

Developing a Diabetes Population Management Application for Partners HealthCare

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Background

A high-level objective of the Team 3 Signature Initiative has been to establish systems for measuring, improving, and maintaining uniform high quality in specific clinical areas across Partners. Diabetes is one of these important clinical areas.

The principal objective of this project is to increase the number of providers using, and patients with diabetes being managed with, evidence-based decision support. This will be accomplished through the development of an integrated suite of information system tools targeted to assist providers in caring for their patients with diabetes.

Specifically, this suite will include the Diabetes Smart Form, the Diabetes Registry (Smartcache), and the Registry Population Manager (RPM). The target users of these tools are clinicians and office staff at practices where the LMR is available and more specifically, where data for patients seen at these sites are included in the CDR.

RPM is a software module that organizes and presents information about groups of patients with diabetes (e.g., at provider, practice, entity, or PHS levels) through a standard web browser. This software is intended to be used by clinical providers in various roles (physician, population manager, nurse) to monitor and care for diabetic populations.

Functionalities

RPM is designed to help physicians, clinic managers and regional service organization administrators manage their patient population appropriately.

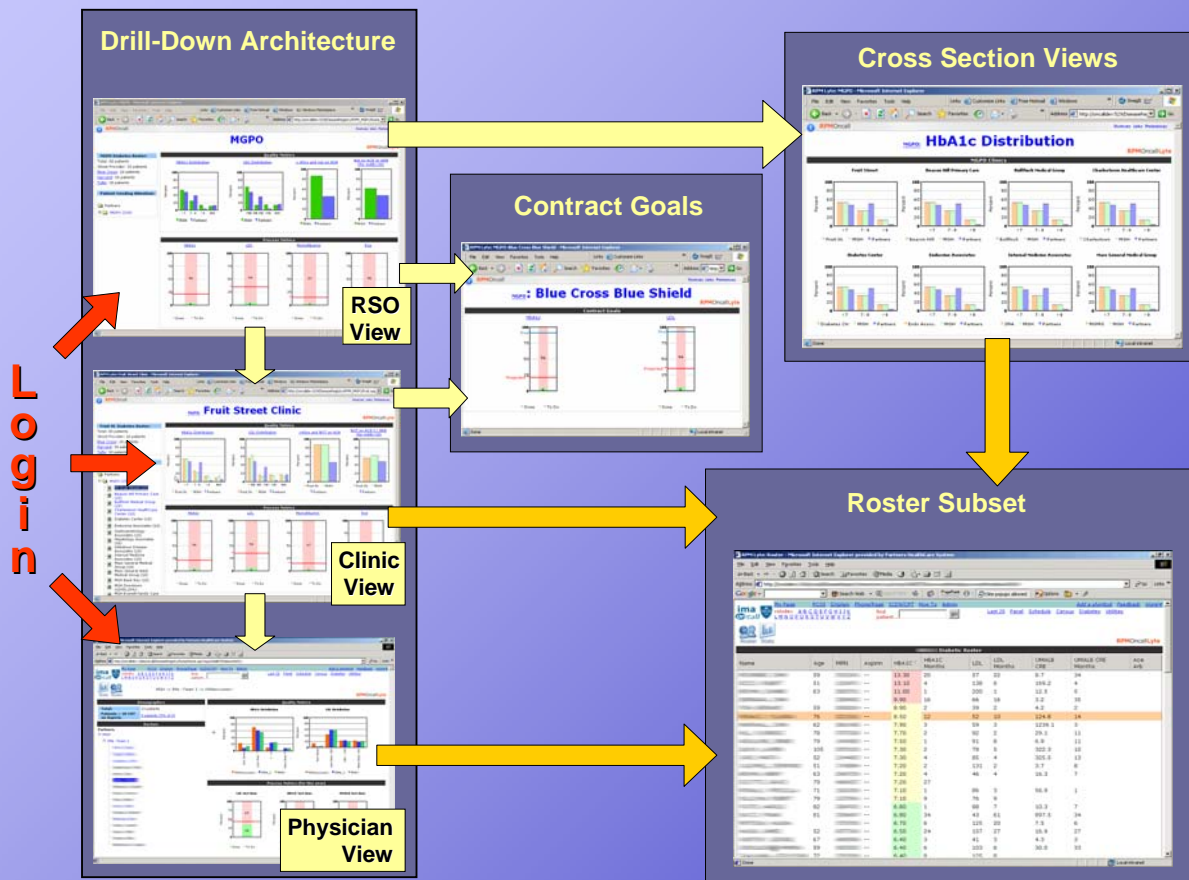
It offers customized views based on user role and allows users to easily drill down from their patient panel to the appropriate cohort of interest.

Our goal is to develop a generic architecture that can accommodate any chronic diseases with minimal customizations.

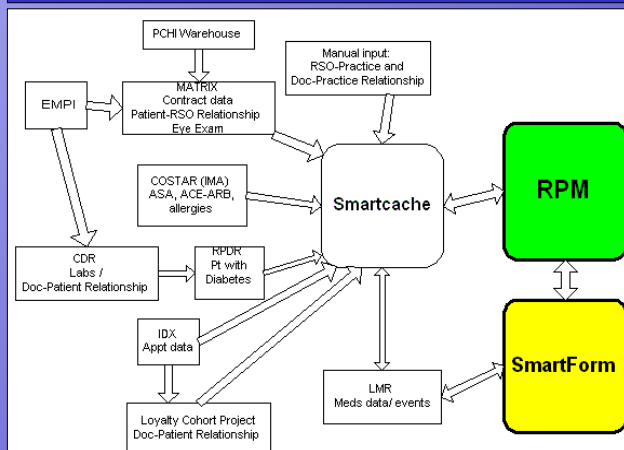
Some of the features of RPM include:

- Ghost provider concept
- Drill-Down hierarchical folder tree
- Contract goals
- Clickable Graphs
- Quality and process metric graphs
- Multi summary views including comparison reports
- Pre-defined links to roster subset of interest
- Roster page with sortable columns
- Link to Monograph
- Email and Letter generation capabilities

Design Architecture



Data Sources



Summary

In answering to a high-level initiative from Partners Healthcare to improve the quality of patient care uniformly, we set forth to develop a Registry Population Manager (RPM), a web-based software that organizes and presents information about groups of diabetic patients within Partners Healthcare.

Once in full production, our objective is to log usage, measure outcomes based on process and quality metrics, and survey users to study the effectiveness of our population management application.