



# All-Payer Primary Care Profiling for Vermont's Blueprint for Health

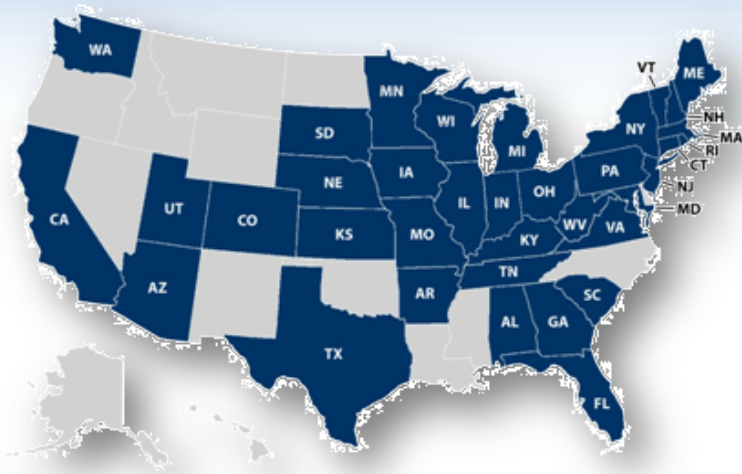
Combining Commercial, Medicaid, & Medicare Data

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October 20, 2014

# Agenda

- Onpoint Health Data
- Blueprint Practice Profiles
  - Practice profile data sources and profile evolution
  - Primary care practice attribution
  - Expenditure, utilization, and quality measures
  - Statistical methods and risk adjustment
  - Profile walk-through
- Additional uses and new directions: clinical and ACO measures

# Onpoint Health Data: Experience



**HealthPartners**

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Home > Total Cost of Care

## Total Cost of Care

HealthPartners has been developing health care cost of care and resource use measures since 1995. Total Cost of Care, or TCOC, is an innovative method of measuring health care affordability without sacrificing quality or experience. TCOC measures are powerful analytical tools for health plans, providers, medical groups, government agencies, employers, and others with a stake in reducing health care cost trends.

**TCOC overview**  
Executive summary  
A brief overview of TCOC and NQF endorsement.  
Support and endorsement  
TCOC methodology is supported by various organizations.  
Supporting research  
Research supporting the measurement of cost and resource use for health care affordability.

**White papers and technical papers**  
Total Cost of Care white paper  
An in-depth look at TCOC.  
Resource use white paper  
A detailed overview of the Total Care Relative Resource Values (TCRRVs<sup>SM</sup>) technique.  
Guidelines and considerations for risk-adjusting, case-mixing and segmenting technical notes

**TCOC overview**  
Scientifically tested  
TCOC measures in use  
TCOC toolkit  
Contact TCOC

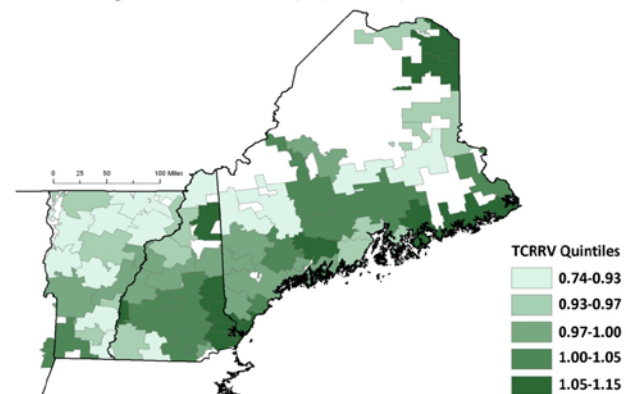
National Quality Forum, NQF Endorsed Total Cost of Care and Resource Use Measures

Cost & Quality Ratings

**In the news**  
HealthPartners Total Cost of Care is featured in a new report from

## EXHIBIT 4

Variation in Resource Use Among Commercial Beneficiaries: ME, NH, and VT HSAs, 2008-10



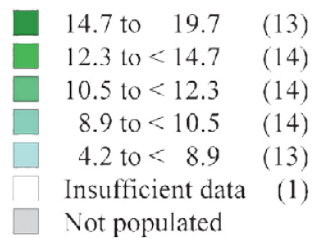
**SOURCE:** Authors' analysis of commercial claims data from Onpoint Health Data (ME, NH, and VT)

**NOTES:** Map illustrates the ratio of average resource use 2008-10 in each New England hospital service area (HSA) to the 2008-10 average of resource use across the three states, weighted by the average number of commercial beneficiaries in the dataset for each HSA. All data adjusted for age, sex, and carveout level. Resource use capped at \$100,000 and reimbursements reduced proportionately. TCRRVs = Total Care Relative Resource Values.

