



Merge Imaging Suite solution for teleradiology

Sharper focus. Productive workflows.

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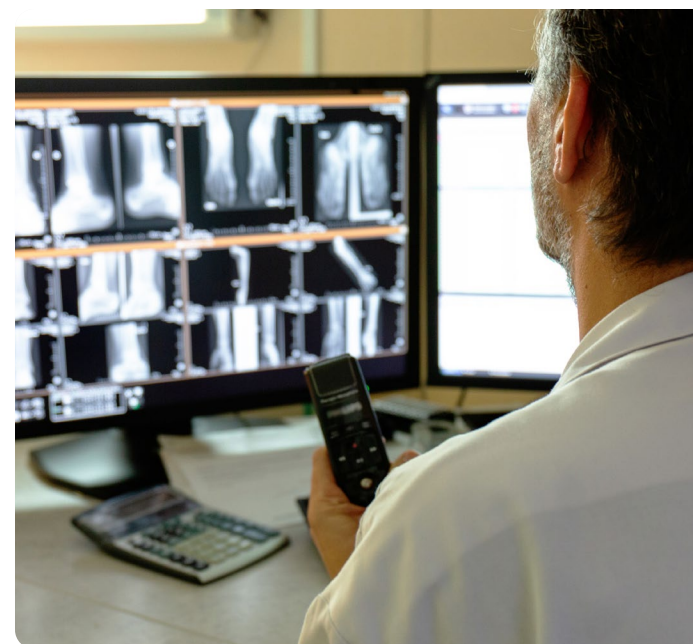
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by Merative



SECTION 01

The rise of teleradiology

Teleradiology is growing to become an indispensable part of modern healthcare, allowing for efficient distribution of workloads and 24/7 coverage. Many hospitals and health systems have turned to outsourcing radiology reading as a way to combat the growing shortage of radiologists, and the rapidly increasing volumes of cases resulting from the growing demands on imaging from aging populations and more complex health issues.

**Drivers of teleradiology and
outsourced radiology reading:**

- 72% of U.S. hospitals used outsourced teleradiology services in 2023, a significant increase from previous years. This compares to 53% in Europe and 65% in the Asia-Pacific region.¹
- Shortage of in-house radiologists, especially for night shifts and weekends, is a major factor as well as cost-effectiveness and access to sub-specialty expertise are also key motivators for outsourcing.²
- A shortage of up to 42,000 radiologists is expected by 2033.¹
- The number of imaging studies is projected to increase by up to 5% per year across all modalities, but the number of radiology residency positions is currently planned to increase only by 2%.³



SECTION 02

Challenges for teleradiology providers

The global teleradiology market is experiencing moderate growth in new entrants, with dozens of small and investigational companies launching services between 2023 and 2025. While major players dominate the market, smaller startups are increasingly entering with niche offerings, especially in AI-assisted diagnostics and cloud-based platforms.⁴ Nonetheless, teleradiology providers face considerable challenges:⁵

Regulatory compliance:

- Navigating **HIPAA** and other data privacy laws is complex and costly.
- Compliance with **state-specific licensure** and **credentialing** requirements adds administrative burden.

Cybersecurity risks:

- Handling sensitive patient data remotely increases vulnerability to **data breaches** and **ransomware attacks**.

Infrastructure costs:

- High upfront investment in **PACS systems, cloud storage, and secure communication platforms**.
- Ongoing costs for **IT support, data encryption, and redundancy systems**.

Radiologist recruitment:

- The national shortage of radiologists makes it difficult for new firms to **staff qualified professionals**, especially for subspecialties and night shifts.

Reimbursement and payer policies:

- Inconsistent **insurance reimbursement** for teleradiology services across states and payers.
- Delays in payment and **lack of parity** with in-person services can strain businesses.

Hospital partnerships:

- Building trust and securing contracts with hospitals is competitive, especially for the newer service providers who are competing against established providers with proven track records.

In the face of growing demand for their services combined with these challenges, teleradiology providers can struggle with inefficient workflows, uneven case distribution, and technology limitations that leave them vulnerable to failure. The team at Merge designed Imaging Suite to help address many of these challenges head-on, providing a robust technology foundation for teleradiology businesses to thrive.



