

IDC MarketScape: U.S. Enterprise Medical Imaging 2024-2025 Vendor Assessment

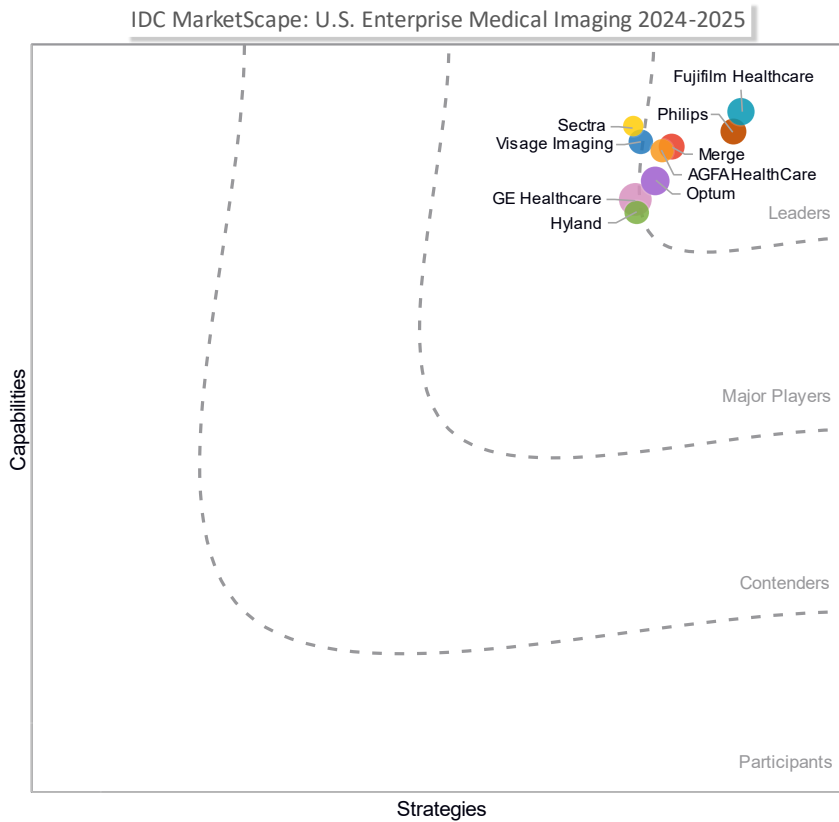
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THIS IDC MARKETSCOPE EXCERPT FEATURES PHILIPS AS A LEADER

IDC MARKETSCOPE FIGURE

FIGURE 1

IDC MarketScape U.S. Enterprise Medical Imaging Vendor Assessment



Source: IDC, 2024

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

ABOUT THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: U.S. Enterprise Medical Imaging 2024–2025 Vendor Assessment (Doc # US52033924).

IDC OPINION

This IDC MarketScape evaluates vendors in the U.S. enterprise medical imaging market with regard to their strategies and capabilities. For decades, siloed infrastructures optimized for fee-for-service care delivery have constrained medical imaging. In today's landscape, the growing demands for cost control, higher care quality, and operational efficiency — which workforce shortages have exacerbated — are forcing healthcare providers to reimagine their medical imaging strategies. Enterprise medical imaging serves as the linchpin for navigating these challenges, offering technology buyers a transformative path to improved patient outcomes and streamlined operations. While enterprise medical imaging encompasses a holistic strategy and framework for managing medical images and related data across a healthcare organization or network, enterprise medical imaging solutions are the tools and technologies that operationalize these strategies, enabling organizations to achieve their medical imaging-related goals.

The enterprise medical imaging data fabric — a sophisticated framework of layers, processes, technologies, and capabilities — plays a pivotal role in bridging gaps across key healthcare applications such as electronic health records (EHRs), picture archiving and communication systems (PACS), vendor-neutral archives (VNAs), and radiology information systems (RIS). This integration extends to devices and data formats, including DICOM, DICOM (DIMSE), DICOMweb, non-DICOM, HL7, FHIR, and standards like PAM, WIC, SWF, MHD-I, and cross-enterprise document sharing (XDS), as well as file types such as JPEG, MPEG, PDF, and RAW. Healthcare providers also depend on a diverse ecosystem of imaging modalities — x-ray, CT, MRI, ultrasound, PET, nuclear medicine, and emerging digital pathology systems. Seamlessly accessing and sharing data across these systems is not just a technical imperative but a clinical necessity. It ensures interoperability while addressing the unique demands of specialized "ologies," like radiology, cardiology, oncology, neurology, and pathology, each requiring tailored workflows to optimize patient outcomes.

The volume of medical imaging data is projected to surge significantly, with IDC forecasting an increase across North America to 7EX by 2025, representing an annual

growth rate of 40%. This exponential growth underscores the critical need for robust solutions capable of managing and leveraging this data efficiently. Modern enterprise medical imaging platforms must integrate core capabilities with cutting-edge technologies like cloud computing and artificial intelligence (AI), ensuring scalability, speed, and accuracy in diagnostics while optimizing resource utilization. Amid growing data demands and budgetary pressures, these solutions must also demonstrate a clear ROI. U.S. healthcare providers face tighter budgets and reimbursement challenges, making it essential for enterprise imaging platforms to deliver tangible outcomes such as improved operational efficiency, enhanced patient outcomes, and support for value-based care initiatives.