# Dartmouth Pediatric Atlas

## Diagnostic Imaging and Rx Drug Use

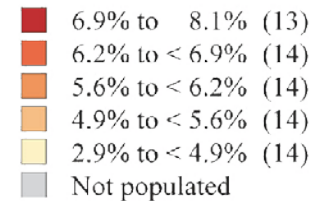
**Head CT Scans per 1,000 Children**  
by Hospital Service Area (2007-10)



**Map 25.** Head CT scans per 1,000 children among hospital service areas (2007-10)

**Percent Filling Prescription for an ADHD Medication**

by Hospital Service Area (2007-10)



**Map 32.** Percent of children filling at least one prescription for an ADHD medication among hospital service areas (2007-10)



# **Blueprint Practice Profiles**

**Practice Profile Data Sources & Profile Evolution**

**Primary Care Practice Attribution**

**Expenditure, Utilization, & Quality Measures**

**Statistical Methods & Risk Adjustment**

**Profile Walk-through**

# Blueprint Profile Goals

- Practices compare performance to region and state
- Guide planning efforts for quality improvement initiatives
- Support health area collaboration, planning, and care coordination



# Data Sources & Evolution

- **Data sources:** VHCURES (commercial and Medicaid), MAPCP (Medicare), and Blueprint rosters
- **Evolution:** Dates and enhancements
  - **6/2013:** 2011 data year (commercial + Medicaid)
    - » Expenditure, utilization, quality, risk-adjusted, and adjusted for Medicaid
  - **1/2014:** 2012 data year (commercial + Medicaid)
    - » Enhanced adjustment for Medicaid
    - » Scatterplot of expenditures by Resource Use Index
  - **9/2014:** 2013 data year (all payers): Enhanced adjustment for Medicare; added trend graphics



# Primary Care Practice Attribution

- **Onpoint attribution**
  - Single, consistent attribution method applied to all payers – commercial, Medicaid, and Medicare
- **Methods**
  - Blueprint-supplied rosters identify primary care practitioners, start and end dates, and practice assignment
  - Uses national standard set of Evaluation & Management (E&M) codes from CMS
  - Uses 24-month look-back
  - Member is assigned to practice with the most visits with standard methods for handling ties



# Expenditure, Utilization, & Quality Measures

## Demographics & Health Status

- Age and gender
- Clinical Risk Groups (CRGs) health status
- % Medicaid and % Medicare

## Expenditures

- 26 expenditure measures
- Inpatient, outpatient facility, professional, pharmacy, special Medicaid services
- Built to Blueprint financial model



## Utilization

- 15 utilization measures
- Inpatient, ED, professional, diagnostic
- HealthPartners' Resource Use Index (RUI) measures, including total resource use

## Quality of Care

- Focused on 9 adult and 4 pediatric effective/preventive care measures
- Based on application of NCQA HEDIS to VHCURES claims data

# Statistical Methods & Risk-Adjustment

- **Stratification and exclusions**
  - Pediatric profiles (ages 1–17 years) and adult profiles (ages 18+ years); practices with 300+ members
- **Adjustment for partial enrollment**
  - Enrolled for 9 months vs. 12 months
- **Outlier capping**
  - Each measure capped at the 95<sup>th</sup> percentile statewide
- **Margins of error**
  - 95% confidence intervals

# Risk-Adjustment (All-Payer Model)

- **Standard adjustments**
  - 3M Clinical Risk Group (CRG) categories, age and gender groupings, maternity (adult only), selected Blueprint target conditions
- **Enhanced risk-adjustments**
  - **Medicaid:** Member in Medicaid, member's practice's % Medicaid, member with extensive special Medicaid services, dual-eligible
  - **Medicare:** Member in Medicare, member's practice's % Medicare, Medicare disabled status, dual-eligible, Medicare end-stage renal disease (ESRD) status, died during the year

