Achieving Clinical Enterprise Integration with BizTalk

BUSINESS GOALS

A large U.S. healthcare provide, needed to integrate electronic health records from more than 60 facilities in their network with a propriety mainframe-based patient accounting (PA) system. The PA system stores financial data, calculates healthcare costs, and provides patient billing information, making it a critical part of their computing environment.

However, there was a big risk of business discontinuity if and when electronic health records (EHR) systems were implemented or upgraded at any of their facilities. The client's goal was to maintain business continuity and growth by eliminating dependency and enabling the PA system to integrate seamlessly with any EHR system in use.

BUSINESS BENEFITS

Quick, easy on-boarding of new facilities, regardless of the EHR system in use

Moved critical business functionality in-house and removed dependency on EHR vendors

Guaranteed real-time data availability for all business critical needs

Eliminated the need for legacy system changes for new facility implementation

CHALLENGES

- High system dependency and complex integration with existing EHR system
- Each EHR uses a different HL7 and propriety standard
- Inability to quickly adapt to different messaging formats
- Substantial risk of destabilizing existing legacy systems

SYNTEL'S SOLUTION

Syntel designed a highly scalable, product-agnostic BizTalk solution capable of integrating leading EHR systems such as MEDITECH, Epic, Cerner, PBAR, HMS and McKesson with the client's legacy patient accounting system.

The solution was designed in two independent personas. The first translates incoming HL7 and proprietary transactions to pre-defined versions of canonical XML messages. The second persona receives canonical messages and transforms them back into the proprietary formats required by the destination system (such as PA, OnBase, etc).

The solution is flexible enough to support dynamic transformation, able to make changes "on the fly" to handle any type of HL7 or proprietary message. It also incorporates real-time tracking and robust exception handing features to monitor and re-process rejected transactions.

Syntel also helped upgrade the solution to the latest BizTalk 2016 version for increased agility and faster message processing.