The challenges faced by technology buyers in the enterprise medical imaging space are complex and require strategic solutions. This document examines the dynamics of the U.S. enterprise medical imaging market and its key vendors, offering insights to help healthcare organizations make informed decisions. Selecting the right enterprise medical imaging solution must go beyond addressing workflow inefficiencies — it should also position organizations to adapt and thrive in the evolving U.S. healthcare landscape. Current market pressures, which the recent election has compounded, are more likely than not to introduce new changes to healthcare policy, reimbursement structures, and regulatory requirements, adding yet another layer of uncertainty for U.S. healthcare providers. By empowering clinicians with integrated, future-proof solutions, healthcare provider organizations can deliver better care while maintaining resilience amid shifting industry dynamics.

Key Findings from the Research

According to IDC, half of the projected growth in U.S. healthcare spending on medical imaging through 2025 will target enterprise medical imaging — solidifying it as a critical technology area. Rather than viewing enterprise medical imaging as an incremental improvement, technology buyers should recognize it as a paradigm shift that unifies data, enables AI-powered workflows, and transforms care coordination across a complex ecosystem. The segmentation of vendors in the U.S. market into Leaders and Major Players, with no notable Contenders or Participants, underscores the market's fiercely competitive nature, where success hinges on strategic foresight and technological innovation. Choosing the right enterprise medical imaging solution goes beyond addressing today's challenges; it is about laying the groundwork for resiliency and future readiness to thrive in a rapidly evolving industry landscape.

Market Segmentation

The market segmentation (refer back to Figure 1) comprises Leaders and Major Players, reflecting a mature market with notable consistency in competitiveness among vendors based on their positioning. Leaders distinguish themselves through their ability to

blend strategic vision with robust solutions that address the diverse and complex needs of U.S. healthcare providers. Major Players, on the other hand, represent a dynamic mix of vendors with strong niche specializations and emerging players driving innovation through cloud-native architectures and SaaS subscription models. These vendors are actively refining their strategies, focusing on closing the gap with market leaders by enhancing capabilities, embracing cutting-edge innovation, and responding to the shifting demands of healthcare providers. Their positioning and trajectory underscores their potential for significant market influence and growth. The segmentation underscores a market in flux — competitive, innovative, and rich with opportunities for vendors to carve out leadership positions. For technology buyers, this dynamic landscape presents an opportunity to select partners who not only address present-day needs but also demonstrate adaptability and a forward-looking approach that aligns with the future of healthcare.

Competitive Clustering

Vendors positioned high in the Leaders quadrant distinguish themselves through a combination of deep expertise in medical imaging hardware and clinical workflows, seamlessly translated into advanced enterprise medical imaging solutions (see Figure 1). These vendors excel in delivering AI-powered predictive imaging, scalable cloud-native architectures, and integration capabilities that extend across the broader healthcare ecosystem. Their comprehensive portfolios, which include successful products and services, demonstrate their ability to scale solutions effectively across large health systems. With significant R&D investments, financial stability, and a relentless focus on customer insights, these vendors have built a strong reputation and solidified their positions as trusted technology partners.

The clustering of vendors in the middle of the quadrant reflects a competitive group vying for greater market share, often leveraging established positions in legacy PACSs and universal viewers. By incorporating modular, AI-enhanced, and cloud-based designs, these vendors are aligning their offerings with healthcare providers transitioning to enterprise medical imaging. With ongoing advancements in AI capabilities, federated imaging networks, and multimodal data integration, these vendors hold significant growth potential. Strategic refinement and a stronger focus on innovation could allow them to bridge the gap to leadership, opening new opportunities in this dynamic market.

Vendors positioned high on the capabilities axis but with moderate strategic positioning often offer intuitive user interfaces, strong security, and deployment models that support cost-effective scalability — features that resonate with providers focused on specialized imaging workflows, such as radiology reading groups or seeking productivity-enhancing tools. By broadening their strategic focus and aligning their

offerings to meet the needs of enterprise medical imaging, they can achieve broader market recognition and impact.

For technology buyers, understanding these market dynamics is essential. Selecting a vendor requires careful evaluation of their ability to deliver both immediate value and long-term impact. The profiles and insights provided in this document offer critical guidance for identifying partners equipped to meet present needs while positioning healthcare organizations for future success.

Key Considerations for Technology Buyers

PACSS

Despite the rise of VNAs and cloud-based platforms, PACSS remain a pillar of enterprise medical imaging for many U.S. healthcare providers. Investment trends reveal their enduring importance even as the landscape evolves. According to IDC, 28.7% of U.S. healthcare providers plan to invest further in their existing PACSS through 2025, reflecting their reliability and operational necessity. Meanwhile, 16.9% of providers are preparing to replace their PACSS, signaling a move toward solutions offering more modern and advanced functionality.

Interestingly, 12.7% of providers are adopting PACSS for the first time, suggesting that even as newer technologies emerge, PACSS continue to address critical imaging needs. Conversely, 28.0% of providers indicate no plans for additional PACS investments, potentially due to satisfaction with existing systems or a shift toward alternative solutions like VNAs or cloud-native platforms.

This nuanced investment landscape underscores the dual role of PACSS: they are both a trusted legacy technology and a system under increasing pressure to adapt to the demands of modern enterprise medical imaging. As healthcare providers strive to balance operational stability with innovation, PACSS must evolve to offer enhanced functionality, interoperability, and alignment with emerging technologies, ensuring they remain relevant in the era of data-driven, connected care.

By integrating into cloud architectures, PACSS now enable scalability and resilience while reducing on-premises infrastructure burdens. The incorporation of AI is further transforming PACSS, with features such as automated anomaly detection, case prioritization, and report pre-population enhancing radiologists' efficiency. These advancements allow clinicians to focus on complex cases, reducing diagnostic variability and improving overall productivity.