SECTION 03

Five ways Merge Imaging Suite can accelerate teleradiology workflows

1. Fair and efficient caseload distribution

One of the biggest pain points in teleradiology is ensuring fair and efficient distribution of cases among radiologists. Merge Imaging Suite uses proprietary AI technology within its workflow orchestrator, to automatically distribute cases to reading physicians based on multiple factors:

- Radiologist specialty and subspecialty
- Individual preferences and reading speeds
- Current workload and availability
- Case urgency and complexity

This intelligent orchestration helps prevent “cherry-picking” of studies and ensures a more equitable distribution of work across reading teams. The AI engine learns over time, to continue optimizing the automated distribution of cases to each radiologist. The result is improved radiologist satisfaction and more efficient utilization of your team’s expertise.

2. Anytime, anywhere, any-device access:

Merge Imaging Suite is built on a cloud-native foundation, enabling true anytime, anywhere access to studies. Radiologists can read from home, the office, or on-the-go using any internet-connected device. The cloud architecture also provides:

- Automatic scaling to handle fluctuations in study volume
- Predictable IT infrastructure costs and maintenance
- Seamless software updates without downtime, so applications are always on the latest version
- Built-in disaster recovery and business continuity with near-zero downtime



3. Seamless integration with hospital's PACS and modality systems:

A key challenge for teleradiology providers is efficiently ingesting studies from multiple hospitals and health systems, each potentially using different PACS and modalities. Merge Imaging Suite's vendor-neutral design ensures compatibility with virtually any imaging source.

- Studies can be automatically routed to your reading team with little or no manual intervention.
- Caseloads can be orchestrated seamlessly with the help of configurable and dynamically delivered worklists.

4. Enhanced reading, efficiency, turnaround time, and accuracy:

Merge Imaging Suite doesn't just route studies — it seamlessly integrates access to advanced visualization and diagnostic tools within radiologists' existing workflows, to enhance their reading efficiency and accuracy. The platform offers:

- Full-featured diagnostic viewing with mammography capabilities and 3D post-processing capabilities
- Integration of third-party AI algorithms for automated detection, triage, and quantification, with status from those algorithms showing up in the worklist
- Customizable hanging protocols and user preferences that follow radiologists across devices
- Efficiency across all steps of the imaging lifecycle, to accelerate the velocity at which caseloads are addressed from time-to-first-image to delivery of the final report

5. Enterprise-grade security and compliance:

Handling sensitive patient data across multiple organizations and sites requires ironclad security. Merge Imaging Suite was built from the ground up with security and compliance in mind:

- End-to-end encryption of data in transit and at rest
- Role-based access controls and comprehensive audit logging
- HIPAA and GDPR compliance, SOC2 compliant, Censinet-certified
- Regular third-party security audits and penetration testing





SECTION 04

Transforming teleradiology

Merge Imaging Suite for Teleradiology is enabling practices around the US to scale their operations, improve radiologist satisfaction, and deliver quality services to their clients — the hospitals and health systems who are focused on quality patient care.

As the demand for teleradiology services continues to grow, Merge Imaging Suite for Teleradiology provides a robust, scalable, reliable and flexible technology foundation is crucial for imaging businesses. Merge Imaging Suite provides the tools and capabilities needed to thrive in this evolving landscape.

Ready to see how Merge can transform your teleradiology workflows?

- Learn more at www.merative.com/merge-imaging/imaging-suite-for-teleradiology
- [Request a conversation](#) with a Merge expert today for a demo so that you can see firsthand the future of remote reading.





SECTION 05

Learn more about Merge

About Merge

Trusted by 6 of the 10 largest U.S. health systems, Merge by Merative empowers healthcare organizations with advanced medical imaging solutions to enhance workflows, optimize care delivery, and help improve patient outcomes. Merge’s Imaging Suite, built on a cloud-native foundation, provides solutions for Vendor-Neutral Archive (VNA), PACS, Enterprise Image Viewing and Workflow Orchestration. Merge’s portfolio also includes Best in KLAS Cardiology and Hemodynamic Monitoring, and Digital Pathology.

Learn more at merative.com/merge-imaging

About Merative

Merative provides data, analytics, and software for healthcare and government social services. With focused innovation and deep expertise, Merative works with providers, employers, health plans, governments, and life sciences companies to drive real progress. Merative helps clients orient information and insights around the people they serve to improve decision-making and performance.

Learn more at merative.com

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