Federal Health Architecture

pop health

An Open Source Population Health Reporting Prototype

Background

- **ARRA and HITECH : Demanding New Play for Healthcare**
  - Having an Electronic Health Record (EHR) system will no longer be sufficient for providers
  - Proof is needed to show and measure how much providers are making a difference in patients' outcomes
  - *Goal is to electronically capture in coded format and to report health information and to use that information to track key clinical conditions in order to demonstrate "meaningful use" of Health IT*

Objectives

- **Develop a Population Health Reporting Service That Will:**
  - Incorporate current definitions of population health quality measures
  - Empower providers to better understand the health of their patient population
  - Demonstrate how the HITSP C32 interoperability standard can be used to send information from health care providers to government agencies

- **The popHealth Project Aims To:**
  - Provide open access to the software, discussions on features, feedback on use, and long-term strategy
  - Position population health quality measures so that they motivate standards adoption
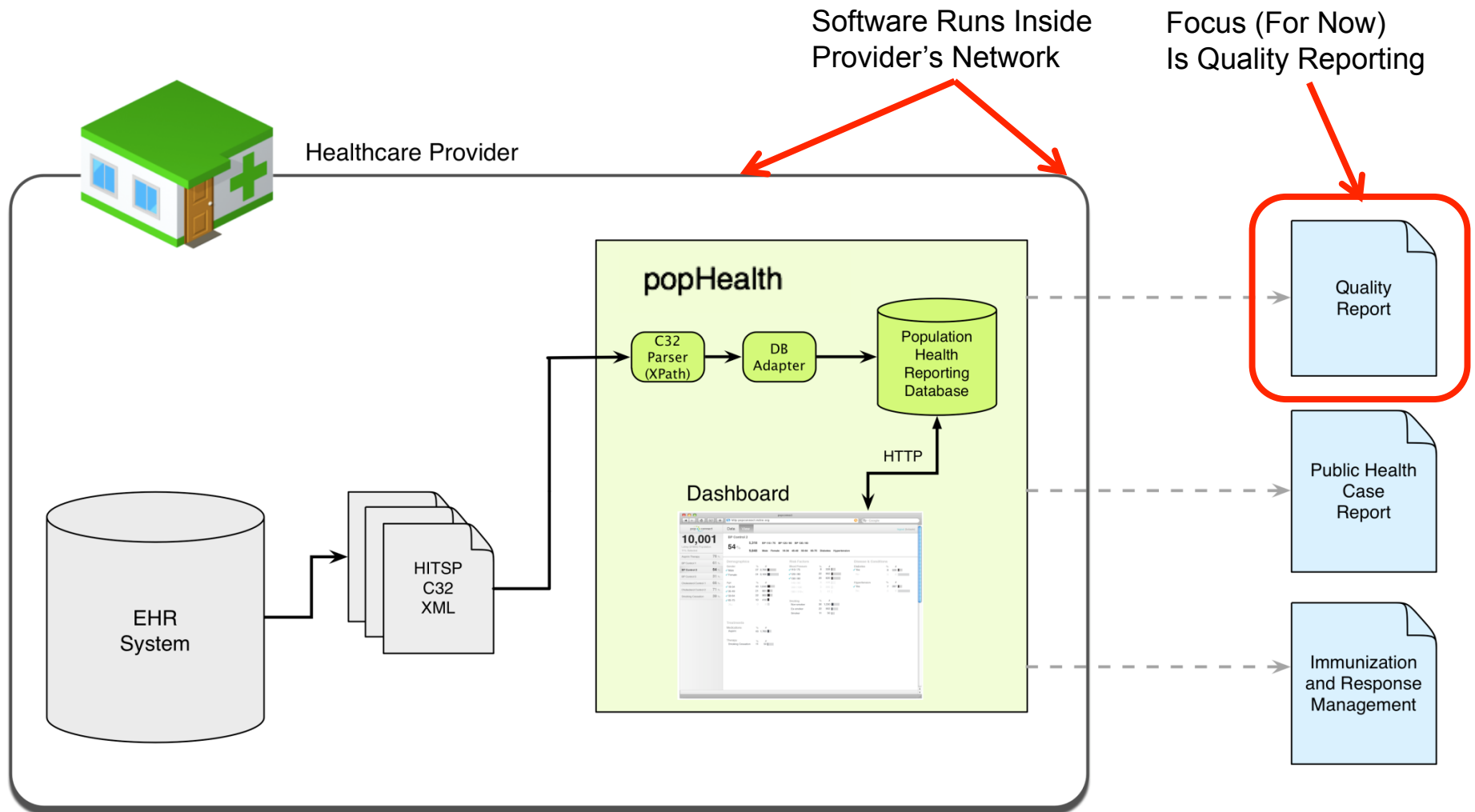 - Guide the evolution of population health reporting standards, by live pilots and deployments

Key Design Features

- PopHealth is designed to operate within a provider's infrastructure
  - Addresses privacy and security concerns associated with information associated with individual patient records
  - Software has direct access to the summary continuity of data associated with individual patient records

- PopHealth is a web-based service, that currently relies on the HITSP C32 data standard to extract report data from patients' continuity of care records
  - Software has been designed to be flexible and permissive, so that it can support various data standards both for input and output

- Future data standards planned for integration with popHealth include
  - ASTM CCR
  - HL7 QRDA
  - HL7 eMeasure

