

Warm Springs Rehabilitation System

www.warmsprings.org South Central Texas

“Re-architecting our HL7 network with Corepoint Integration Engine enables us to provide dependable communication exchange between the diverse departments and systems we support.”

The Warm Springs Rehabilitation System consists of four hospitals and six clinics working together to provide comprehensive rehabilitative care in South Central Texas.

Customer HL7 Challenges

- To centrally manage HL7.
- To quickly create new HL7 interfaces. ARA's Insights.

Impact(s)

- Centralized message management.
- Intuitive routes and filters for flexible message delivery.
- Graphical tools to create interfaces and monitor HL7 message delivery.
- Peace of mind knowing every HL7 message is being tracked.

Effective HL7 is the Goal

The Warm Springs Rehabilitation System provides complete physical and cognitive rehabilitative care to Texans recovering from surgery, strokes, falls and other injuries. Rehabilitation programs at Warm Springs focus on each patient's individual needs, providing the treatment and recovery activities that best enable patient recovery.

For many years Warm Springs used HL7 messaging to exchange patient administration information and charges among its seven facilities.

Peer-to-Peer HL7 is Not the Solution

Warm Springs began HL7 implementation using a peer-to-peer approach.

Peer-to-peer communications means a system must maintain an interface to every system with which information is shared. While this is an easy architecture to implement with two or three systems, as the number of systems increases a peer-to-peer network becomes exponentially harder to manage and expand.

As David Chionsini, CIO for Warm Springs, explains: “We had two issues with our peer-to-peer solution. The first issue was that our architecture did not support centralized HL7 message management and monitoring. Interfaces had to be closely monitored to ensure clinicians were not the first to report an interface glitch when ADT or Charge data had not been received by the appropriate system.

Customer Solution

- Engaged Corepoint Health to redesign HL7 architecture.
- Implemented the recommended architecture using Corepoint Integration Engine as an interface engine.

Solution Details

Warm Springs knew that to use HL7 more effectively they needed an HL7 architecture that simplified their interfaces and provided centralized tools for managing their interfaces.

Their peer-to-peer HL7 network consisted of about 34 interfaces which were used to transmit ADT messages and charges between their facilities. To add more systems, both sending and receiving vendors needed to negotiate the details of the interface. As part of their HL7 redesign, they installed the Corepoint Integration Engine with the RFMDB gear as an HL7 interface engine/message router. This move reduced their total number of ADT interfaces by eight and reduces the number of interfaces being used for charges by four. This was a 35% reduction in the number of interfaces they needed to maintain.

Besides the reduction in interfaces, Corepoint Integration Engine's monitoring and logging capabilities enable the Warm Spring's IT team to practice more efficient HL7 management processes. Chionsini reflects, “Using Lumberjack, Corepoint Integration Engine's message logging module, we are able to reduce operation costs by taking the guess work out of maintenance and support. Messages that do not make it to their destination are flagged by the Corepoint Integration Engine and can be easily resent using point and click tools. Corepoint Integration Engine's interface creation tools and connection wizard makes it possible to read and write HL7 information to a database for systems that don't support HL7.”

CUSTOMER SUCCESS

The second issue with our peer-to-peer methodology was the total number of interfaces.” continues Chionsini. “Managing 34 interfaces located across seven facilities had become very costly and we had reached the critical point where new systems could not be connected to our HL7 network without significant interface development.

The cost and effort associated with building, deploying and supporting interfaces made it clear that a peer-to-peer architecture was no longer a viable HL7 solution for Warm Springs.”

Re-architecting HL7 with Corepoint Integration Engine

Warm Springs took a completely new approach to redesigning their HL7 communications. They engaged Corepoint Health to help define a more effective interfacing architecture. Warm Springs found that the integration talent at Corepoint Health, combined with interface engine technology – Corepoint Integration Engine and the RFMDB (Routing, Filtering, Mapping, and Database) Gear to support routing and message mapping – provided a very effective solution for their organization.

Chionsini explains:

“With the widespread use of HL7 in healthcare and continually tight IT budgets, we needed an HL7 architecture that simplified how new systems were interfaced. We also needed an architecture that supported centralized interface management. We had to know that every HL7 message was being delivered to every subscriber system, and be informed if a message could not be delivered. Corepoint Health reviewed our current HL7 infrastructure and recommended an architecture that met these goals. The Corepoint Integration Engine provides core HL7 communication support and management tools while the RFMDB Gear controls message routes. With the engine in place, HL7 support and implementation has become amazingly simple at Warm Springs.”

“We were able to reduce the number of interfaces we maintain while adding superior management tools to our network. That’s a really powerful one-two punch. We used Corepoint Health solid HL7 tools and HL7 training classes to make our team more effective. Creating the 22 new interfaces to replace our 34 existing interfaces was simple.”

HL7 is Now Easy (And Effective)

Concludes Chionsini: “Knowing we can quickly add new systems and expand automation within our rehabilitation operations is a great feeling. Knowing Corepoint Integration Engine will ensure we will not have undelivered HL7 messages is an even better feeling. Re-architecting our HL7 network with Corepoint Integration Engine, and breaking our peer-to-peer interface boundaries, enables us to provide dependable communication exchange between the diverse departments and systems we support. In addition, we can now quickly build and maintain interfaces without extensive knowledge of HL7. I did not think such a complete, yet cost effective solution was possible until I talked to Corepoint Health.”

In addition, with an interface engine at the center of our network, adding new systems will be much easier. We are no longer dependent upon vendors to complete peer-to-peer work – we’ve taken control of our own data. For example, Corepoint Integration Engine’s Derivative Explorer provides our implementation team with specifications to all published HL7 releases in use today. This feature makes it easy to design, deploy and document new interfaces. The point and click method of handling “one off” details such as “Z” segments is the simplest to use in the market. The engine fits well into our overall business mission of providing clear and concise exchange of patient information throughout the Warm Springs Rehabilitation System.”

Return on Investment

For Warm Springs, the investment in the Corepoint Integration Engine has really paid off. David Chionsini finishes up his discussion on the Corepoint Integration Engine installation at Warm Springs by discussing Return on Investment (ROI). “Because of the decrease in cost to deploy new interfaces and the ease in which we can maintain interfaces, the financial ROI for the Corepoint Integration Engine will be exceptional. In addition, we expect to be able to measure additional ROI in delivering better service to doctors, nurses, and therapist all while seeing improved patient results. Corepoint Health and Corepoint Integration Engine, got our interfacing efforts on track and improved the level of support we provide. Corepoint Health really understands healthcare integration in the real world.”

About Corepoint Health

Corepoint Health has the healthcare IT experience and strength to deliver a dramatically simplified approach to internal and external data integration and health information exchange for hospitals, radiology centers, laboratories, and clinics. Our next generation software solutions are transformational and will streamline your IT environment, provide a fast track to achieving your interoperability goals, and create operational leverage within your organization. Corepoint Health’s solutions achieve a needed balance of being both intuitive and sophisticated while delivering solid functionality and performance.

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