A series of case studies illuminating how HIT professionals are using HL7®FHIR® to improve and advance modern healthcare

MEDHOST
A health information technology company founded in 1984, MEDHOST serves healthcare facilities nationwide with cloud-based financial, clinical, and operational solutions, focusing on providing cost-effective solutions for community hospitals in the United States.

AMAZON WEB SERVICES
Amazon Web Services (AWS) is the world’s most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centers globally. Millions of customers—including the fastest-growing startups, largest enterprises, and leading government agencies—are using AWS to lower costs, become more agile, and innovate faster.

Goal
To provide community hospitals with secure, cost-effective digital infrastructure that meets federal mandates and provides simple access to healthcare data for patients and providers.

Opportunity
To forge a partnership to develop a digital interface solution allowing standardized access to healthcare documentation using HL7® SMART on FHIR® resources.

MEDHOST sought to provide a solution for community hospitals that would be openly available and cost effective while providing the highest security standards. We strongly believe that FHIR API will accelerate interoperability within healthcare systems.

— Pandian Velayutham, senior director of engineering, MEDHOST
**Project**

The 21st Century Cures Act is designed to give patients and healthcare providers secure access to health information. The healthcare industry is challenged with the Cures Act requirements, which has timelines requiring healthcare organizations to provide access to patient data through HL7 FHIR.

Because many community hospitals struggle to manage, pay for, and secure modern, digital infrastructure that meets this federal mandate and provides simple access for patients and providers, MEDHOST needed to help its more than 1,000 healthcare facility customers be compliant. The company began working closely with the team at AWS.

During the planning stages for enabling Cures Act compliance, MEDHOST realized that by enabling FHIR functionality on AWS, they could also take advantage of the ever-growing AWS AI and machine learning (ML) services in order to provide advanced analytics and unlock insights from their structured and unstructured clinical data, such as clinical notes.

MEDHOST chose FHIR Works on AWS, an open source software toolkit, to provide a cloud-based multi-tenant scalable solution. By having a cloud-based solution, it takes away the operational challenges and also enables hospital IT systems to expand the solution based on future need.
Progress

MEDHOST’s solution gives patients improved access to their own data. For example, patients can see their latest vital signs through a user interface from any device. This visibility increases patients’ engagement and streamlines their interactions with providers.

The solution also increases interoperability, helping providers to share information with each other or with financial stakeholders. Providers can also gain additional understanding and insights using interactive dashboards.

MEDHOST used its experience with AWS to kick-start and integrate new AWS features with its existing platform. This has given MEDHOST a huge head start toward meeting compliance requirements and opened other options that might not have been possible before.

Watch this video to learn more.

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Pandian Velayutham, senior director of engineering, MEDHOST