Workflow

Software Runs Inside Provider's Network

Focus (For Now) Is Quality Reporting

Healthcare Provider

popHealth

C32 Parser (XPath) → DB Adapter → Population Health Reporting Database

HTTP

Dashboard

10,001

EHR System

HITSP C32 XML

Quality Report

Public Health Case Report

Immunization and Response Management

Screen Shots
and
Work Flow

Web-Based

Meant To Be
Instantiated
Behind
Provider's
Firewall

Addressing
Security &
Privacy Around
Data

This Provider Has <u>11156</u> Patients
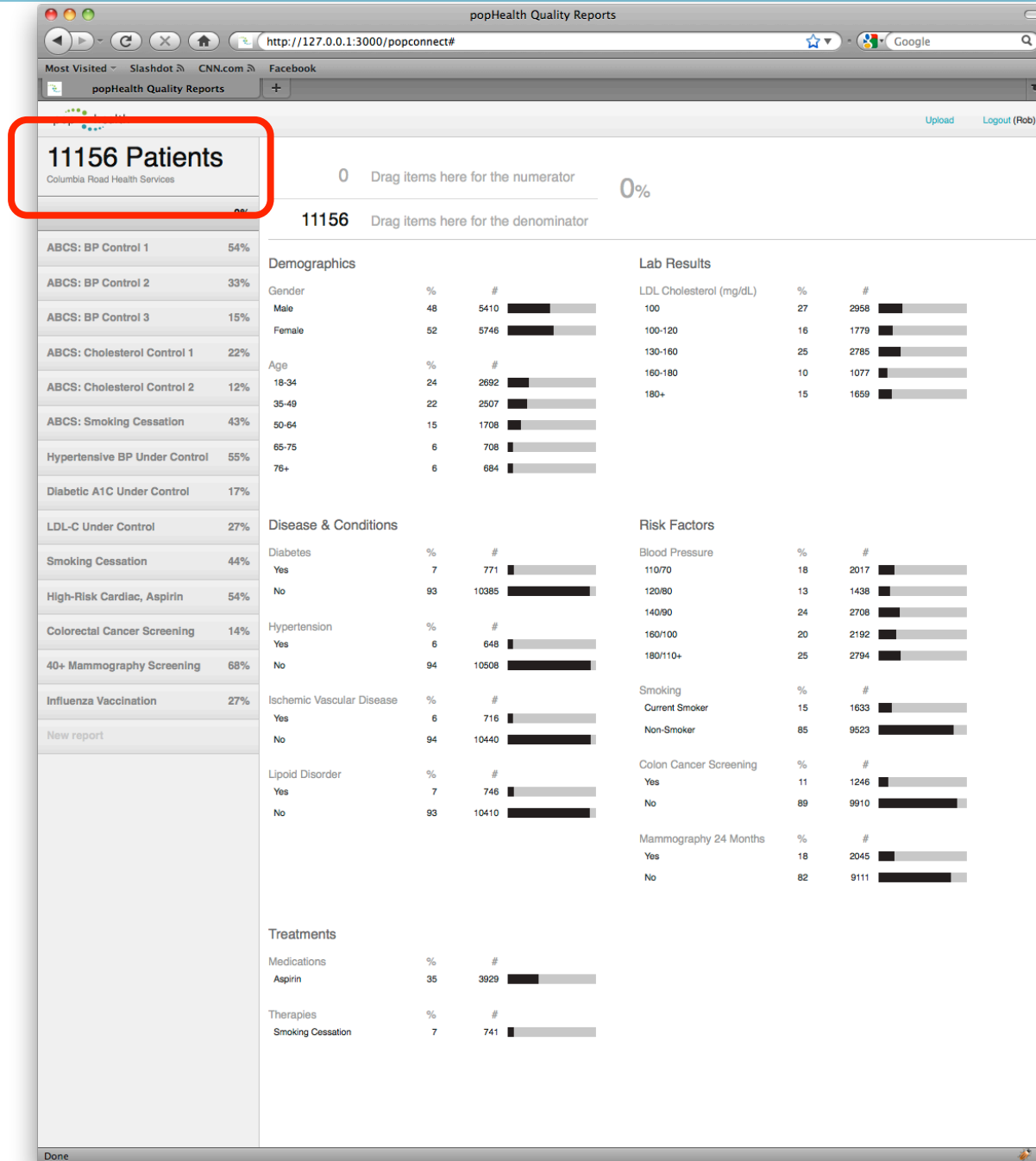
