



# Understand and accelerate your healthcare organization's digital maturity

How HIMSS INFRAM assessments and Amazon Web Services (AWS) cloud partnership can baseline and provide a curated journey to digital maturity.





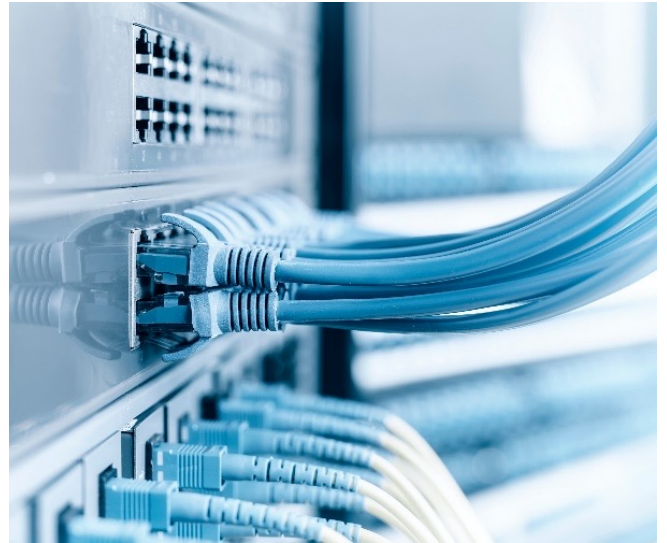
## AWS in healthcare

The Amazon Web Services (AWS) healthcare mission is to enable access and delivery of person-centred care in order to improve outcomes and lower costs by accelerating the digitization and utilization of healthcare data. Our aim is to help healthcare organizations and their partners develop technology strategies to achieve more with less, modernize technology, and digitally transform back office and clinical services.

## Charting your path to digital excellence in healthcare

In today's rapidly evolving healthcare landscape, digital transformation is no longer a luxury, it's a necessity. As healthcare organizations strive to improve patient outcomes, streamline operations, and enhance overall efficiency, understanding their current digital capabilities and mapping out a clear path forward is crucial.

This is where the partnership between Amazon Web Services (AWS) and the Healthcare Information and Management Systems Society (HIMSS) comes into play. By combining AWS's cloud expertise with HIMSS's deep healthcare industry knowledge, we're empowering healthcare organizations to accurately assess their digital maturity and chart a course towards a more connected, efficient, and patient-centric future.



## INFRAM and AWS Cloud: Accelerating healthcare digital maturity

Embarking on a HIMSS INFRAM assessment offers healthcare organizations a clear path to digital maturity, providing a comprehensive evaluation of their technological infrastructure and a roadmap for improvement. This assessment becomes even more powerful when combined with AWS cloud services and partner solutions, creating a synergy that accelerates digital transformation.

The INFRAM assessment delivers a detailed analysis of your current digital capabilities, identifying gaps and opportunities across critical areas such as cybersecurity, data management, and clinical workflows. It provides actionable insights and benchmarks against industry standards, ensuring your technology investments align with organizational goals.

AWS cloud platform complements the INFRAM assessment by offering:



- Scalable infrastructure to rapidly implement INFRAM recommendations
- Advanced analytics and machine learning for deeper insights
- Robust security features aligning with INFRAM's cybersecurity guidelines
- Access to cutting-edge technologies for swift innovation
- Cost-effective, pay-as-you-go models for optimized IT spending

## Your digital maturity compass



At the heart of this partnership lies the HIMSS Infrastructure Adoption Model (INFRAM), a comprehensive framework designed to evaluate and score an organization's technical infrastructure. The INFRAM assessment serves as a powerful tool to:

1. Establish a baseline of your current digital capabilities
2. Identify gaps and areas for improvement
3. Benchmark your progress against industry standards
4. Provide a roadmap for strategic technology investments

By leveraging the INFRAM assessment, healthcare organizations can gain a clear understanding of where they stand in their digital adoption journey and make informed decisions about their next steps. With AWS and HIMSS together, we're committed to guiding healthcare organizations through every stage of their digital transformation, from initial assessment to implementation and beyond.