# Risk-Adjustment (All-Payer Model)

## For the Statisticians

### Adult Model

$$\begin{aligned} y = & \alpha + (F\_AGE1834)\beta_1 + (F\_AGE3544)\beta_2 + (F\_AGE4554)\beta_3 + (F\_AGE5564)\beta_4 + \\ & (M\_AGE3544)\beta_5 + (M\_AGE4554)\beta_6 + (M\_AGE5564)\beta_7 + (M\_AGE6574)\beta_8 + \\ & (M\_AGE7584)\beta_9 + (M\_AGE85PLUS)\beta_{10} + (MEDICAID)\beta_{11} + (MEDICARE)\beta_{12} + \\ & (DUAL\_ELIGIBILITY)\beta_{13} + (SMS)\beta_{14} + (PRACTICE\_PERCENT\_MEDI)\beta_{15} + \\ & (PRACTICE\_PERCENT\_MCARE)\beta_{16} + (DISABLED)\beta_{17} + (ESRD)\beta_{18} + \\ & (DIED\_DURING\_YEAR)\beta_{19} + (CHRONIC)\beta_{20} + (CRG\_ACUTE\_MINOR)\beta_{22} + \\ & (CRG\_CHRONIC)\beta_{23} + (CRG\_SIGNIFICANT\_CHRONIC)\beta_{24} + \\ & (CRG\_CANCER\_CATASTROPHIC)\beta_{25} + (MATERNITY)\beta_{26} + (MATERNITY * \\ & MEDICAID)\beta_{27} + \varepsilon \end{aligned}$$

### Pediatric Model

$$\begin{aligned} y = & \alpha + (F\_AGE0104)\beta_1 + (M\_AGE0511)\beta_2 + (F\_AGE0511)\beta_3 + (F\_AGE1217)\beta_4 + \\ & (M\_AGE1217)\beta_5 + (MEDICAID)\beta_6 + (SMS)\beta_7 + (PRACTICE\_PERCENT\_MEDI)\beta_8 + \\ & (CHRONIC\_PED)\beta_9 + (CRG\_ACUTE\_MINOR)\beta_{10} + (CRG\_CHRONIC)\beta_{11} + \\ & (CRG\_SIGNIFICANT\_CHRONIC)\beta_{12} + (CRG\_CANCER\_CATASTROPHIC)\beta_{13} + \varepsilon \end{aligned}$$

# Practice Profiles Evaluate Care Delivery

## Commercial, Medicaid, & Medicare

Welcome to the 2014 Blueprint Practice Profile from the Blueprint for Health, a state-led initiative transforming the way that health care and overall health services are delivered in Vermont. The Blueprint is leading a transition to an environment where all Vermonters have access to a continuum of seamless, effective, and preventive health services. Blueprint practice profiles are based on data from Vermont's all-payer claims database, the Vermont Healthcare Claims Uniform Reporting and Evaluation System (VHCURES). Data include all covered commercial, Full Medicaid, and Medicare members, attributed to Blueprint practices starting by December 31, 2013.

Practice Profiles for the adult population cover members ages 18 years and older; pediatric profiles cover members between the ages of 1 and 17 years.

Utilization and expenditure rates presented in these profiles have been risk adjusted for demographic and health status differences among the reported populations.

This reporting includes only members with a visit to a primary care physician, as identified in VHCURES claims data, during the current reporting year or the prior year.

### Demographics & Health Status

	Practice	H.S.A.	State
Average Members	4,081	84,070	2,900,000
Average Age	50.6	50.1	50.1
% Female	55.6	55.5	55.5
% Medicaid	14.5	13.0	13.0
% Medicare	23.7	22.2	22.2
% Maternity	2.1	2.1	2.1
% with Selected Chronic Conditions	50.1	38.8	38.8
Health Status (ORIG)			
% Healthy	39.0	43.9	43.9
% Acute or Minor Chronic	18.8	20.5	20.5
% Moderate Chronic	27.9	24.5	24.5
% Significant Chronic	15.4	12.3	12.3
% Cancer or Catastrophic	1.4	1.3	1.3

Table 1: This table provides comparative information on the demographics & health status of your practice, all Blueprint practices in your Health Service Area (HSA), and the state as a whole. Included measures reflect the types of information used to adjust rates: age, gender, maternity status, and health status.

Average Members serves as this table's denominator and adjusts for partial enrollment during the year. In addition, special attention has been given to Medicaid and Medicare. This includes adjustment for each member's enrollment in Medicaid or Medicare, the member's practice's percentage of membership in Medicaid or Medicare, Medicare disability or end-stage renal disease status, and the member's receipt of special Medicaid services that are not found in common populations (e.g. day treatment, residential treatment, case management, services, and transportation).