High Level Summary Data About Population Immediately Available
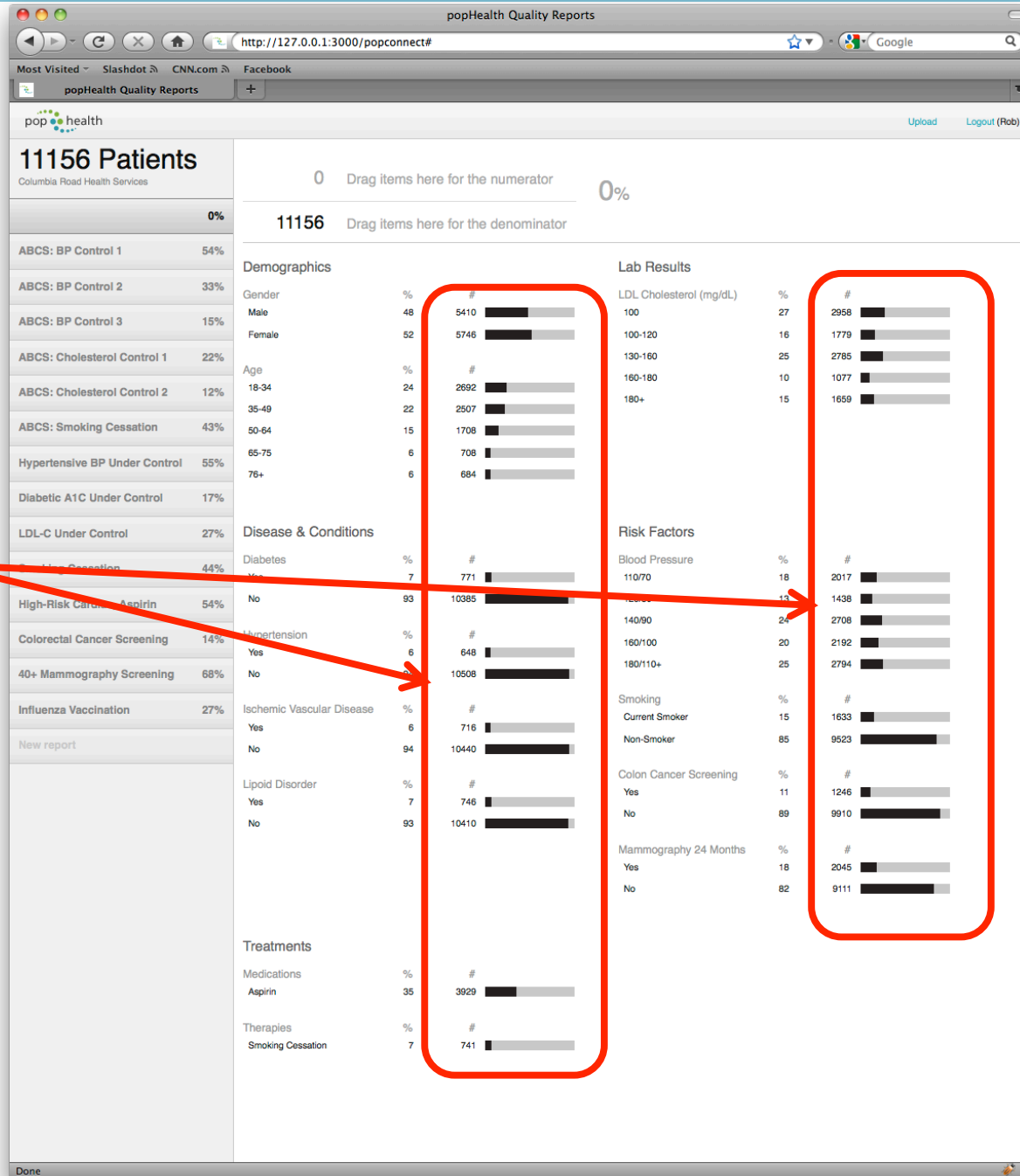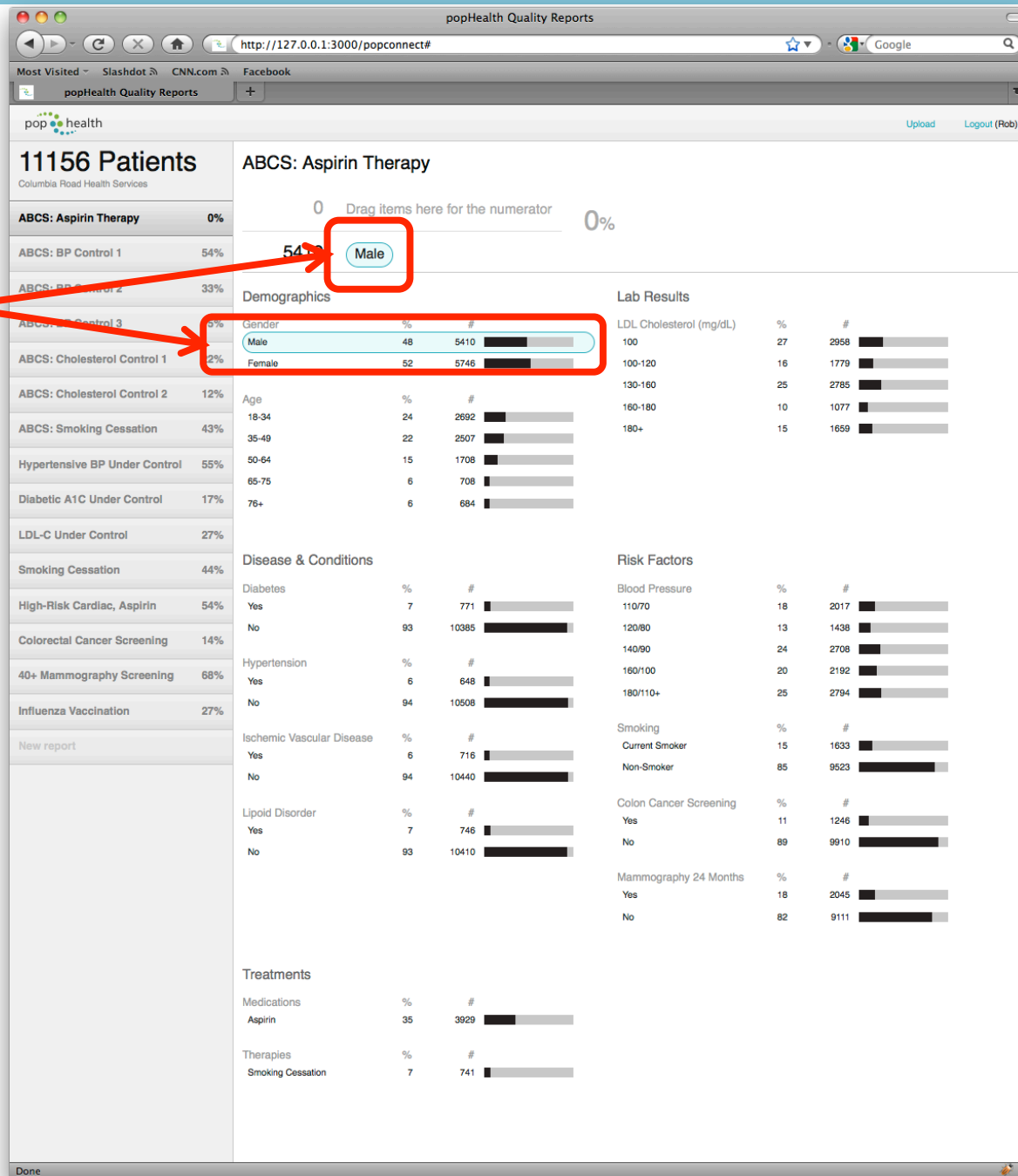
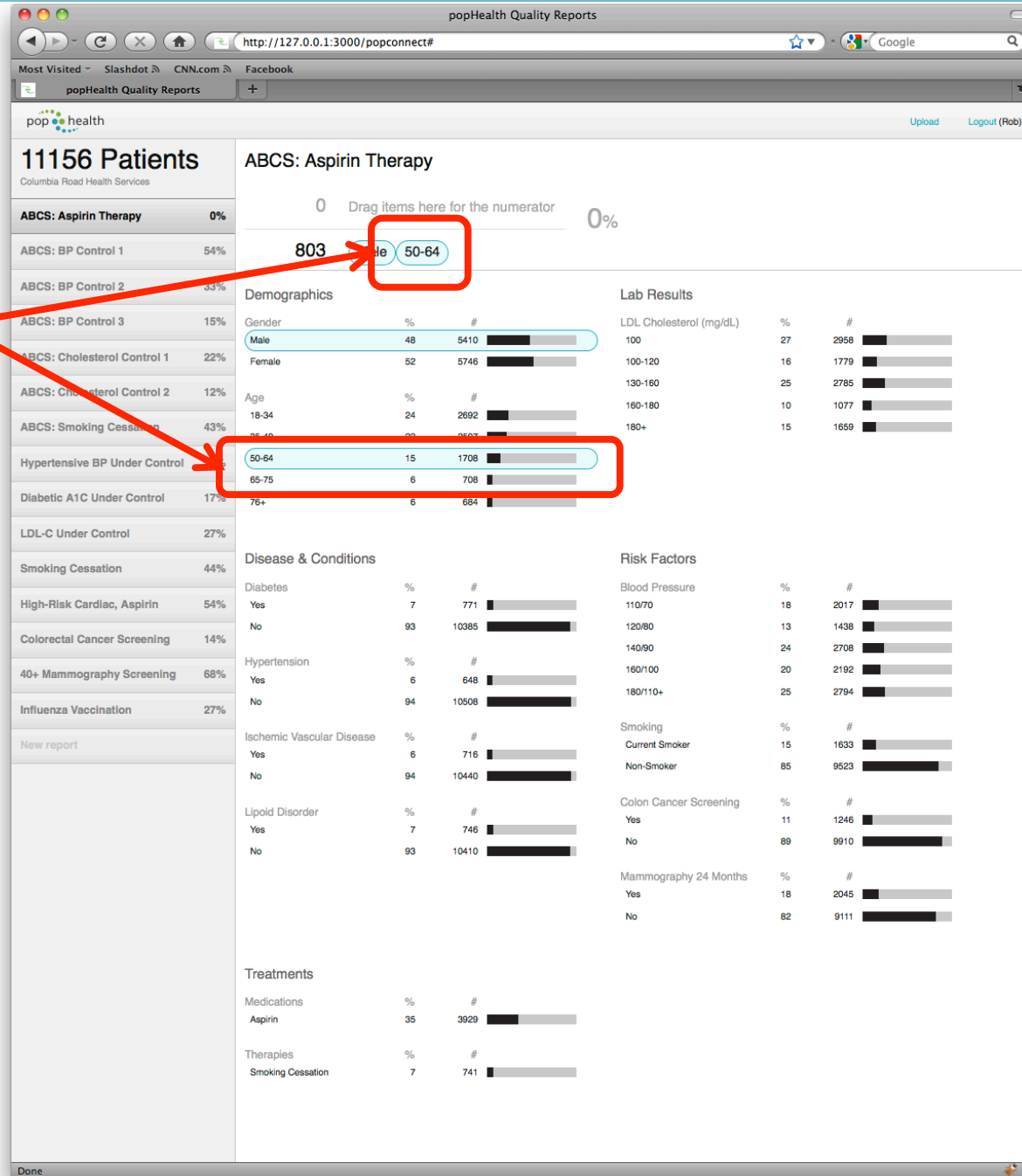Provides Preset Quality Reports