## HIMSS INFRAM maturity levels

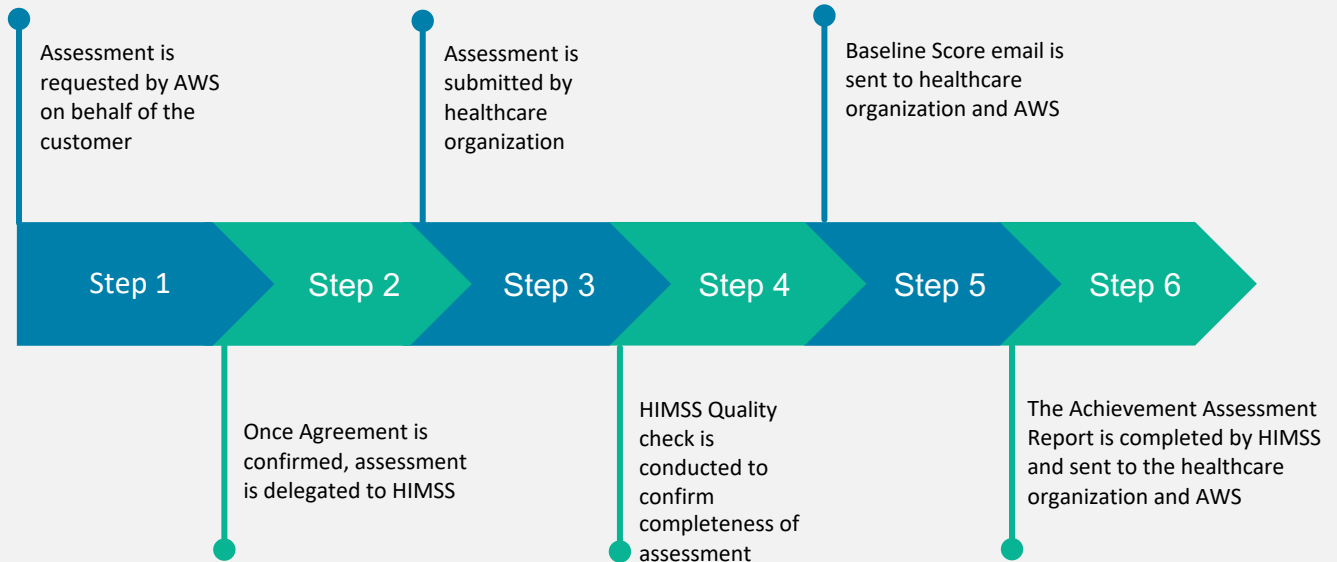
HIMSS INFRAM measures the performance of how well an organization's infrastructure supports its strategic objectives and desired outcomes. Performance is evaluated at each stage of the model, and recommendations are provided to help the organization advance its infrastructure capabilities and maturity.

### HIMSS INFRAM levels

- 7 Adaptive and flexible network control with software defined networking; home-based tele-monitoring; internet/TV on demand
- 6 Software defined network automated validation of experience; on-premise enterprise/hybrid cloud application and infrastructure automation
- 5 Video on mobile devices; location-based messaging; firewall with advanced malware protection; real-time scanning of hyperlinks in email messages
- 4 Multiparty video capabilities; wireless coverage throughout most premises; active/active high availability; remote access VPN
- 3 Advanced intrusion prevention system; rack/tower/blade server-based compute architecture; end-to-end QoS; defined public and private cloud strategy
- 2 Intrusion detection/prevention; informal security policy; disparate systems centrally managed by multiple network management systems
- 1 Static network configurations; fixed switch platform; active/standby failover; LWAP-only single wireless controller; ad-hoc local storage networking; no data center automation
- 0 No VPN, intrusion detection/prevention, security policy, data center or compute architecture

## Getting Started

Getting started with your INFRAM assessment is a straightforward yet thorough process, designed to ensure accurate results and actionable insights. This collaborative journey involves your healthcare organization, AWS, and HIMSS working together through six key steps:



This systematic approach ensures that every aspect of your digital infrastructure is thoroughly evaluated, setting the stage for targeted improvements and strategic investments. Let's dive deeper into each step of this transformative process, exploring how the INFRAM assessment paves the way for your organization's digital evolution.

The INFRAM assessment process typically unfolds over three distinct delivery phases, each with its own focus and approximate duration.

**Phase 1** ➔ Survey Request & Survey Delegation, typically takes about two weeks. This initial stage sets the foundation for the assessment.

**Phase 2** ➔ Survey Completion, is the most time-intensive part of the process, generally spanning 4-8 weeks. During this period, the healthcare organization thoroughly completes the comprehensive survey provided by HIMSS.

