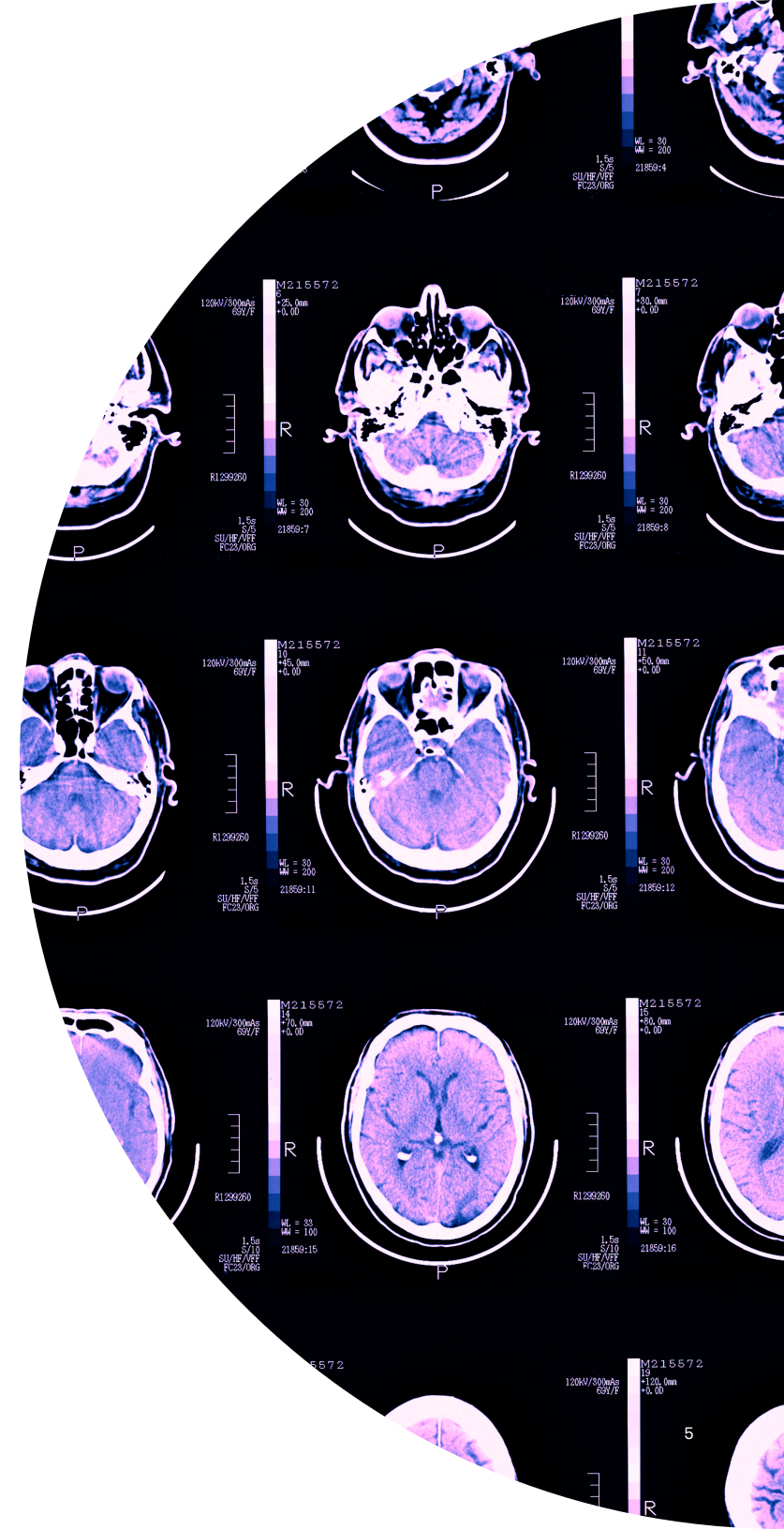To facilitate acceptance of redesigned workflows, the team engaged representatives from each user group.

The "super users" tested and provided feedback on the workflows, creating opportunities to address potential problems before rollout. When the solution did go live, the command center experienced the lowest recorded volumes of user calls in the team's history and closed within three days.

No longer reacting to downtime and other problems caused by multiple disparate, geographically dispersed systems, the team can work more proactively. "We are monitoring and responding to possible issues before they happen and working with Merative to resolve them," explains Tsuji.

With the newly integrated, highly scalable platform, radiologists can deliver images to physicians within agreed-on timeframes, helping improve patient care and reduce costs across the network. "We never hear radiologists complain about accessing prior studies, which was a big issue," says Tsuji. "They rave about the full-folder-on-the-fly. We are one of the first healthcare systems to use the feature, and it's amazing."

Having achieved unprecedented system uptime, HealthPartners dramatically improved the user experience and restored user confidence. In its level-one trauma facilities, for instance, ER doctors and other providers know that they have the imaging tools required to quickly triage patients and deliver life-saving treatments. Clinicians can also use timely imaging insights to help reduce anxiety levels among patients and their loved ones.

Tsuji stresses the benefits of collaborating with an Merative team committed to HealthPartners' ongoing success. "The project was not for the faint of heart. It was thousands of hours of our organizations working collectively together to build a stable environment, but both sides were committed. The difference having a partner like Merative can make will be like night and day."

About HealthPartners

Founded in 1957, HealthPartners is among the largest consumer-governed nonprofit healthcare organizations in the US. Based in Bloomington, Minnesota, it provides medical and dental services to more than 1.2 million patients annually. It also offers health insurance coverage to more than 1.8 million members in Minnesota, Wisconsin and four other states. The organization employs approximately 26,000 people, including 1,800 multispecialty physicians and 60 dentists who work in primary and urgent care clinics, specialty centers and hospitals.

About Merative

Merative is a data, analytics and technology partner for the health industry, including providers, payers, life sciences companies and governments. With trusted technology and human expertise, Merative works with clients to drive real progress. Merative helps clients reassemble information and insights around the people they serve to improve healthcare delivery, decision making and performance. Merative, formerly IBM Watson Health, became a new standalone company as part of Francisco Partners in 2022. Learn more at www.merative.com.

Solution component

IBM iConnect Access
IBM iConnect Enterprise Archive
Merge PACS

Learn how you can benefit

Merative provides award-winning enterprise imaging solutions for radiology, cardiology and orthopedics, using vendor neutral cloud and AI technologies to reduce workspace complexity and create seamless workflows.

Visit our website or talk to an enteprise imaging solutions expert to learn more about how Merative can help you.