In addition, PACSS are expanding their role in data exchange by adopting standards like HL7 FHIR, enabling seamless integration with VNAs and EHRs. These innovations

extend PACSs' utility beyond radiology into areas like cardiology, pathology, and even non-DICOM sources, making them increasingly versatile in the healthcare ecosystem.

Despite these advancements, PACSs face significant challenges in adapting to the demands of modern enterprise medical imaging. Traditional PACSs often struggle with interoperability, particularly with emerging modalities such as digital pathology. Moreover, competition from VNAs and cloud platforms, which offer superior flexibility, scalability, and cross-departmental integration, is intensifying.

Nevertheless, opportunities for PACS modernization remain compelling. Embedding AI capabilities and leveraging cloud technologies provide pathways for PACSs to stay relevant. The future of PACSs will hinge on their ability to evolve and meet the needs of enterprise medical imaging, including multimodal data management, advanced interoperability, and integration with next-generation technologies. By embracing these changes, PACSs can continue to serve as strategic assets in the ever-expanding medical imaging landscape.

VNAs

VNAs have emerged as essential tools in eliminating data silos and enabling seamless interoperability within enterprise medical imaging. By centralizing imaging data storage and facilitating real-time collaboration across systems, VNAs bridge the gap between fragmented workflows and the broader clinical ecosystem. IDC data highlights their growing importance: 30.6% of U.S. healthcare providers increasing their imaging budgets plan to invest in VNAs by 2025, with 26.4% allocating funds to enhance existing VNAs. These trends underscore the recognition of VNAs as foundational to enterprise medical imaging.

Beyond their core strengths in image standardization, interoperability, and data exchange, VNAs deliver transformative benefits. They consolidate imaging data into unified repositories, reducing the complexity and cost of data storage and eliminating disruptive migrations. This simplification translates into significant operational savings. Moreover, VNAs bolster data security with HIPAA-compliant safeguards, centralized access controls, and robust encryption, ensuring that sensitive imaging data is protected throughout the enterprise.

The urgency for such security measures has never been greater. As of October 23, 2024, the U.S. experienced 492 healthcare data breaches, impacting over 163.7 million individuals — a staggering 60% increase from the prior year. These breaches highlight the escalating cybersecurity risks faced by healthcare organizations and the critical need for robust solutions like VNAs to protect imaging data and maintain care continuity.

For healthcare providers, VNAs are more than tools for standardization and interoperability — they are strategic assets for mitigating the financial, operational, and reputational risks of data breaches. By investing in VNAs, organizations not only ensure the integrity and security of their imaging ecosystems but also enhance operational efficiency and gain peace of mind in an increasingly challenging cybersecurity landscape.

Consumer-Centricity

Enterprise medical imaging elevates patient and employee experiences by transforming how healthcare organizations deliver and access services. Among the most impactful advancements are zero-footprint viewers — web-based tools that allow patients and providers to access medical imaging studies from any device without requiring additional software installations. Seamlessly integrated with EHRs, these viewers provide direct access to medical imaging data, fostering transparency, enabling informed decision-making, and promoting shared accountability in health outcomes. For clinicians, they remove technical barriers, enabling faster, more convenient access to studies and enhancing workflow efficiency.

Patient portals have also become central to enterprise medical imaging strategies, serving as a unified hub for accessing medical imaging studies, results, and notes. These portals extend beyond offering convenience to also play a critical role in building trust and engagement. Features like secure messaging, appointment scheduling, and access to educational resources empower patients to participate proactively in their care. Real-time communication pathways between patients and providers strengthen relationships and align with value-based healthcare objectives by fostering greater involvement in care decisions.

AI-powered chatbots further elevate experiences by integrating into workflows to simplify access and improve engagement. These chatbots provide step-by-step guidance for tasks like accessing medical imaging reports or scheduling follow-ups. They can streamline pre-procedure workflows by delivering tailored instructions, collecting essential pre-visit information, and answering common questions, reducing staff workload and improving operational efficiency. By demystifying processes and offering responsive support, chatbots enhance transparency, engagement, and patient satisfaction.

For technology buyers, patient-centric features like zero-footprint viewers, patient portals, and AI-driven chatbots are no longer optional — they are essential components of modern enterprise medical imaging solutions. These tools align with healthcare industry trends emphasizing transparency, connectivity, and personalization. By investing in these capabilities, providers can position themselves as leaders in

delivering exceptional patient and provider experiences, meeting the expectations of today's healthcare consumers, and setting new standards for care delivery.

Market Trends and Future Opportunities

Cloud

Cloud technology is redefining the landscape of enterprise medical imaging by providing a foundation for scalability, resilience, and operational efficiency. As U.S. healthcare organizations face challenges such as escalating cyberattacks, growing imaging data volumes, and the increasing need for seamless operations, the cloud has become an essential strategic enabler. Cloud platforms address critical needs such as disaster recovery, data resilience, and operational agility while reducing overhead costs and delivering unparalleled flexibility. Although the initial investment in cloud solutions may exceed traditional on-premises systems, the long-term benefits — enhanced performance, scalability, streamlined workflows, and superior security — justify its role.

Several factors are driving the move to the cloud in enterprise medical imaging. According to IDC, the top considerations include the importance of the workload (61.4%), security (56.8%), and ease of migration (54.4%). These priorities highlight the need for enterprise medical imaging vendors to deliver solutions that balance technical excellence with operational practicality. Cloud platforms, with their elastic infrastructure, dynamically scale resources to meet fluctuating demands, ensuring consistent performance during peak usage periods, such as mass casualty events or seasonal surges in medical imaging volumes. In addition, cloud-based enterprise medical imaging solutions provide robust disaster recovery and data resilience capabilities, leveraging geographically distributed storage and automated backup protocols to secure imaging data and enable rapid recovery during outages or failures.

