

THE INFRASTRUCTURE REALITY BEHIND HEALTHCARE AI

What healthcare leaders say about the infrastructure needed to support AI at scale

Successful AI adoption depends on secure, compliant, and scalable infrastructure across care settings. Yet HIMSS Market Insights research shows many healthcare organizations are still working toward true AI readiness.*



Here's where surveyed leaders stand today:



Infrastructure readiness lags behind AI adoption



Just **33%**

report a high level of readiness to support most AI use cases at scale



51%

say they are only moderately prepared to support AI workloads



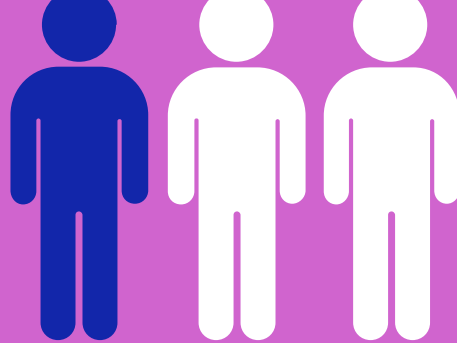
Operational performance also remains a challenge

54%

of leaders report disruption from performance variability across non-hospital sites

46%

report disruption from slow or inconsistent performance



Only **one-third** of leaders say their organizations are prepared to scale infrastructure as AI expands



To advance AI, leaders see data privacy, integration, and security as top priorities



68%

identify data privacy and HIPAA compliance as a top prerequisite for scaling AI



56%

cite integration with existing systems as one of the most critical requirements for broader AI adoption



54%

identify cybersecurity protections as a top prerequisite for expanding AI initiatives

Cybersecurity rises to the top

70%

cite stronger cybersecurity protections as one of the most important infrastructure capabilities to strengthen before scaling AI more broadly



Readiness today shapes tomorrow's AI success

The promise of AI is clear, but achieving AI at scale requires more than new technology. Healthcare organizations must strengthen the infrastructure capabilities that underpin AI success, including security, compliance, integration, scalability, and operational performance. Organizations that invest in these foundational areas will be better positioned to support broader AI adoption and future innovation.

To learn how Spectrum Business can help create a secure, scalable network foundation for AI adoption, visit <https://www.spectrum.com/solutions/industries/healthcare>

Sponsored by:

Spectrum
BUSINESS

About Spectrum Business®

Spectrum Business empowers healthcare organizations to transform the patient experience with networking, security, communications, collaboration and TV solutions. Our certified healthcare IT solutions experts serve many of the largest health systems in the US with a network engineered for exceptional performance, end-to-end accountability and 100% US-based support, available 24/7.

*HIMSS Market Insights, May 2026, AI and Network Infrastructure Readiness [research report]. This research was conducted among 100 executives and IT/technology leaders (managers and above) in healthcare in the United States. Respondents were screened for having a decision-making or influencing role regarding investments or strategies related to AI, IT infrastructure, and network/connectivity at their organizations. Spectrum Business was not identified as a research sponsor.

www.himss.org | ©2026

Produced by
HIMSS