Combining All-Payer Claims with Clinical Data
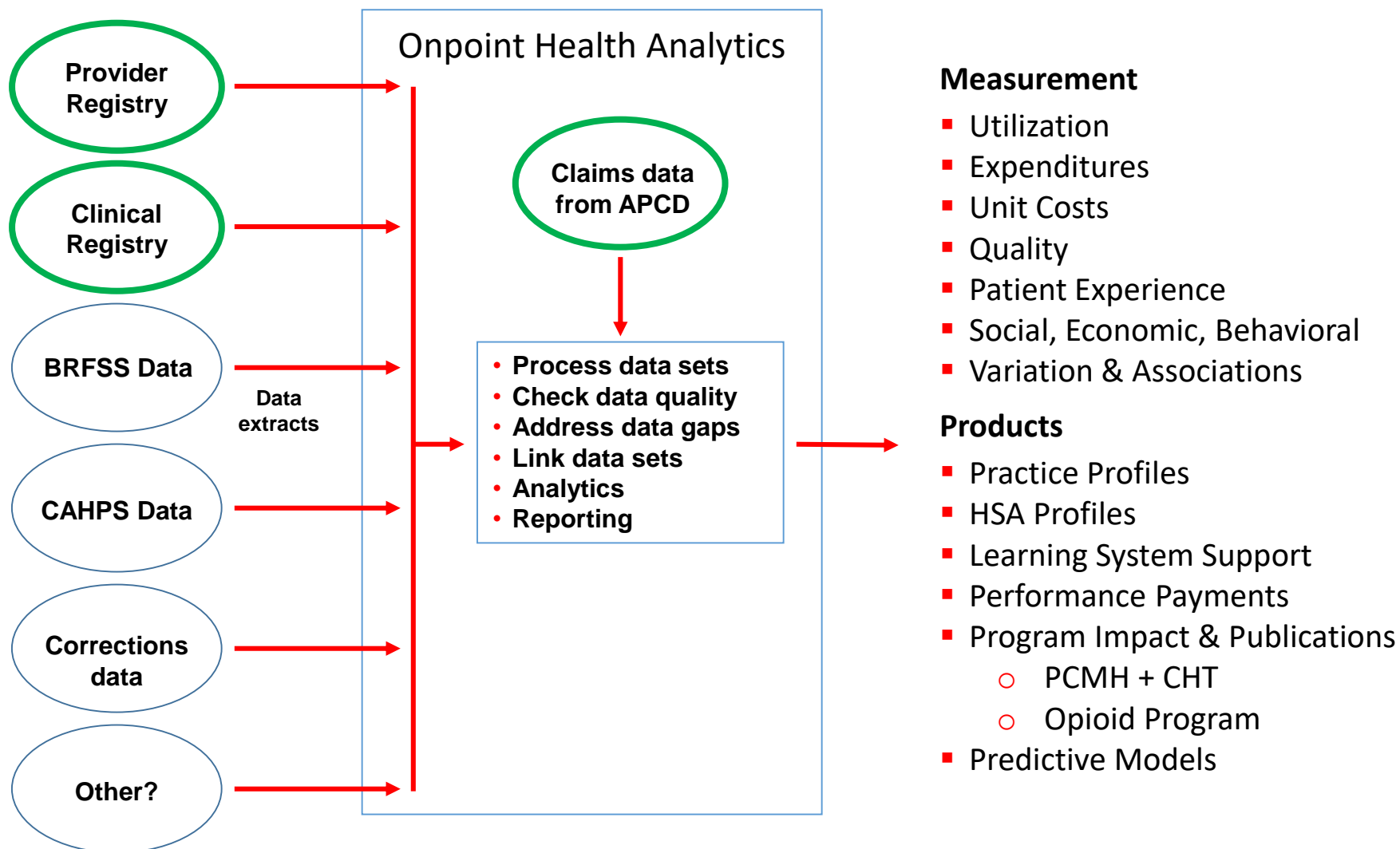
NAHDO Annual Conference 2016