The Selected Chronic Conditions measure indicates the proportion of members through the claims data as having one or more of seven selected chronic conditions: chronic obstructive pulmonary disease, congestive heart failure, chronic kidney disease, hypertension, diabetes, and depression.

The Health Status measure aggregates 3M™ Clinical Risk Grouping (CRG) into the year for the purpose of generating adjusted rates. Aggregated risk class includes: Healthy, Acute (e.g., ear, nose, throat infection) or Minor Chronic (chronic joint pain), Moderate Chronic (e.g., diabetes), Significant Chronic (e.g., CHF), and Cancer (e.g., breast cancer, colorectal cancer) or Catastrophic (e.g., dystrophy, cystic fibrosis).

### Total Expenditures per Capita

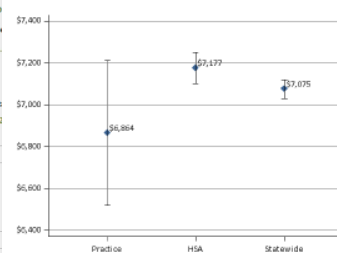


Figure 1: Presents annual risk-adjusted rates and 95% confidence intervals with expenditures capped statewide for outlier patients. Expenditures include both plan and member out-of-pocket payments (i.e., copay, coinsurance, and deductible).

### Total Expenditures by Major Category

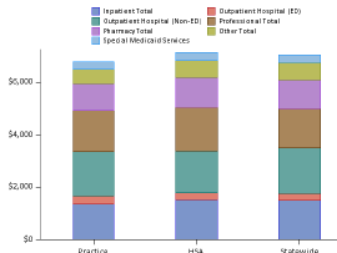


Figure 2: Presents annual risk-adjusted rates for the major components of cost (as shown in Figure 1) with expenditures capped statewide for outlier patients. Some services provided by Medicaid (e.g., case management, transportation) are reported separately as Special Medical Services.

### Total Expenditures Excluding SMS

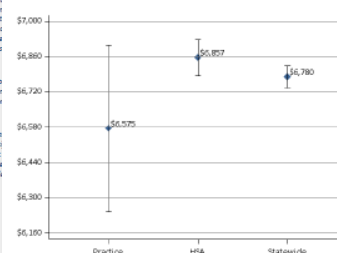


Figure 3: Presents annual risk-adjusted rates and 95% confidence intervals with expenditures excluding Special Medical Services, capped statewide for outlier patients. Expenditures include both plan and member out-of-pocket payments (i.e., copay, coinsurance, and deductible).

### Total Resource Use Index (RUI) Excluding SMS

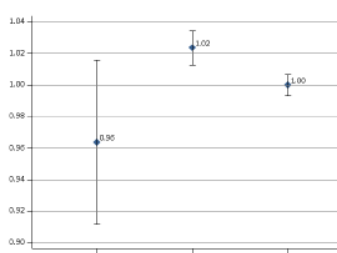


Figure 4: Presents annual risk-adjusted rates and 95% confidence intervals. Since price per service varies across Vermont, a measure of expenditures based on resource use — Total Resource Use Index (RUI) — is included. RUI reflects an aggregated cost based on utilization and intensity of services across major components of care (e.g., inpatient) and excludes Special Medical Services. The practice and HSA are indexed to the statewide average (1.00).