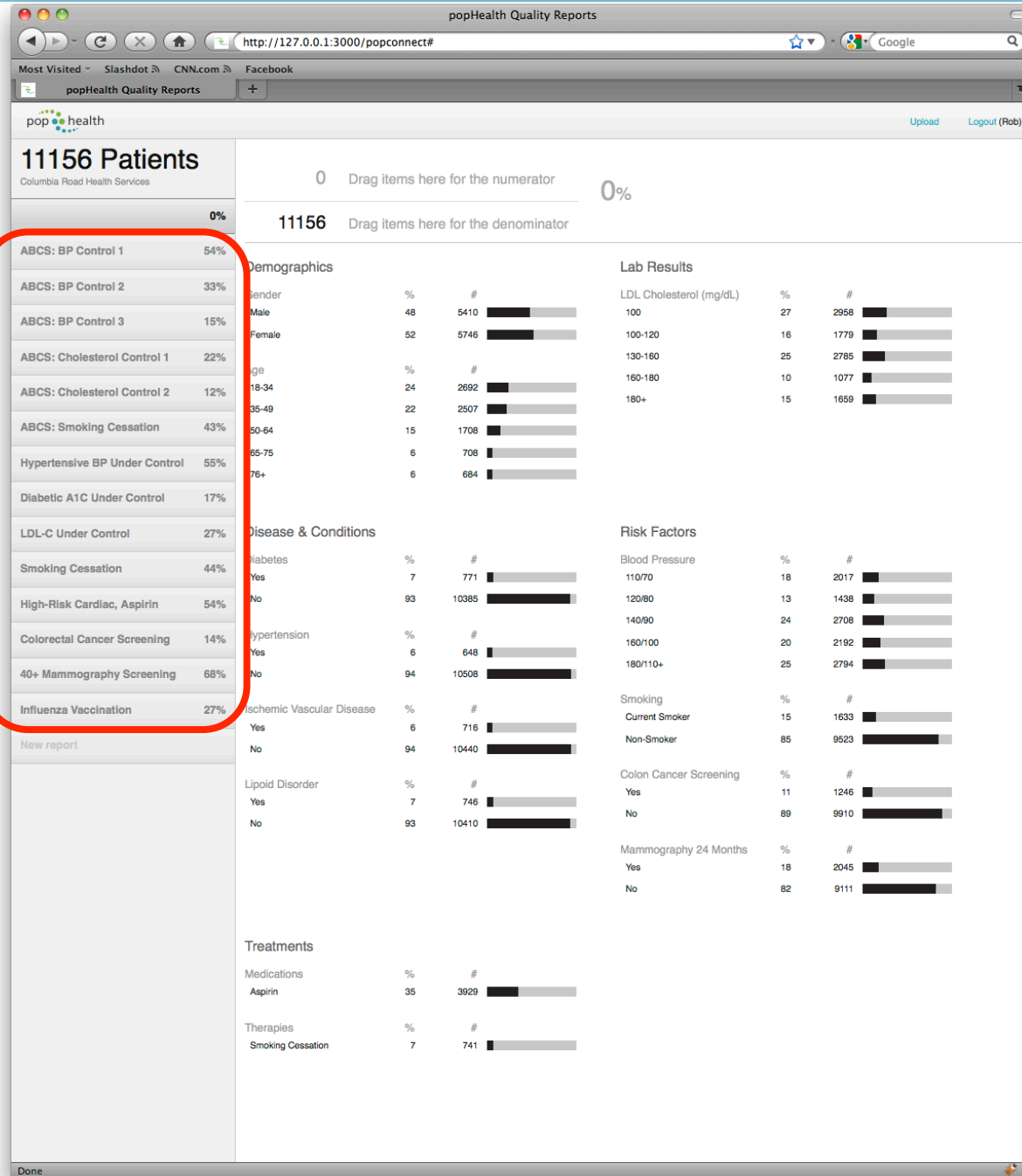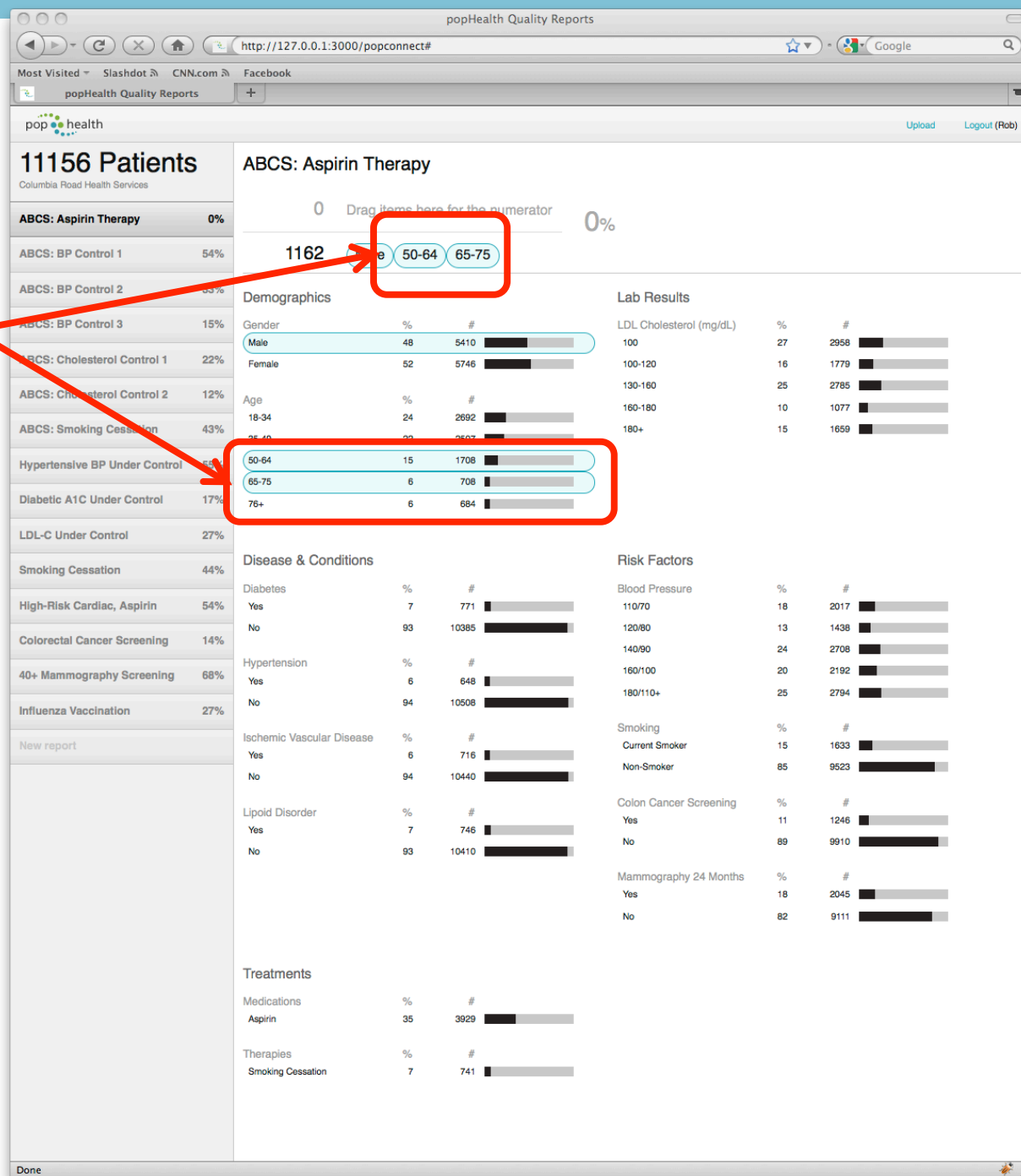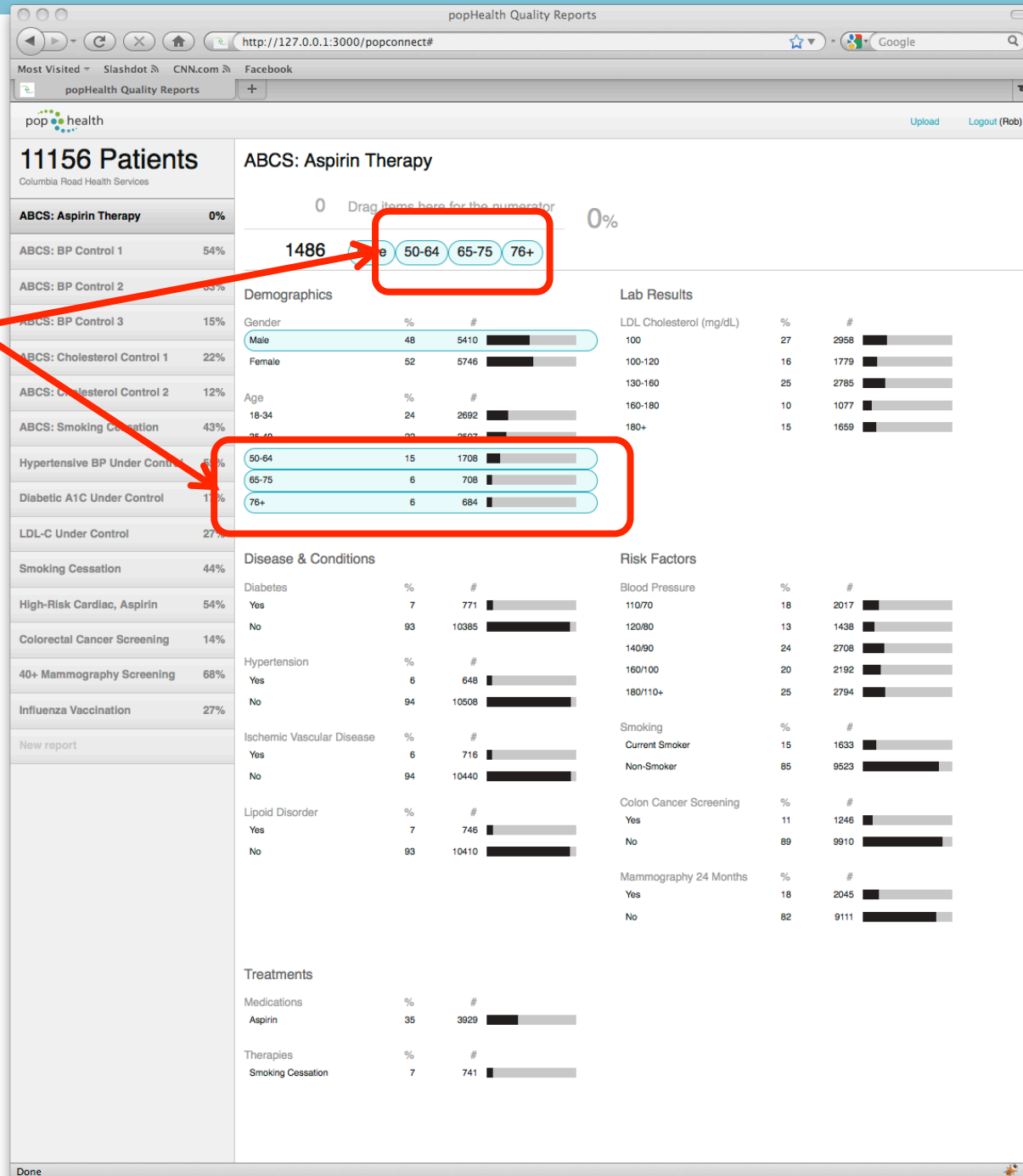
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