Client Requirements

Client is a leading care network, providing population health management and care coordination for the medicaid population, serving over 13 million members. Client was using a number of discrete legacy applications to manage population data for at-risk patients. This data was collected manually by case managers through paper forms at the point-of-care. It wanted to automate the existing manual data collection process through a suite of light, browser based, offline mobile apps which could be used by case managers to accurately collect patient information at the point-of-care.

CitiusTech was selected to design and develop this suite of mobile apps because of its expertise around mobile app development, user experience design and care management processes.
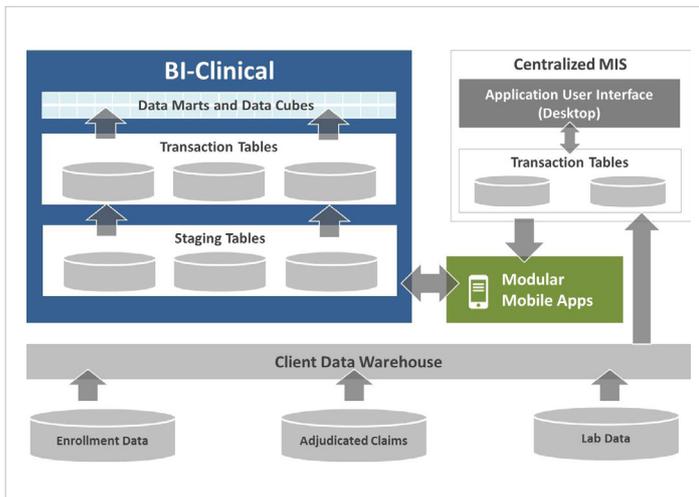
CitiusTech Solution

Requirement Analysis

CitiusTech team of healthcare consultants did a detailed analysis of the client's application portfolio. The requirement analysis stage included -

- Understanding end-user and product owner requirements for the suite of mobile apps
- Defining user workflows for various use cases, document data flows and point-of-care scenarios
- Creating high quality wireframes and visual designs in an interative manner to align with end-user needs

Solution Highlights

- **Dynamic Form Generation:** Created a dynamic form generator utility to build on-demand forms to support different kind of fields, interdependencies, validations, reference values etc.

- **Offline data storage on a mobile device**: Built a persistent meta data and transactional data model for offline management of patient data

- **Sync with online databases:** Designed app-specific web services with the ability to download and sync data between the online and offline databases on-demand. Also provided capabilities to selectively sync or discard the offline data

Development and Deployment

CitiusTech team developed, tested and delivered the offline apps on iPad using a combination of technologies - IndexedDB, JSON, .Net and HTML5.

The apps were tested on multiple devices and browsers. Performance testing was performed to confirm the responsiveness and stability under particular workload.

Value Delivered

By partnering with CitiusTech, the client was able to:

- Replace existing legacy desktop applications with modular mobile apps thus increasing reach and usability.
- Ensure data accuracy by replacing existing paper-based processes with a mobile-enabled process for information capture.
- Develop highly engaging and user-friendly interfaces that to maximize adoption and productivity of case managers.
- Minimize development rework by developing a dynamic form generator that enabled users to create new forms, as well as update existing assessments.

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.

Seattle | Dallas | Princeton | London | Mumbai | Airoli | Singapore