### Annual Total Expenditures per Capita Excluding SMS vs. Resource Use Index (RUI)

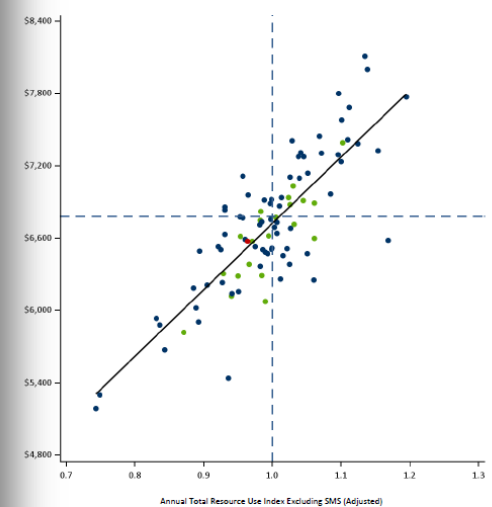


Figure 5 demonstrates the relationship between risk-adjusted expenditures excluding SMS and RUI for Blueprint practices. This graphic illustrates your practice's risk-adjusted rate (i.e., the red dot) of all practices in your Health Service Area (i.e., the green dots) and all other Blueprint practices (i.e., the blue dots). The dotted lines show the average expenditures per capita and average RUI (i.e., 1.00). Practices with higher expenditures and utilization are in the upper right-hand quadrant with lower expenditures and utilization are in the lower left-hand quadrant. An RUI value indicates higher than average utilization; conversely, a value lower than 1.00 indicates lower than average utilization. A trend line has been included in the graphic, which demonstrates that, in general, practices with utilization had higher risk-adjusted expenditures.

Health Status Cost of Care Utilization Effective & Preventive Care Data Detail



# Additional Uses & New Directions

Clinical & ACO Measures

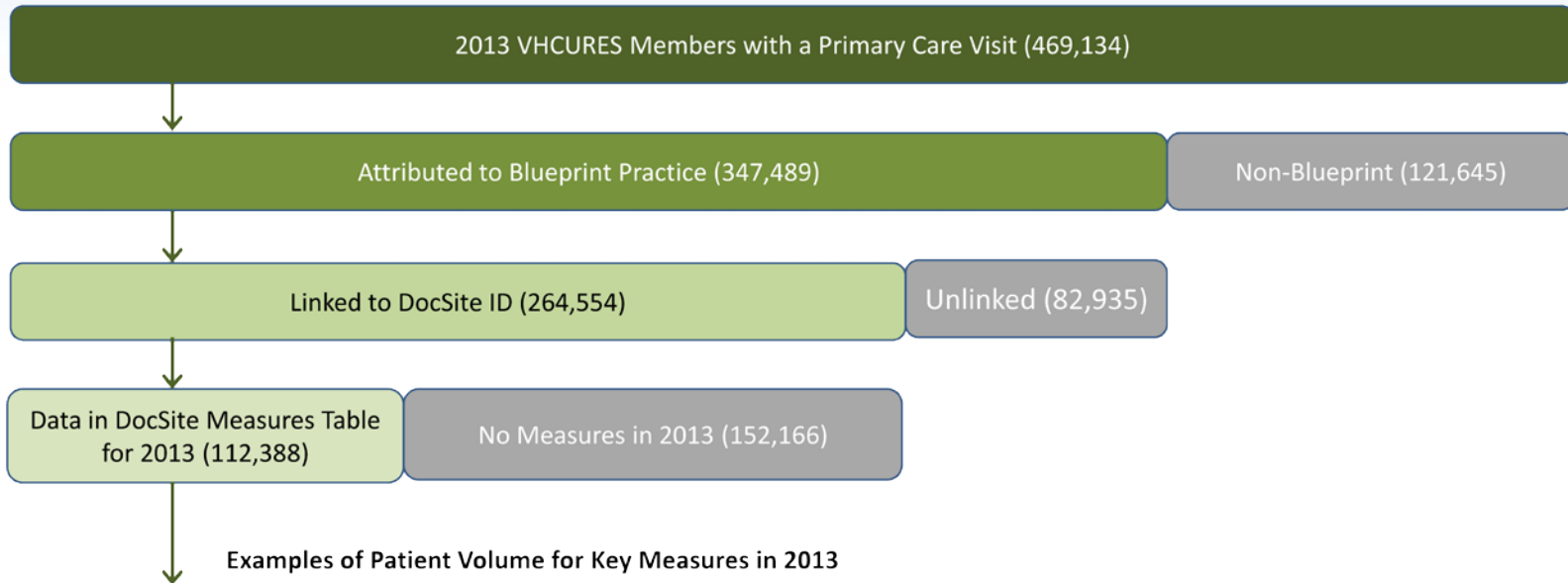
# Additional Uses & New Directions

- Practice profiles will be created twice yearly starting in 2015
- HSA and organizational profiles
- New data sources
  - Incorporation of Behavioral Risk Factor Surveillance System (BRFSS), network, and other data sources at the HSA level
  - New ACO measures
  - Linkage to DocSite and clinical measures
- Goals
  - Compare performance, guide quality initiatives, support area collaboration and care coordination