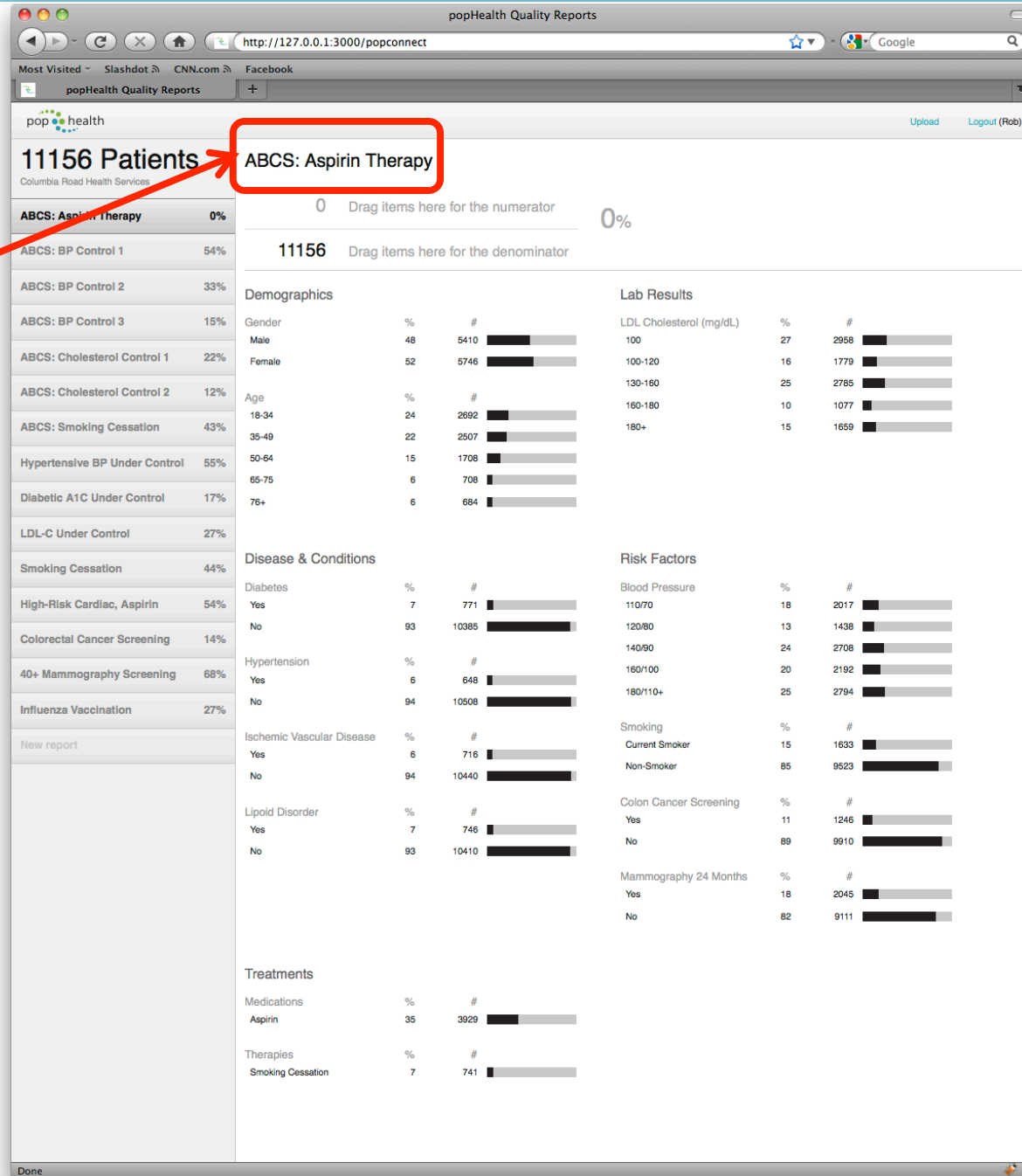
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Up To Identify
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For Inspection