**Phase 3** ➔ Creation and delivery of the Achievement Assessment Report (AAR) Findings, which usually requires around two weeks.

In total, an INFRAM assessment often takes between 8 to 12 weeks from start to finish.

It's important to note that these timelines are flexible and can vary significantly depending on the size and complexity of your healthcare organization. Larger institutions with more extensive infrastructure may require additional time, particularly during the Survey Completion phase. Conversely, smaller organizations or those with streamlined processes might move through the assessment more quickly.



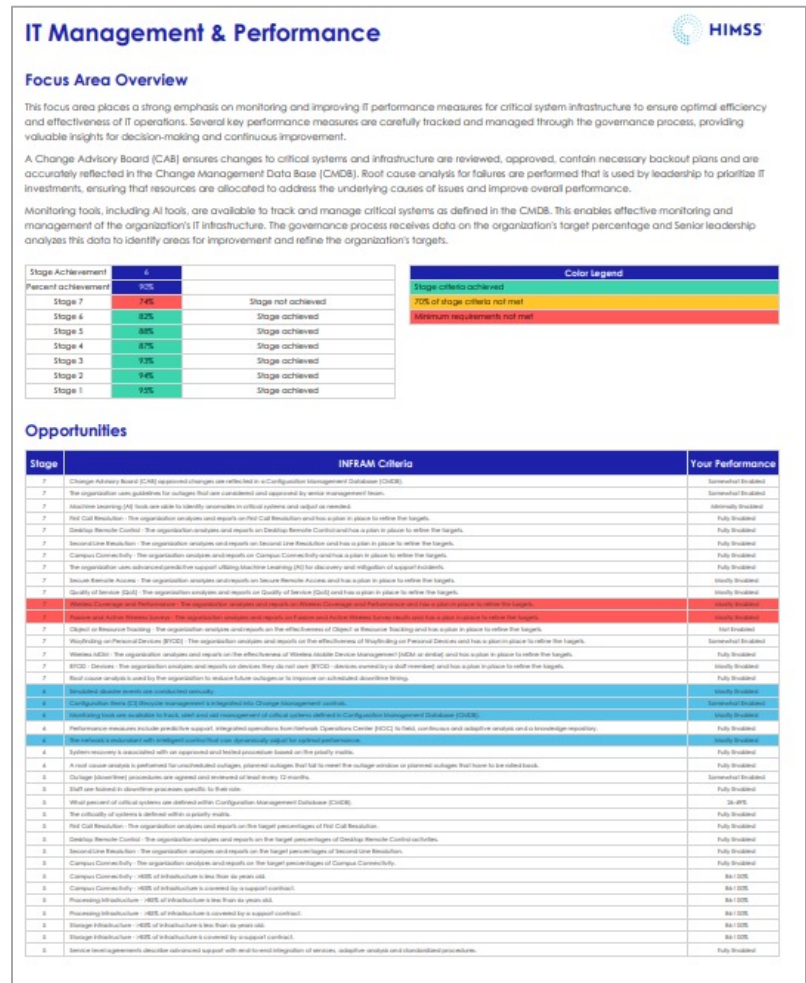


## Your HIMSS INFRAM assessment outcome

Through the assessment process conducted by the healthcare organization and reviewed by HIMSS-certified professionals, the report is created to examine your IT infrastructure across various domains, including Infrastructure Fundamentals, IT Resilience, IT Service Management, Security, and adoption of Advanced Technologies. Each domain is thoroughly analyzed, highlighting strengths, weaknesses, and opportunities for improvement.

The report offers a detailed analysis of your organization's current IT infrastructure maturity level, utilizing a standardized scoring system or rating scale globally. This objective assessment enables you to benchmark your IT capabilities against industry peers both in your area, country and also internationally and identify areas where you excel or fall behind level requirements. This report also provides valuable benchmarking data for your organization, allowing you to compare your performance with industry best practices and gain a deeper understanding of your organization's landscape.

One of the key strengths of the HIMSS INFRAM Assessment Report is its ability to provide a clear roadmap and actionable plan for enhancing your IT infrastructure. With your healthcare organization working in partnership with AWS, our healthcare industry professionals can offer advice on the next steps, technology adoption and service recommendations based off the INFRAM report and, where required, provide specialist partner recommendations tailored to your organization's needs to help meet or exceed an INFRAM level. With the HIMSS INFRAM report and AWS guidance we can enable you to prioritize investments, streamline processes, and leverage emerging technologies to drive operational efficiency and improve patient outcomes. This transparency ensures that the assessment findings are well-substantiated and provides a solid foundation for informed decision-making.