The integration of software-as-a-service (SaaS) and managed service models within cloud-based enterprise medical imaging further simplifies IT management and reduces complexity. SaaS allows healthcare providers to deploy and manage enterprise medical imaging solutions without the burden of maintaining physical infrastructure. These platforms facilitate seamless updates, ensuring organizations have access to the latest features and security enhancements. Managed service models extend these benefits by offering end-to-end oversight, including performance monitoring, compliance management, and troubleshooting, freeing clinical teams to focus on patient care rather than IT concerns.

Cloud platforms also play a critical role in breaking down silos and fostering collaboration. By centralizing imaging data and integrating it with broader systems like EHRs, cloud solutions enable seamless access and coordination among care teams. Radiologists, clinicians, and specialists can view unified medical imaging data from any location, improving decision-making and patient outcomes. For instance, rural hospitals

can leverage cloud-based imaging to consult with subspecialists in urban centers in real time, enabling faster and more accurate diagnoses.

For technology buyers, migrating to the cloud is more than an infrastructure upgrade — it is a transformational shift in how enterprise medical imaging operates. Buyers should prioritize cloud platforms that provide a modern, scalable, and resilient environment capable of meeting current demands while adapting to future innovations like AI-powered imaging analytics and predictive diagnostics. The cloud is not merely a migration path but a flight path to the future of enterprise medical imaging, enabling organizations to thrive in an increasingly connected and data-driven healthcare ecosystem.

AI

AI is transforming enterprise medical imaging as both an enabler and a catalyst for intelligent automation and diagnostic precision. According to IDC, 47.2% of U.S. healthcare providers increasing their spending on medical imaging plan to allocate funds to AI and ML through 2025, focusing on critical tasks such as anomaly detection and workflow optimization. These investments highlight AI's growing role in enhancing diagnostic accuracy and streamlining clinical processes, particularly as radiology departments grapple with increasing medical imaging volumes and resource constraints.

A key emerging trend is the rapid adoption of generative AI (GenAI) in medical imaging, with 63.9% of healthcare providers planning to invest in GenAI by 2025. GenAI extends traditional AI capabilities by improving image quality, creating synthetic data sets for training algorithms, and enhancing predictive analytics. For instance, it can simulate rare medical conditions, enabling radiologists and AI models to identify anomalies that might otherwise go undetected. This capability addresses challenges such as data scarcity in specialized imaging and accelerates the development of robust diagnostic tools.

Integrating AI into enterprise medical imaging platforms signals readiness for advanced diagnostic and operational capabilities. These technologies reduce variability, maintain consistent imaging standards, and leverage advanced analytics to deliver actionable clinical insights. Beyond diagnostics, AI automates tasks such as case prioritization and preliminary findings generation, freeing radiologists to focus on complex cases. AI-driven triage tools can identify critical issues — such as indications of acute stroke or trauma — in real time, significantly improving both clinical outcomes and operational efficiency.

The transition to AI-driven medical imaging solutions also addresses workforce challenges in radiology, including staff shortages and burnout from high workloads. By

automating resource-intensive tasks, AI enhances productivity while maintaining diagnostic quality. In addition, AI tools standardize reports and enforce protocol compliance, reducing clinical practice variations across large healthcare networks. These features ensure consistency and reliability in imaging workflows, benefiting providers and patients alike.

Adopting AI-powered enterprise medical imaging platforms enables healthcare organizations to automate complex processes, enhance diagnostic consistency, and improve patient outcomes. As the market evolves, AI will remain a central driver of innovation, positioning organizations that embrace it as leaders in medical imaging excellence. By integrating AI into their strategies, healthcare providers can not only meet today's challenges but also set a foundation for future advancements in precision medicine.

Teleradiology

Teleradiology is shaping the future of enterprise medical imaging by enabling radiologists to interpret studies remotely while fostering cross-institutional collaboration. For healthcare organizations, adopting enterprise medical imaging solutions that support teleradiology is becoming essential to expand diagnostic capabilities, address workforce shortages, and maintain seamless operations. By allowing medical imaging cases to be distributed to subspecialist radiologists regardless of location, teleradiology ensures access to expertise in rural or underserved areas where onsite radiology resources are often limited. As workforce shortages intensify, this capability will be pivotal in sustaining diagnostic efficiency and quality.

With 22.2% of increased medical imaging spending allocated to teleradiology through 2025, it is clear that this approach is seen as a strategic asset for improving access to specialized care, reducing diagnostic variability, and enhancing turnaround times. Teleradiology also supports 24/7 operations by connecting providers with radiologists across different time zones. This round-the-clock availability is critical for addressing after-hours imaging needs, such as emergency room cases or trauma diagnostics, where timely interpretation can be life-saving.

For technology buyers, evaluating enterprise imaging platforms for robust teleradiology support is crucial. Key capabilities to prioritize include seamless integration with existing PACS, VNAs, and EHRs, as well as scalable cloud infrastructure and secure remote collaboration features. These elements enable efficient workflows and reliable connectivity for distributed care teams. In addition, advanced AI-driven solutions — such as virtual triaging, automated reporting, and real-time anomaly detection — are vital for optimizing workflows in high-demand teleradiology environments. These tools not only streamline operations but also enhance diagnostic accuracy and efficiency.

