

Revolutionizing the Patient/Provider Experience at the Point of Care

Challenge

One of healthcare's major challenges is access to complete, comprehensive, and accurate patient data at the point of care. Converting that data into usable and valuable information to assist the provider in conducting a thorough, beneficial patient examination, and to inform prescriptive pathways for better healthcare, is another. These challenges stem from data being stored in multiple, disparate databases and other related systems-of-record. Data interoperability between disparate systems-of-record has been a challenge facing enterprise systems, and those that use them, for years.

A key objective at the point of care is to distill a patient's record into the relevant patient story and to resolve knowledge gaps, both from other systems-of-record and through metrics gathered during each patient-provider encounter. Keeping this data in sync, real-time, between multi-user consuming applications and electronic health record platforms using HL7 FHIR® has proved elusive. As will be demonstrated, applications used during patient-provider encounters can now remain in sync, real-time, with VistA (and can be extended to other electronic health record platforms) in a manner that supports more active role for patients in their clinical encounters with care providers (whether in-person or via the web). This capability is extensible to other clinical systems without the traditionally associated high labor costs.

Solution

In order to gather complete, accurate, and actionable patient information, the user experience must pull its data from accurate sources. With multiple active and often dispersed systems-of-record, the reliability of any one piece of that data can be suspect. Using an approach that is focused on promoting data interoperability between disparate systems-of-record is a unique capability of Apex's Synchronize!™. It is a platform for enterprise data federation, designed to provide a comprehensive, value-added platform for business intelligence regarding mission-critical data that span multiple active and dispersed systems-of-record.

Using this platform, multi-user consuming applications can read and write patient data, using industry-standard HL7 FHIR®. These consuming applications can furnish longitudinal information that any authorized end-user in the patient care cycle needs. Alternative methods for gathering necessary information can be developed that assist clinicians through the adaptation of workflows, automated heuristics, and clinical decision support. Finally, by capturing every state

change and interaction from the consuming application's user interface, it is possible to analyze and design to achieve improved outcomes via "evidence-based usability."

Benefits

For the Provider:

- Provides complete, accurate and actionable longitudinal data at the point of care.
- Configurable based on the provider's clinical requirements.
- Allows for streamlined workflows, reducing the administrative burden on the provider and the cognitive burden on all care providers in the continuum of care.
- Allows for analytics that lead to better treatment options for the patient and better outcomes based on data collected at the point-of-care and analyzed across the entire domain.

For the Patient:

- Enhances patient confidence in the decisions made by the provider.
- Ensures correct patient information is used during care visits.
- Enhances patient choices regarding treatment options offered.
- Empowers patients to take a more active role in their care.

Highlights

- Enables complete, comprehensive longitudinal patient information at the point of care.
- Provides the ability to analyze data from multiple disparate systems-of-record required to make informed decisions in mission-critical situations.
- Provides a standard HL7 FHIR® interface for user interfaces, data exchange and other consuming applications.
- Affords near-real-time canonical or longitudinal views of a patient's record.

Summary

The patient-provider experience at the point of care is the most critical user experience within a healthcare system. The ability to provide complete, accurate, and usable information at this point of care is essential to administering safe and effective care to the patient. The interoperable technology provided by Synchronize!™ addresses a critical enterprise need to have a near real-time canonical or longitudinal view of a patient's story, especially when multiple systems-of-record are used to store and manage dispersed portions of the patient record.