

HEALTHCARE SOLUTION BRIEF

Overcoming Critical Healthcare IT Challenges: Enhancing Security, Efficiency, and Patient Care

Healthcare organizations operate in environments characterized by complex technology demands, stringent regulatory requirements, and continuous threats to sensitive patient data. To address these challenges effectively, optimizing IT and security infrastructure is essential. Leveraging digital innovation, data protection, intelligent automation, hybrid infrastructure, secure networking, cybersecurity protection, and managed IT services, healthcare providers can significantly enhance productivity, resilience, and efficiency.



DIGITAL INNOVATION: ENABLING SMARTER HEALTHCARE

Digital transformation is pivotal for healthcare organizations aiming to improve patient care and operational efficiency. According to Gartner, 85% of businesses, including healthcare, will adopt cloud-first strategies by 2025, positioning digital infrastructure at the heart of future operations. Leveraging digital innovation such as cloud computing, telemedicine, and IoT medical devices creates streamlined processes, reduced operational overhead, and enhanced patient engagement.

For instance, healthcare providers increasingly rely on cloud-based telemedicine and virtual healthcare platforms, making secure and reliable IT infrastructure non-negotiable. Effective integration of these platforms can significantly reduce administrative burdens and enhance patient-provider interactions, thus elevating overall productivity.



DATA PROTECTION: SAFEGUARDING PATIENT INFORMATION

Healthcare organizations handle vast amounts of sensitive patient data, making data protection a top priority. Recent statistics underscore the high stakes involved—IBM's annual report notes the healthcare industry's average cost per data breach reached \$10.93 million in 2023, the highest across all industries. Deploying identity and access management (IAM) solutions, including multi-factor authentication (MFA) and role-based access control (RBAC), can dramatically reduce unauthorized data access incidents.

In fact, Verizon's 2024 report indicates that 70% of breaches involved compromised privileged credentials. Implementing IAM and Privileged Access Management (PAM) frameworks ensures that only authorized individuals have access to critical resources, significantly reducing insider threats and credential-based breaches.



INTELLIGENT AUTOMATION: ACCELERATING EFFICIENCY

Intelligent automation, through artificial intelligence (AI) and robotic process automation (RPA), optimizes healthcare IT operations by automating routine tasks such as provisioning, monitoring, and incident response. The Wall Street Journal reports that AI is expected to autonomously manage a significant portion of customer interactions by 2025, and healthcare organizations can similarly leverage AI to automate tasks such as patient registration, data entry, and incident response.

Automation reduces operational errors and frees healthcare professionals to focus on patient care rather than administrative tasks. For example, automation in identity management (IdM) processes has allowed organizations to cut user onboarding times drastically, saving thousands of operational hours annually, as demonstrated by telecommunications providers who saved over \$1 million annually through streamlined IdM practices.



HYBRID INFRASTRUCTURE: OPTIMAL BALANCE OF FLEXIBILITY, SECURITY, AND CONTROL

Hybrid cloud infrastructure is ideal for healthcare organizations due to its flexibility, scalability, and security. Gartner predicts that by 2028, 50% of data will reside in cloud infrastructures, underscoring the necessity of robust hybrid solutions. Healthcare providers require hybrid models that integrate cloud scalability with the security and regulatory compliance of on-premises environments. Adopting hybrid cloud infrastructure optimizes performance for resource-intensive AI-driven healthcare applications, enhancing speed and efficiency in clinical decision-making processes. Healthcare organizations must also ensure strategic placement of workloads, balancing cost, security, and performance demands, making the role of expert technology partners essential.

Hybrid infrastructure supports healthcare organizations in managing and securing diverse workloads across both on-premises and cloud environments. Grand View Research reports that the hybrid cloud market is growing at a compound annual growth rate (CAGR) of 19.1%, driven primarily by demands for AI integration and secure data management. Providers adept at managing hybrid infrastructures can ensure optimal performance, compliance, and disaster recovery. Hybrid environments provide the flexibility to shift workloads based on demand, reduce downtime through resilient disaster recovery strategies, and optimize costs. This model is particularly beneficial in healthcare, where the ability to manage and securely analyze patient data across diverse platforms directly contributes to improved patient care and operational resilience.