Sample Report

The HIMSS INFRAM Assessment Report serves as a valuable resource for healthcare organizations seeking to optimize their IT infrastructure and position themselves for long-term success in the rapidly evolving healthcare landscape. By leveraging the insights and recommendations presented in this report, you can embark on a strategic journey to enhance patient care, improve operational efficiency, and drive digital transformation within your organization.

*"The HIMSS INFRAM gives us a common yardstick. By using a recognized, 3rd party benchmark across our seven hospitals – we know where we stand and we can move forward strategically in planning roadmaps for the future. It also helps us highlight our alignment against global standards like ISO, which helps us justify that investment."*

**Andrew Kelly**  
Chief Technology Officer, Canada Healthcare Council



## AWS getting you to your digital maturity destination

The HIMSS INFRAM model serves as a comprehensive guide, leading healthcare organizations toward digital maturity across critical areas. By leveraging INFRAM, you can ensure your organization is well-positioned to thrive in the digital age, focusing on five key pillars:

**Cybersecurity: Fortifying your digital defences.** INFRAM guides healthcare organizations in establishing robust cybersecurity practices, leveraging AI for threat detection, enhancing breach response, and expediting recovery, ultimately safeguarding patient data and maintaining trust in the digital infrastructure.

**Adoption: Maximizing technology utilization.** INFRAM maximizes your technology investment by boosting staff proficiency, optimizing performance, fostering continuous improvement, and cultivating innovation, ultimately unlocking the full potential of your digital tools to drive efficiency and enhance patient care.

**Sustainability: Reducing your carbon footprint.** INFRAM offers comprehensive services to healthcare organizations, including greenhouse gas emissions assessment, carbon footprint reduction strategy development, sustainable IT infrastructure implementation, progress tracking, and reporting, aligning digital transformation with eco-friendly practices for optimized operations and a healthier planet.

**Performance: Enhancing systems reliability and efficiency.** INFRAM helps healthcare organizations maintain peak performance across their digital ecosystem by developing robust systems, change management plans, leveraging cutting-edge technology for proactive incident mitigation, ensuring adherence to service-level agreements, implementing continuous monitoring and optimization strategies, creating a reliable and efficient digital environment for seamless healthcare delivery.

**Outcomes: Aligning technology with organizational goals.** INFRAM provides a framework that aligns information and technology initiatives with clinical, financial, and operational objectives, establishes and tracks Key Performance Indicators (KPI), creates a feedback loop for continuous improvement, and demonstrates the Return on Investment (ROI) of digital transformation efforts, ensuring meaningful results and overall success from digital investments.

The HIMSS INFRAM Assessment, powered by AWS Healthcare experts and trusted partners, offers a game-changing opportunity for healthcare organizations to gain an independent, comprehensive evaluation of their IT infrastructure. By leveraging AWS's cutting-edge technology, deep healthcare domain expertise, and a network of trusted partners, organizations can unlock invaluable insights and actionable recommendations tailored to their unique needs. This assessment provides a holistic view of an organization's IT infrastructure maturity, encompassing infrastructure fundamentals, resilience, service management, clinical systems, and advanced technologies. The resulting report serves as a strategic blueprint, guiding organizations through a transformative journey to optimize their IT infrastructure, streamline processes, and embrace innovative technologies that enhance operational efficiency, drive better patient outcomes, and elevate the quality of care for both the workforce and patients.



Our HIMSS partnership enables healthcare organizations to quickly assess and understand how to improve their digital maturity. With HIMSS, alongside AWS, we offer solutions to assess, baseline, and accelerate digital transformation, enhancing operational efficiency, return on investment, and care quality."

**Dr Rowland Illing**

AWS Medical Director for International Public Sector Health

## Get started

To get started contact your [AWS account team](#) to learn more on how we can:

- Support you on your cloud journey
- Understand your technical landscape
- Build your AWS Cloud business case
- Identify the best procurement route for your NHS Trust
- Identify quick wins and initial migration opportunities

## AWS resources

- [HIMMS INFRAM](#)
- [AWS for Health](#)
- [Healthcare Solutions](#)

## Get in touch

<https://aws.amazon.com/health/>