Workflow Orchestration

Enterprise medical imaging is increasingly reliant on advanced workflow orchestration to manage high imaging volumes and enhance operational efficiency, particularly as radiology reading groups and command centers become more prevalent. Radiology command centers, for example, have emerged as pivotal in high-demand imaging environments, automating case prioritization and aligning resource allocation with clinical urgency. With organizations allocating 36.1% of increased medical imaging budgets to workflow orchestrators and 30.6% to radiology command centers in 2025, these tools are becoming top priorities for large healthcare systems aiming to optimize performance and improve outcomes.

For technology buyers, platforms with AI-driven orchestration capabilities are key to achieving these goals. Features like automated case prioritization and triage enable radiologists to focus on critical studies, improving diagnostic speed and accuracy. Scalability is another vital factor — solutions must support multisite operations and federated workflows, accommodating the growing demands of enterprisewide imaging environments. Seamless integration with EHRs and other enterprise systems ensures that imaging workflows are unified with broader clinical operations, providing clinicians with a comprehensive view of patient data to drive informed decision-making.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

IDC leverages its unique insights into vendor selection processes in healthcare provider organizations, which it draws from extensive client interactions and the continuous monitoring of healthcare industry trends. IDC carefully designed the vendor inclusion criteria for this MarketScape to consider the most relevant and representative vendors operating within the U.S. enterprise medical imaging market. The vendors this research assessed meet specific criteria reflecting their significance, market presence, and ability to address the unique challenges U.S. healthcare providers face.

For consideration in this study, IDC stipulated that vendors should meet the following minimum criteria:

- **Geography:** The vendor has an established corporate presence (e.g., main/branch office) in the United States that manages (or supports) the sales, delivery, and implementation of health IT solutions.
- **Market:** The vendor sells the solution (i.e., enterprise medical imaging) in the U.S. health IT market.
- **Vertical:** The vendor delivers the solution (i.e., enterprise medical imaging) to healthcare provider organizations.
- **Offering:**

- **Definition:** IDC defines enterprise medical imaging as "a set of strategies, initiatives, workflows, and solutions implemented enterprisewide to consistently and optimally capture, index, manage, store, distribute, view, exchange, analyze, and govern all medical imaging data and content across different settings."
- **Function:** Enterprise medical imaging solutions aim to consolidate medical imaging data, content, systems, and infrastructure commissioned over time across different units, departments, facilities, and "ologies."
- **Description:** The enterprise medical imaging data fabric and its underlying or overlaid data layers, processes, technologies, and capabilities help bridge the gaps between such areas as EHRs, PACSs, VNAs, RISs, and devices, typically using DICOM, DICOM (DIMSE), DICOMweb, nonDICOM, PAM, WIC, SWF, MHD-I, XDS, CARD IEO, HL7, FHIR, JPEG, MPEG, PDF, and RAW data.

This IDC MarketScape bases its evaluation on data it collected through primary and secondary research methods. Primary research includes direct company briefings, customer reference interviews, and data that participating vendors provided. Secondary research includes publicly available information, such as company filings, press releases, official websites, and other reputable sources. IDC collected and reviewed the research data for vendors this study includes from July to November 2024.

IDC extended participation in this assessment to vendors meeting the inclusion criteria (which IDC defined) through both direct and indirect outreach. Excluded vendors fell into one of the following categories:

- Those that did not meet the research's inclusion criteria
- Those whose solutions did not unequivocally align with IDC's market definition and study parameters
- Those who declined to participate and for whom insufficient secondary data existed to form a well-researched judgment about their strategies and capabilities

Importantly, vendors that met the inclusion criteria could not exclude themselves from the study, even if they declined to participate. In such cases, IDC utilized publicly available data and independent research to evaluate the vendor's strategies and capabilities to ensure a fair and comprehensive assessment.

ADVICE FOR TECHNOLOGY BUYERS

Technology buyers can leverage this IDC MarketScape study to make informed decisions when selecting enterprise medical imaging solutions. IDC has tailored this

study to assist buyers in navigating the complexities of the U.S. enterprise medical imaging market, offering a comprehensive evaluation of available solutions while providing insights into the strategies and capabilities of the vendors. IDC established a rigorous and meaningful framework for defining and evaluating the landscape. This methodology accounts for the diversity of vendor strategies and capabilities, ensuring buyers have a clear lens to assess offerings and identify the solutions best suited to their unique requirements.

- **Define your imaging needs with careful precision:** Not all enterprise medical imaging solutions are created equally. Start by identifying workflow inefficiencies, such as delays in image retrieval, redundant processes, or challenges in managing multisite imaging operations. Consider long-term objectives, such as transitioning to value-based care models or integrating emerging imaging modalities (e.g., digital pathology or AI-based diagnostics). For example, if your radiology department struggles with bottlenecks, prioritize platforms with advanced workflow orchestration tools to streamline image routing and case assignments across sites.
- **Prioritize seamlessness across the medical imaging continuum:** Your enterprise medical imaging solution must support seamless data sharing across departments, such as radiology, cardiology, and pathology, as well as with external partners for teleradiology or multi-institutional collaborations. Ensure the system adheres to standards such as DICOMweb and HL7 FHIR for compatibility with VNAs, EHRs, and other systems and entities. For healthcare organizations managing diverse imaging sources, interoperability enables a unified patient imaging record, reducing silos and enhancing collaborative care.
- **Evaluate vendor reliability and long-term support:** Enterprise medical imaging is a team sport that requires a partner, not just a vendor. Research the vendor's track record in deploying enterprise medical imaging at scale. Assess the quality of their support services, including response times for critical issues and expertise in troubleshooting imaging-specific challenges, such as modality integration or image compression. Maintenance contracts should include clear upgrade paths for future technologies, such as AI-based predictive imaging or cloud-based federated imaging networks. Select a vendor with a strong reputation for innovation and a commitment to maintaining your platform's long-term viability.
- **Focus on image quality, workflow efficiency, and patient safety:** High-quality images are nonnegotiable in enterprise medical imaging. Ensure the platform provides diagnostic-grade images and hanging protocols that match diverse modalities, including high-resolution MRI, CT, and PET scans. Platforms incorporating AI tools for anomaly detection or automated quality checks can enhance accuracy while reducing clinician workloads. In addition, prioritize