SECURE NETWORKING: PROTECTING CRITICAL INFRASTRUCTURE

The healthcare sector has become a prime target for cyberattacks due to the sensitive nature of patient data and critical healthcare services. According to recent studies, cyberattacks increased by 30% year-over-year in Q2 2024, highlighting the need for robust network security solutions.

Advanced secure networking frameworks leveraging AI and ML technologies, such as threat intelligence and micro-segmentation, significantly enhance threat detection and mitigation. Micro-segmentation limits threat exposure by isolating systems into secure zones, preventing lateral movement within networks. In healthcare, micro-segmentation can dramatically reduce the impact of breaches, safeguarding sensitive patient data and essential medical systems.



CYBERSECURITY PROTECTION: EMBRACING ZERO TRUST

Zero Trust frameworks, which assume all network activities could be threats until proven otherwise, have become essential in protecting healthcare organizations from sophisticated cyber threats. Forrester Research found that organizations adopting Zero Trust strategies experience 50% fewer breaches.

Integrating robust Identity and Access Management (IAM) systems with Zero Trust architectures significantly reduces an organization's attack surface. Context-based security, combining user behavior analytics, continuous authentication, and real-time threat monitoring, ensures comprehensive and adaptive cybersecurity protection. Healthcare organizations that adopt Zero Trust strategies not only enhance security but also ensure compliance with stringent regulations such as HIPAA.



SOLVING HEALTHCARE IT STAFFING GAPS WITH RESOURCE MANAGEMENT

The healthcare industry also faces significant IT staffing challenges, driven by a shortage of qualified technology professionals and increasing operational complexity. According to recent IDC predictions, more than 90% of organizations worldwide will feel the impact of IT skills shortages by 2026. Healthcare organizations can address these staffing gaps by leveraging strategic resource management practices and managed services.

Effective resource management enables healthcare providers to deploy flexible staffing models, including resource augmentation, managed services, and specialized consulting. Utilizing flexible resource management services allows organizations to access immediate expertise from basic desktop support to highly specialized roles to manage emerging technologies such as AI, cybersecurity, and advanced cloud solutions without the overhead of permanent hires. This flexibility ensures optimal staffing levels and maintains high-quality IT support without recruiting challenges, reducing operational risk and improving service continuity.

CASE STUDY

Healthcare System Scales IT Staff 314% in One Year

Using a flexible Resource Management service, this healthcare system successfully expanded its IT team from 7 to 29 team members within one year and filled 11 contract roles to support IT operations across 55 locations nationwide.

[READ THE STORY](#)



MANAGED IT SERVICES: THE STRATEGIC ADVANTAGE

Given the complexities of healthcare IT, many organizations increasingly leverage Managed IT Services to manage their technology needs. By partnering with expert managed service providers, healthcare organizations can access specialized expertise, advanced technologies, and proactive support, significantly enhancing operational efficiency and security posture.

Managed services providers (MSPs) offer comprehensive solutions, including infrastructure management, cybersecurity, identity management, and disaster recovery. Providers enable healthcare organizations to optimize IT investments, reduce operational costs, and ensure continuous protection against evolving threats. According to Gartner, organizations investing in scalable, future-ready IT infrastructures, often provided by MSPs, are 60% more likely to experience operational agility and faster market responses.

ACHIEVING IT EXCELLENCE IN HEALTHCARE

Optimizing IT and security infrastructure is paramount for healthcare organizations to remain productive, resilient, and efficient in an increasingly digital world. Embracing digital innovation, robust data protection, intelligent automation, hybrid infrastructure, secure networking, and advanced cybersecurity protection through IAM, PAM, and Zero Trust frameworks positions healthcare providers to excel amidst growing threats and operational demands. Finally, the strategic adoption of flexible Resource Management and Managed IT Services delivers the expertise, security, and efficiency healthcare organizations require, allowing them to focus on their core mission—delivering exceptional patient care.

Partnering with an expert guide such as Verinext ensures healthcare organizations benefit from specialized insights, tailored strategies, and comprehensive support, empowering them to navigate complex IT landscapes and achieve sustainable, secure growth.

If you are ready to elevate your IT infrastructure to significantly enhance the productivity, resilience, and efficiency of your healthcare environment, [view this infographic](#).

Then contact Verinext today to start a conversation.

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