# Linking Claims & Clinical Data

## Enhancing Blueprint Reporting: Clinical Outcomes

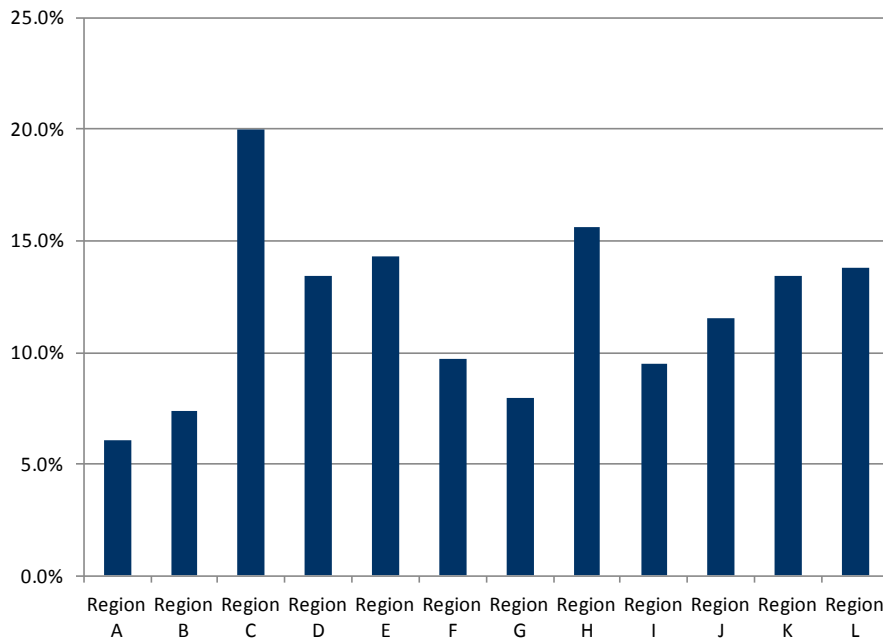


Measure	Number of Patients with Data
Blood Pressure	93,230
Triglycerides	26,585
LDL-C	24,978
Tobacco Use	18,004
HbA1c	12,812

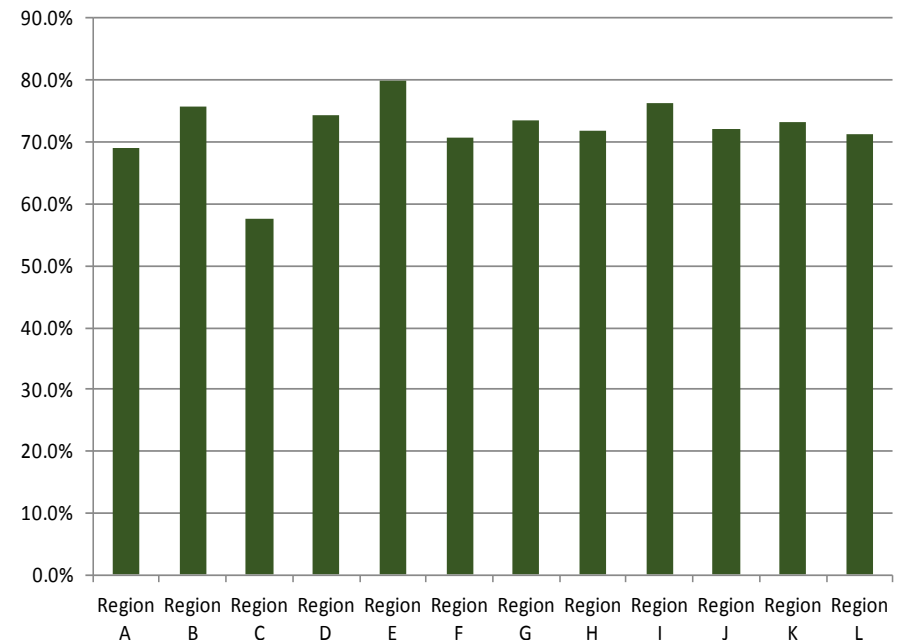
# Linking Claims & Clinical Data

## Enhancing Blueprint Reporting: Outcomes Data

**(ACO 27)** % of Members with Diabetes,  
Glucose Not in Control (A1c >9%)



**(ACO 28)** % of Members with Hypertension,  
Blood Pressure in Control (<140/90 mm Hg)





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