

Mural Virtual Care Solution: A Better Platform for Protocol Compliance



GE Healthcare





Overview

GE Healthcare's new Mural Solution features a patient oversight application, which intelligently aggregates and trends relevant data from multiple devices and systems to prioritize clinicians' attention to the most critical patient cases based on hospital defined protocols.¹ By digitizing hospital-defined protocols, care pathways, and Early Warning Scores (EWS) in a single pane of glass, the Mural solution may help clinicians reduce variation in care delivery and time to intervention.

Challenge

All hospitals face the challenge of adhering to care protocols. One study found compliance as low as 12% against 22 common guidelines across 5 Level 1 trauma centers.¹ Noncompliance causes deviation in care pathways, which may lead to delays in treatment and negative outcomes.

Solution

The Mural Solution digitizes hospital defined protocols and care standards, aggregating and trending real-time data from a variety of sources, including bedside monitors, the EMR, flowsheets, labs, and more.¹ These digitized protocols help display actionable information, configurable care bundles, and protocol

alerts.¹ It can also synchronize applications drawing data from multiple sources including waveforms, ECG reports, PACS images, and audio/video streams from the bedside, all in a single pane of glass. A differentiating feature of the Mural Solution is that its core offering features a Class II medical device providing clinical decision support by digitizing hospital defined early warning scores, screening protocols, and care standards. Data that may already be available on a hospital's network such as blood pressure, SpO2, or heart rate can all be tracked to highlight patients that fall out of thresholds in real time through a digitized hospital protocol.¹

Mural Solution's core offering can also digitize best practice care standards or care bundles prompting clinicians when critical steps are missed. The protocols can be analyzed later for efficacy and, if needed, revision. The Mural Solution's core offering provides hospitals the flexibility to customize their protocols, thresholds, care standards, and screen layouts.¹

The Mural Solution provides additional differentiation by integrating data from multiple systems and clinical devices and synchronizing multiple applications "in a single pane of glass." In this, the Mural Solution addresses the common complaint about EMRs and other systems: that they require practitioners to dig

through multiple screens of information. The Mural Solution, developed in close consultation with healthcare partners, will usher in a new model of coordinated, cross-department care. While early use cases include ICU, the Mural Solution is positioned as a solution that can support various care models.

Appearance

To the clinical user, the Mural Solution's patient surveillance screen appears as a "mural" of squares, each representing a patient case. The patients are prioritized on this screen based on hospital defined EWS or screening protocols. Patients whose vitals or other parameters fall outside of the thresholds defined by the hospital are shown in a box at the top of the screen and their square is highlighted in red. Once a patient is selected, an application opens up a patient snapshot screen, which aggregates and trends relevant data sourced from multiple clinical devices and systems.¹ In a single pane of glass, the Mural Solution can also synchronize standalone applications that draw data from multiple sources including patient monitoring data, diagnostic images, nursing flowsheets, and audio/video.

Features

SMART ALERTS

Clinical role and workflow-specific meaningful visual notifications based on hospital unit's protocols are sent to smartphones, tablets, or pagers for rapid intervention.¹

EPISODIC DIAGNOSTICS

Provides access to ICU patient records and imaging reports from the radiology and/or cardiology departments. Data access is contextually driven and retrieves only relevant patient data.

WAVEFORM VIEWER²

Enables access to high-fidelity waveforms with graphical and numerical trends for the patient under observation and review. Standards-based information for enhanced interoperability across patient monitoring networks. Supports 24-to-72-hour data storage for trends and event review.

INTERACTIVE COLLABORATION

Seamless two-way virtual collaboration between remote and on-site clinicians is available with integration of optional software-based audio/video application.

Technical Features

- Built on GE Healthcare's Edison Healthlink platform provides a load balanced architecture for higher throughput
- Clinical data-aggregation platform with interoperable HL7, FHIR, and REST API integration to existing EMRs, LIS, Rx, medical devices, and more
- Integration with hospital LDAP enterprise authentication system for seamless login using current credentials
- Secure communication to protect the confidentiality and integrity of patient information
- Seamless workflow on virtual-care cockpit through simultaneous user and patient context-sharing across participating applications
- Configurable user interface for layout and application selection

Built on Healthlink

The Mural Solution is deployed atop GE Healthcare's Edison Healthlink, a customizable, purpose-built, edge component of the Edison intelligence platform that enables locally deployed, HIPAA compliant healthcare solutions which can aggregate, correlate, analyze, process, display and share data from attached clinical devices, sensors and health information systems. With Edison HealthLink, GE Healthcare provides consistent access to the solutions customers need, anytime and anywhere within the confines of their secure network.

The Mural Solution is currently deployed as an edge application and is fully scalable and customizable. In addition, the Mural Solution preserves the fidelity of the original data from the subsystems that feed it, making it a rich repository for future data studies.

We can help

We've already invested in the expertise needed to help you achieve your efficiency, performance, and patient care goals. Now let us help you get there!

1. Enabled by DECISIO Insight® - a Class II medical device.

2. Waveform Viewer is a standalone software element sold as part of a single solution. The Mural solution is comprised of various standalone software products.



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About GE Healthcare:

GE Healthcare is a leading global medical technology and digital solutions innovator. GE Healthcare enables clinicians to make faster, more informed decisions through intelligent devices, data analytics, applications and services, supported by its Edison intelligence platform. With over 100 years of healthcare industry experience and around 50,000 employees globally, the company operates at the center of an ecosystem working toward precision health, digitizing healthcare, helping drive productivity and improve outcomes for patients, providers, health systems and researchers around the world. Follow us on [Facebook](#), [LinkedIn](#), [Twitter](#) and [Insights](#) or visit our website www.gehealthcare.com for more information.