solutions that minimize radiation exposure and include features that enhance patient comfort during imaging procedures. For example, tools integrating dose monitoring, device optimization, and patient-centric imaging workflows align with safety standards while improving patient and employee experiences.

- **Demand robust security and privacy tailored to imaging data:** Imaging data is a prime target for cyberthreats, making robust security essential. Ensure the enterprise medical imaging solution employs advanced encryption, access controls, and secure storage protocols. Given the size and sensitivity of imaging files, compliance with HIPAA and similar regulations is a baseline requirement. Vendors should also support regular security audits specific to imaging environments, addressing vulnerabilities such as unsecured DICOM transmissions or unauthorized access to radiological images. Security is not just about compliance but also about patient trust and organizational reputation.
- **Plan for scalability and adaptability in enterprise imaging:** As imaging needs grow, your enterprise medical imaging solution must scale without disruption. Whether your organization expands geographically, integrates additional imaging modalities, or adopts multi-institutional collaborations, the solution should accommodate increasing data volumes and complexity. Customization options for workflows — such as site-specific image routing or subspecialty case prioritization — ensure the platform can adapt to the unique needs of large enterprises.
- **Calculate ROI and total cost of ownership (TCO) across imaging operations:** Enterprise medical imaging solutions involve more than just up-front costs. Assess the complete financial picture, including licensing fees, infrastructure upgrades, and maintenance. Solutions relating to advanced storage solutions, such as tiered cloud storage or compression technologies, can reduce operational costs for managing growing imaging data sets. You must also factor in hidden costs — such as training for multimodal integration or upgrades to enable AI functionalities. Choosing a platform with a clear ROI and predictable TCO ensures sustainable imaging operations.
- **Test the solution with pilot programs:** Validate enterprise medical imaging solutions in real-world scenarios before full deployment. Pilot programs can reveal how the system handles challenges such as multisite integration, large data loads, or real-time collaboration for teleradiology. For instance, a pilot test may identify inefficiencies in image routing workflows or latency issues in cloud-based image access. Resolving these issues during a controlled implementation phase reduces risks and ensures a smoother enterprisewide rollout.
- **Aim to champion change management:** Enterprise medical imaging requires specialized user adoption strategies. Find internal clinical and IT champions to help influence radiologists, technologists, and IT staff. Conduct tailored training

programs that address specific features, such as AI tools for automated reporting or cross-departmental data sharing and collaboration functions. Choose solutions with intuitive interfaces that minimize disruptions to clinician workflows and implement change management strategies to reduce resistance to new imaging processes. Successful adoption ensures the realization of the platform's full potential across the enterprise.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While the study evaluates every vendor against each of the criteria the Appendix outlines, the description here provides a summary of each vendor's strengths and challenges.

Philips

Philips is positioned in the Leaders category of the 2024–2025 IDC MarketScape for the U.S. enterprise medical imaging market.

Headquartered in Amsterdam, Netherlands, Philips boasts a distinguished legacy that stretches over 133 years since its founding in 1891. Since then, Philips has strategically transformed into a powerhouse in healthcare technology, owing to a series of calculated acquisitions and strategic alliances that have strengthened its standing in the U.S. health IT market. This evolution reflects Philips' mission to enhance health outcomes through meaningful, impactful innovation.

By prioritizing advancements in clinical workflows and diagnostics, the company has introduced sophisticated imaging and informatics solutions that resonate with the needs of modern healthcare systems. Philips' approach to the market is deeply rooted in leveraging cloud and AI technologies to drive operational efficiency, streamline data accessibility, and support healthcare professionals with data-driven tools. Partnerships, such as those with AWS and Blackford Analysis, exemplify Philips' commitment to enhancing its technological capabilities.

Philips provides products and expertise for major imaging modalities, supporting radiology with ultrasound, x-ray, CT, MRI, cardiology with ultrasound, image-guided therapies, and digital pathology scanners paving the way for seamless enterprise medical imaging. The Diagnostic Imaging Systems lineup features MRI solutions such as the BlueSeal 1.5T MRI with Smart Reading functionality, the Spectral CT 7500, and versatile ultrasound offerings that utilize AI and advanced automation such as the EPIQ, Affiniti, and Compact 5500 series family. Their digital radiography systems, such as the DR 7300 C, incorporate a 3D AI-assisted collimation, a live tube head camera, and automation to streamline workflows. Philips leads its patient monitoring and analytics

with the IntelliVue series, including the MX750, which features a 19in. touchscreen for intensive care and anesthesia applications.

Philips features a comprehensive healthcare informatics portfolio covering radiology informatics, cardiology informatics, digital pathology, and virtual care solutions, turning data into actionable insights via enterprise imaging and decision support tools such as the Advanced Visualization Workspace.