October 26, 2016

Mary Kate Mohlman, Ph.D., M.S.
Vermont Blueprint for Health
Department of Vermont Health Access
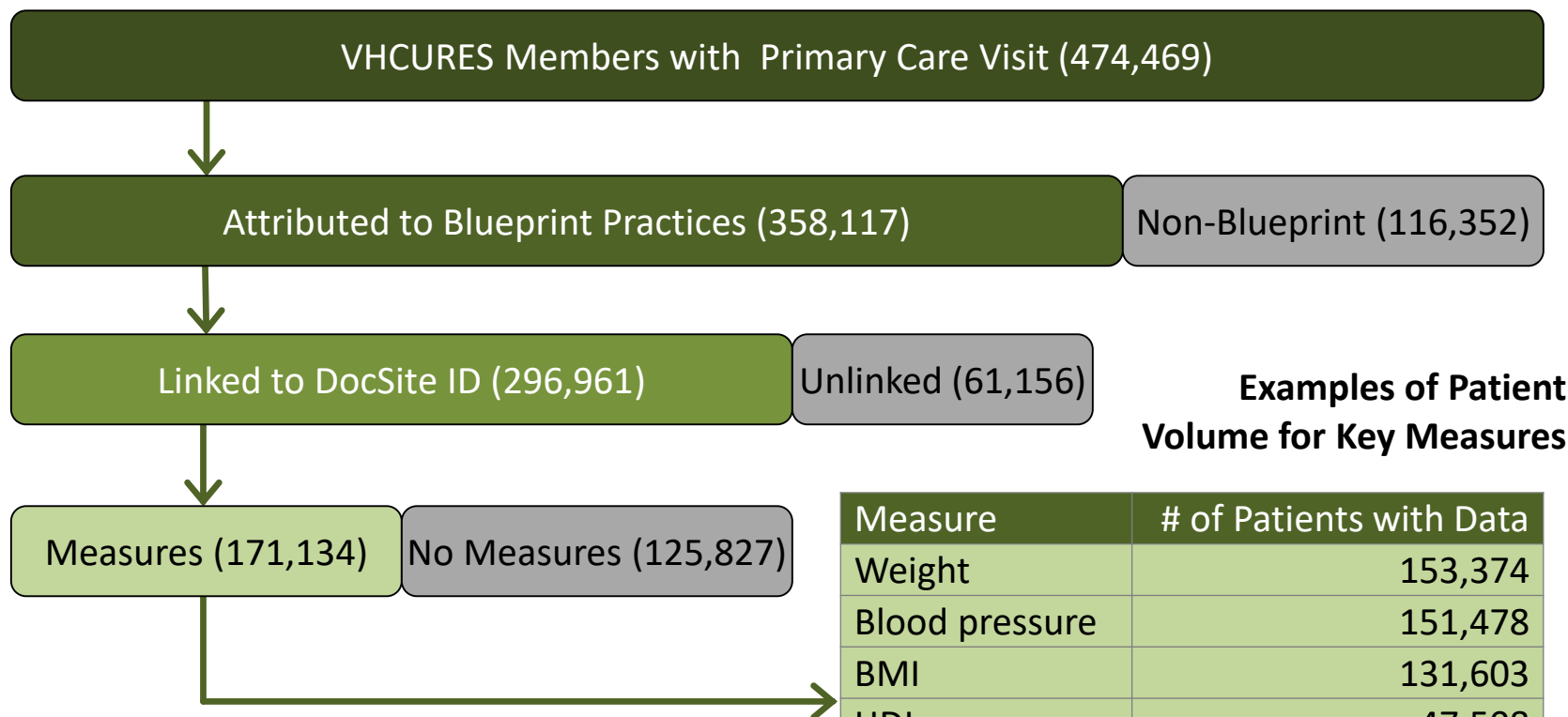
Data Sources

- Vermont Health Care Uniform Reporting and Evaluation System (VHCURES) includes de-identified data from:
  - Medicaid
  - Medicare
  - Commercial, including some self-insured

    * Maintained by Green Mountain Care Board and Onpoint Health Data

- Clinical data aggregated in the Blueprint Clinical Registry
  - Includes EHR data from

    * Maintained by Blueprint for Health, Capital Health Associates, and VITL

- Blueprint Provider Registry
  - Detailed patient-centered medical home information

    *Maintained by Blueprint for Health and field staff

Data Use for a Learning Health System

Linking Claims & Clinical Data – RY8*

Enhancing Blueprint Reporting: Clinical Outcomes

VHCURES Members with Primary Care Visit (474,469)

Attributed to Blueprint Practices (358,117) — Non-Blueprint (116,352)

Linked to DocSite ID (296,961) — Unlinked (61,156)

Examples of Patient Volume for Key Measures

Measures (171,134) — No Measures (125,827)

*RY8 represents dates of services on and between 07/01/2014 and 6/30/2015.
- Developed by Onpoint Health Data

