

popHealth: A Prototype for Reporting and Analyzing Quality Care Measures

popHealth Value to the Providers:

- Promotes easier submission of quality measures to public health organizations
- Empowers providers to perform their own population care analysis

The best decisions in health care for populations and individuals come from good information.

This is the logic behind popHealth, an open source software prototype that allows providers to aggregate data from patient electronic health records (EHR) to generate reports for defined quality measures for their patient population in order to identify opportunities to improve the health of their patients. The quality measures give providers the ability to look at their patient population across a number of different core demographics like age and sex to determine if they are screening for or managing diseases like diabetes, hypertension, hypercholesterolemia, breast and colon cancer to recommended community standards, or to see if their populations are appropriately vaccinated for seasonal influenza, H1N1 or other infectious disease. This information can be used to share quality measures with federal agencies or to satisfy federal reporting requirements.

Developed by the Federal Health Architecture (FHA) within the Office of the National Coordinator (ONC), popHealth is web-based and easy to use. The vast majority of the software for popHealth runs atop the Laika software infrastructure, a widely-used open source EHR testing framework.

The popHealth solution demonstrates how a provider can use the system to submit quality measures or public health data as part of their existing workflow. The transmission of summary quality data is simpler, less data intensive and more scalable, representing an alternative to traditional methods of data analysis and reporting.

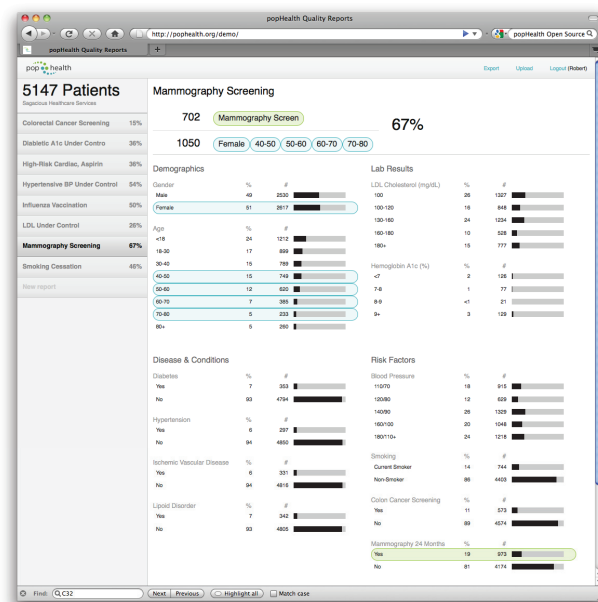
popHealth empowers doctors to better understand their patient population and gives them tools to improve the health of their patients by performing their own population care analysis. In addition, popHealth provides a streamlined mechanism for sending data on summary quality measures from individual providers to federal agencies.

Key design features enable popHealth to use established standards to extract data from the EHR and to generate the summary quality reports. Features also are designed to operate within a provider's infrastructure and use encryption to address privacy and security concerns; support pre-defined quality measure reports as well as ad hoc creation of reports; support the ability to export the PQRI XML as a reporting artifact for the transmission of summary data to federal agencies; and support CDA, CCR or the QRDA standards.

The popHealth software will be made publicly available in March. For more information, go to www.projectpophealth.org.

Sample Report Pulled from popHealth

popHealth was designed to be a valuable dashboard into patient health. The sample report below depicts demographics for a healthcare organization with 5,147 patients. In this report, the doctor opted to view the percentage of their 1050 female patients between the ages of 40 and 80 that had received mammograms. 702, which translates into 67%, had received a mammogram. The report also shows basic demographic information about the overall patient population.



popHealth Features

- Allows for ease of use and access through Web-based interface
- Integrates with existing Electronic Health Record systems that use nationally-recognized health IT data standards
- Supports pre-defined quality measures
- Supports ad hoc quality reports created by the end user
- Automates the generation of a Physician Quality Report Initiative (PQRI) XML report

The popHealth prototype software and source code are freely available under an Apache 2.0 open source distribution license.

popHealth Concept of Operations

popHealth was designed to operate within a provider's infrastructure. This design decision was made to address privacy and security concerns associated with access to information associated with individual patient records.