Enterprise Imaging

The foundation of Philips' enterprise imaging portfolio is its VNA, which enables providers to consolidate DICOM and non-DICOM data from various sources into a centralized location, either on premises or in the cloud. Philips' Enterprise Viewer and other front-end applications leverage this backbone to deliver diagnostics capabilities across multiple workspaces, providing clinicians with instant access to comprehensive patient histories for informed decision-making. HealthSuite Imaging, the company's cloud-based offering, lays the groundwork for advanced data lakes, opening the road to AI-driven research and predictive healthcare models. Embedded image sharing is a key aspect of Philips' enterprise imaging portfolio, integrating with both Philips and third-party PACS and DICOM archives. It image-enables EHR systems, allowing efficient image sharing across HIEs and regional networks. Security features such as two-factor authentication ensure that only authorized users can access images and reports, facilitating secure collaboration among healthcare teams and improving patient care coordination.

Philips enhances clinical collaboration with enterprise workflow orchestration techniques and features such as flexible folders support, personalized inboxes for shared studies, and an auto-loading meeting dashboard to improve exam review efficiency. A dedicated radiology consultant workflow facilitates communication between radiologists and emergency physicians, while eMPI support ensures accurate patient identification and streamlines administration. The upcoming web diagnostic viewer promises to enhance speed, security, and efficiency with server-side rendering. This web-based application aims to eliminate the need for powerful local workstations by processing data in the datacenter and streaming rendered images to users. It offers faster load times and improved user experience and features advanced visualization tools, such as 3D reconstruction and measurement capabilities.

Philips also has an embedded reporting module. It provides structured and free-form reporting options with hyperlinks to images and findings, while voice recognition automates data entry. Automated graphs and lesion tables aid disease tracking, and live priors pre-populate relevant data to enhance workflow efficiency and minimize reporting errors. Clinicians can launch tools contextually, with more than 70 AV applications accessible via SSO, including cardiology, neurology, pre-procedure

planning, and advanced disease analysis, such as breast imaging. Specialty solutions for breast imaging now have improved performance, reducing loading times by 39% using a dedicated mammography keypad for ergonomic use. Third-party AI-interfaced workflow enhancements via the AI Manager streamline the imaging process from triage to diagnosis, basing auto-selected algorithms on image content across applications.

Philips enhances care coordination by integrating cardiology, radiology, and pathology within a common collaborative framework. A unified viewer enables cardiologists and radiologists to access shared images and reports, improving communication and decision-making. Similarly, oncology care benefits from real-time access to pathology and radiology reports, allowing multidisciplinary teams to collaborate securely.

Finally, Philips HealthSuite Imaging leverages the AWS cloud to provide fast data access, disaster recovery, and scalable infrastructure while supporting compliance with HIPAA and other healthcare regulatory requirements. AWS' security and certifications enhance Philips' imaging informatics capabilities, readying the platform for AI integration with flexible deployment options — spanning hybrid and full cloud services.

Strengths

- **Unified ecosystem:** Philips' Imaging Portfolio delivers a cohesive and highly integrated ecosystem that bridges various medical specialties into a unified data management framework. The platform leverages a VNA to ensure the consolidation and easy access of all imaging data, whether DICOM or non-DICOM, across departments. Advanced visualization tools support a seamless and efficient workflow for clinicians, who can view comprehensive patient timelines and exchange critical data without disruption. This integration lays a strong foundation for AI-driven diagnostics and enables advanced analytics by eliminating data silos and promoting interoperability among disparate imaging systems.
- **Collaborative workflows:** A central pillar of Philips' enterprise imaging portfolio is its emphasis on clinical collaboration. Workflow Orchestration is a sophisticated toolset that streamlines collaboration among radiologists, emergency physicians, and multidisciplinary teams, improving the speed and quality of patient care. The platform supports integrated reporting, allowing clinicians to embed hyperlinks to images and findings, making data sharing across departments intuitive and secure. Two-factor authentication and secure access protocols ensure the protection of sensitive patient data. At the same time, features such as automated meeting dashboards and shared exam folders optimize efficiency in high-stress environments, ultimately driving better clinical outcomes and operational performance.

- **Cloud mastery:** Philips also demonstrates considerable cloud expertise through its strategic partnership with AWS, which empowers HealthSuite Imaging with a secure, scalable, and globally accessible infrastructure. This partnership enables advanced features such as cloud-based storage and automated disaster recovery, reducing reliance on costly on-premises hardware. Near-real-time data access facilitates remote diagnostics and telehealth capabilities, which are critical for modern healthcare delivery. The integration with AWS also ensures that users can deploy AI applications effortlessly, enhancing clinical workflows and predictive analytics. Philips' proven track record in managed cloud services, in combination with AWS' stringent regulatory compliance and robust encryption standards, underscores the solution's reliability and scalability, future-proofing healthcare organizations as technology evolves.

Challenges

Organizations with limited IT resources or expertise may encounter challenges in fully leveraging the vast array of Philips' enterprise imaging portfolio and medical imaging solutions. By acknowledging the complexity of the portfolio, institutions can proactively seek the necessary infrastructure and personnel to effectively manage the deployment. The flexibility inherent in Philips' offerings — including hybrid setups and fully cloud-based infrastructures — provides organizations with opportunities to customize solutions to meet their unique needs. However, transitioning from legacy on-premises systems can be challenging without thoughtful planning and ongoing technical support with Philips. This planning and support will facilitate a smoother implementation process, and organizations stand to benefit from specialized support services, such as dedicated project management and integration teams.

