

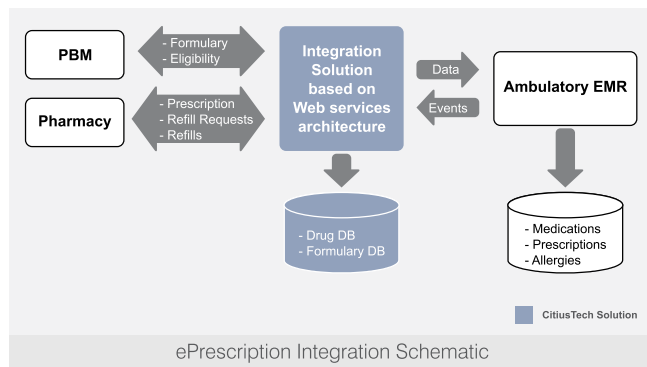
Case Study: ePrescription Integration with EMR

Client Requirements

Client provides clinical information technology solutions for physician practices and healthcare organizations. Their products and services include - electronic medical record (EMR), practice management system (PMS), dictation, speech recognition, transcription services, natural language processing, automated coding, document management and real-time authentication of telephone orders.

Client desired to integrate its EMR product with an ePrescription provider to allow physicians and their staff to write and send complete scripts nationwide, using desktop computers as well as a range of popular hand-held devices.

CitiusTech built a seamless integration layer between the client's EMR and the ePrescription platform.



CitiusTech Solution

Requirements Analysis

The CitiusTech team conducted an assessment of the integration requirements for the client's EMR and the ePrescription platform. This included:

- **Patient information sharing**
 - Process for providers to login into EMR and add patient data
 - Synchronization of patient data with ePrescription platform database including patient's current medication and allergy history

- **Sending prescription data**
 - Ability of Prescriptions made by the Providers to be routed to the ePrescription platform
 - Ability to support refill work flow
- **Data synchronization process for patient information and prescription data**
 - Frequency: Scheduled / real-time
 - Authorization: Digital signature and role-based authentication

Solution Design

Solution architects in the CitiusTech team designed the overall solution including:

- Event based integration to support both real-time and batch transmission of scripts
- Web services framework integrated with current EHR to subscribe to events
- Message management and monitoring mechanism to handle exceptions, errors and transmission failures
- Physician's personalized desktop for signing prescriptions, authorizing refill requests and completing prescription details
- Data synchronization and reconciliation processes for past medications, current medications, prescription, allergies and supported formularies

Development and Deployment

CitiusTech team developed, tested and delivered the solution as an independent module. The module was subsequently integrated as part of the EMR. The SDLC and release process was fully synchronized with the client's development and release cycles.

The custom interface between the client's EMR and ePrescription platform was developed using Microsoft technologies – ASP.NET with C#, Windows service, Rcopia server and XML based APIs and SQL Server 2005.

Value Delivered

In partnering with CitiusTech, the client was able to:

- Offer a seamless integration between EMR and ePrescription platform and enhance the EMR functionality
- Add a competitive edge over other EMR solutions available in the market

About CitiusTech

CitiusTech is a specialist provider of healthcare technology services and solutions to medical technology companies, providers, payers and life sciences organizations. CitiusTech's services and solutions include healthcare software development, healthcare interoperability, regulatory compliance, BI/analytics, consumer engagement, care coordination and population health management.

CitiusTech helps customers accelerate innovation in healthcare through a number of solutions and accelerators for clinical quality reporting, healthcare big data, cloud computing, mobile health and predictive analytics. With cutting-edge technology expertise, world-class service quality and a global resource base, CitiusTech consistently delivers best-in-class solutions and an unmatched cost advantage to healthcare clients worldwide.