Drag Fields
Up To Identify
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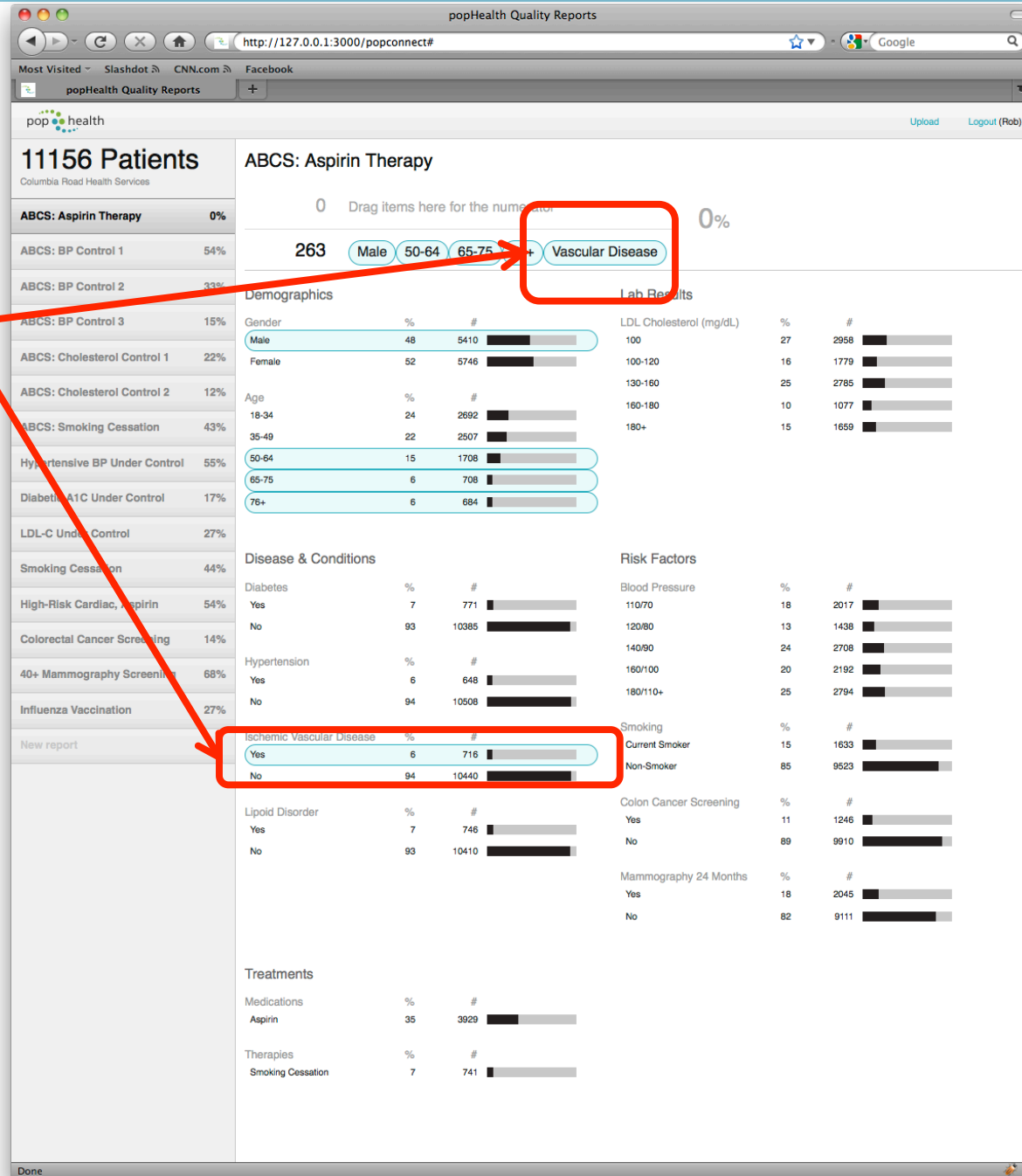Drag Fields
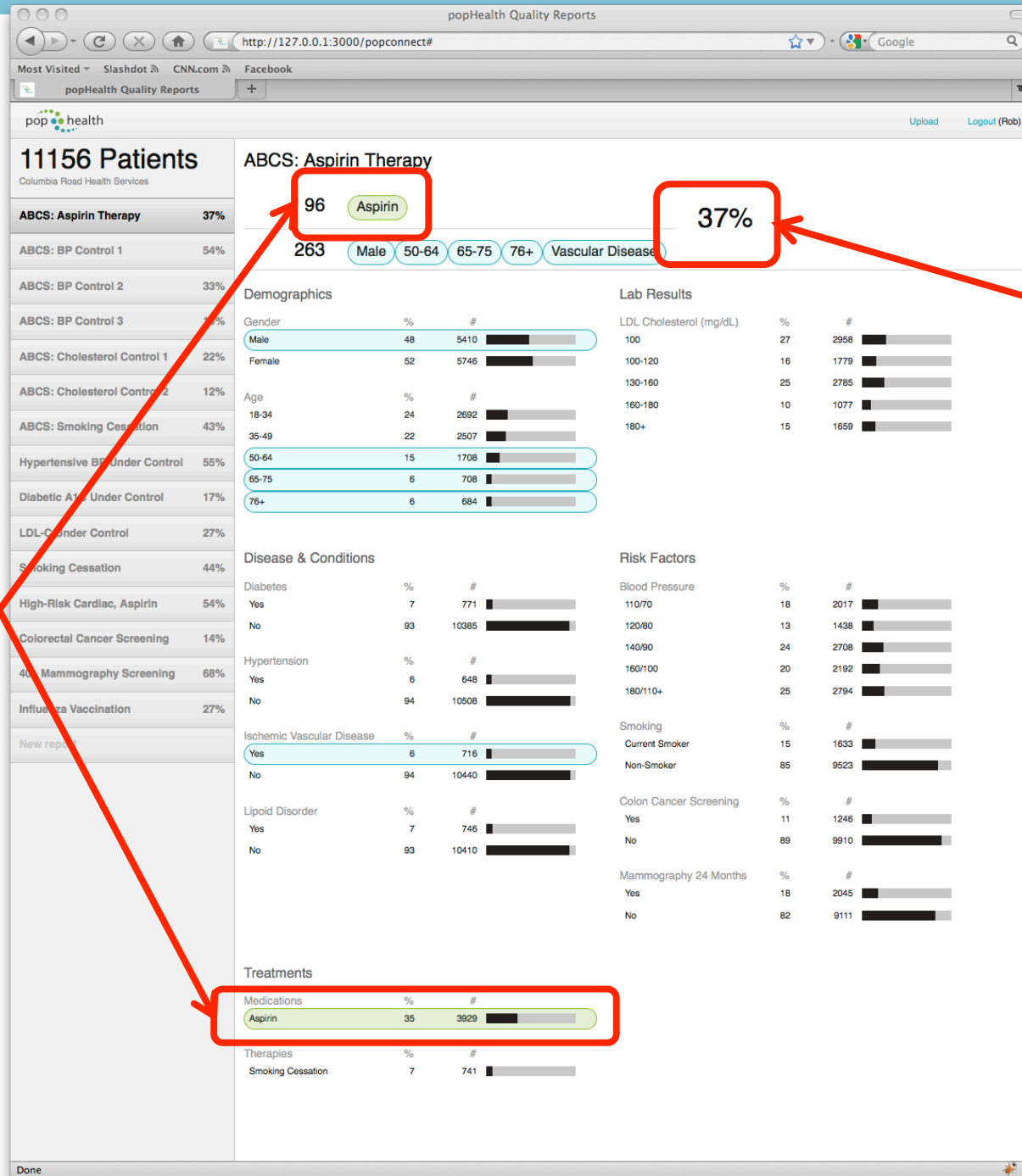Up To Identify
Population
For Inspection

Drag Fields
Up To Identify
Population
For Inspection

Drag Fields
Up To Identify
Population
For Inspection

Drag Fields
Up To
Compose
Query

... and
View the
Quality
Measure

The Patient is Waiting…

Thank you

Contact info: fha@hhs.gov or 202-205-8614