Consider Philips When

Philips' enterprise imaging portfolio is well-suited for medium-sized and large health systems and hospitals aiming to modernize their imaging infrastructure through advanced cloud and AI capabilities. This solution is particularly beneficial for organizations that prioritize a vendor with a longstanding medical device and imaging legacy with the ability to drive seamless interoperability across modalities, departments, and facilities. The vendor's expertise in cloud migration simplifies the transition from traditional on-premises systems to a scalable, secure, cloud-based environment. At the same time, its advanced AI tools are powerful in automating workflows, accelerating diagnostics, and supporting predictive healthcare models. Successful implementation requires a well-prepared IT team capable of handling the solution's intricate architecture and integration processes. IDC recommends engaging Philips' consulting and support services to optimize deployment, as these services provide critical guidance and resources to navigate the ecosystem of solutions, ensuring users realize their full potential.

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well-aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment under assessment. This study aims to redefine how technology buyers evaluate enterprise medical imaging vendors by delivering a dynamic and comprehensive view of the competitive landscape. Unlike traditional rankings, it leverages a breadth and depth of subject matter expertise that it derives from a meticulously designed research framework, including a combination of highly granular vendor RFIs, in-depth briefings, solution demonstrations, customer interviews, and other critical data inputs, providing unparalleled insight into both current capabilities and future strategies.

Technology buyers should view this analysis not only as a ranking but also as a strategic compass that cuts through market complexities, empowering buyers to make informed decisions about solutions that align with organizational goals and the evolving dynamics of the market.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores and, ultimately, vendor positions on the IDC MarketScape on detailed surveys and interviews with the

vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

IDC defines enterprise medical imaging as "a set of strategies, initiatives, workflows, and solutions implemented enterprisewide to consistently and optimally capture, index, manage, store, distribute, view, exchange, analyze, and govern all medical imaging data and content across different settings." In other words, enterprise medical imaging entails a comprehensive approach to managing medical images and related data across a healthcare organization or network. In essence, this technology initiative allows the healthcare provider to converge medical imaging toward a more integrated facility, network, or system. Enterprise medical imaging solutions apply capabilities to work with data, content, systems, and infrastructure that organizations commission over time across different units, departments, facilities, and specialties (or "ologies"). The enterprise medical imaging data fabric, layers, processes, technologies, and capabilities help to bridge gaps between applications such as EHRs, PACSs, VNAs, and RISs, as well as devices using DICOM, DICOM (DIMSE), DICOMweb, non-DICOM, PAM, WIC, SWF, MHD-I, XDS, CARD IEO, HL7, FHIR, JPEG, MPEG, PDF, and RAW data. Images from X-rays, CT scans, MRI scans, ultrasounds, and other modalities are stored in a centralized archive accessed by authorized clinicians from various locations using devices such as desktop computers, laptops, tablets, and smartphones.

LEARN MORE

Related Research

- *IDC FutureScape: Worldwide Healthcare Industry 2025 Predictions* (IDC #US52217524, October 2024)
- *IDC Survey: Strategic Investment Trends in Healthcare Provider IT Solutions for 2024–2025* (IDC #US52221124, September 2024)
- *IDC Survey Spotlight: Healthcare Provider IT Goals for 2024–2025* (IDC #US52221024, August 2024)
- *IDC Survey Spotlight: Healthcare Provider Business Goals for 2024–2025* (IDC #US52220924, August 2024)
- *IDC Survey: Healthcare Provider IT Spending — U.S. Post-Acute Care Settings, 2024–2025* (IDC #US51530224, June 2024)

- *IDC Survey: Healthcare Provider IT Spending — U.S. Outpatient Centers and Physician Practices, 2024–2025* (IDC #US51530124, June 2024)
- *IDC Survey: Healthcare Provider IT Spending — U.S. Hospitals and Medical Centers, 2024–2025* (IDC #US51530024, June 2024)
- *IDC Market Glance: Healthcare Provider Clinical IT Solutions, 3Q23* (IDC #US50842824, September 2023)
- *AI in Medical Imaging: Part II — The Vanguard of Frontrunners* (IDC #US50858723, June 2023)
- *AI in Medical Imaging: Part I — Revolutionizing the Diagnostic Process* (IDC #US43363218, June 2023)
- *IDC PlanScape: Enterprise Medical Imaging* (IDC #US47236521, March 2023)
- *IDC MarketScape: U.S. Enterprise Medical Imaging 2022–2023 Vendor Assessment* (IDC #US48168021, November 2022)

Synopsis

This IDC MarketScape evaluates vendors delivering U.S. enterprise medical imaging solutions for providers by assessing their strategies and capabilities. These solutions transcend traditional medical imaging systems by enabling seamless data sharing, intelligent automation, and operational scalability. Enterprise medical imaging platforms address critical healthcare initiatives such as precision diagnostics, value-based care, remote collaboration, and AI-powered imaging analytics to shift the focus from managing medical images to transforming how healthcare providers work with them to enhance clinical outcomes and operational efficiency.

"Enterprise medical imaging is being redefined by a transformative level of innovation that is happening now and will impact the future of U.S. healthcare," says Mutaz Shegawi, senior research director, IDC Health Insights. "The cloud, for example, is delivering enterprise medical imaging resiliency and scalability in unprecedented ways while AI is paving the way for more diagnostic precision and automated workflows to be infused, and this is all just the beginning. The future promises medical imaging ecosystems that are smarter, more connected, and fully integrated across care teams, modalities, entities, healthcare systems, and even vast geographies when combined with teleradiology, thanks to enterprise medical imaging. Providers who advance their enterprise medical imaging strategies through the right solutions will not just keep up but lead the charge into an era where medical imaging is the foundation of faster decisions, better care, and improved patient outcomes."

ABOUT IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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