Measure	# of Patients with Data
Weight	153,374
Blood pressure	151,478
BMI	131,603
HDL	47,508
Triglycerides	43,086
LDL-C	40,675
Tobacco use	27,493
HbA1c	23,059

Growth in Linked Claims and Clinical Records Containing Clinical Measures
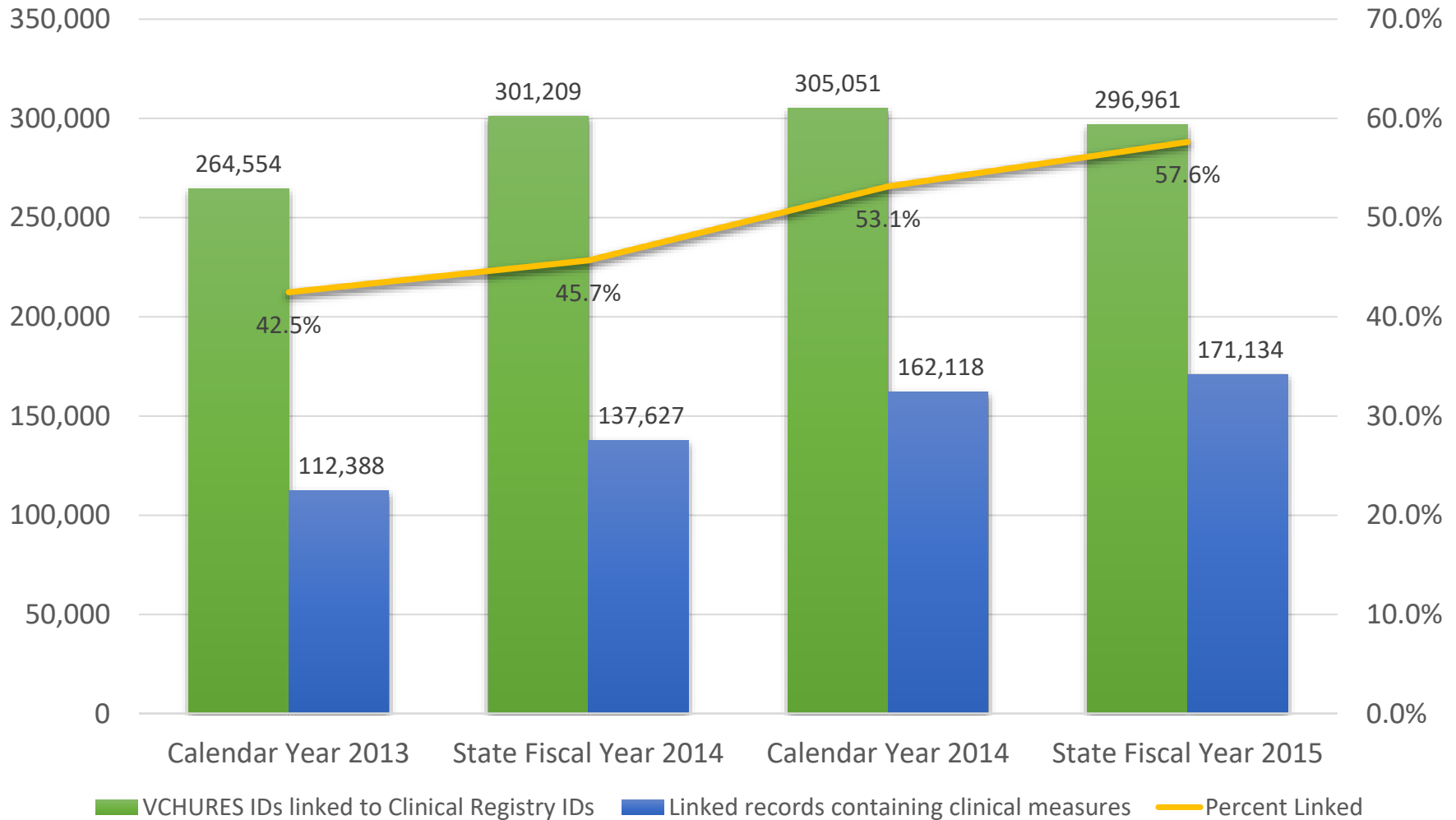
Practice Profiles Evaluate Care Delivery
Commercial, Medicaid, & Medicare

- Developed by Onpoint Health Data

Practice Profile

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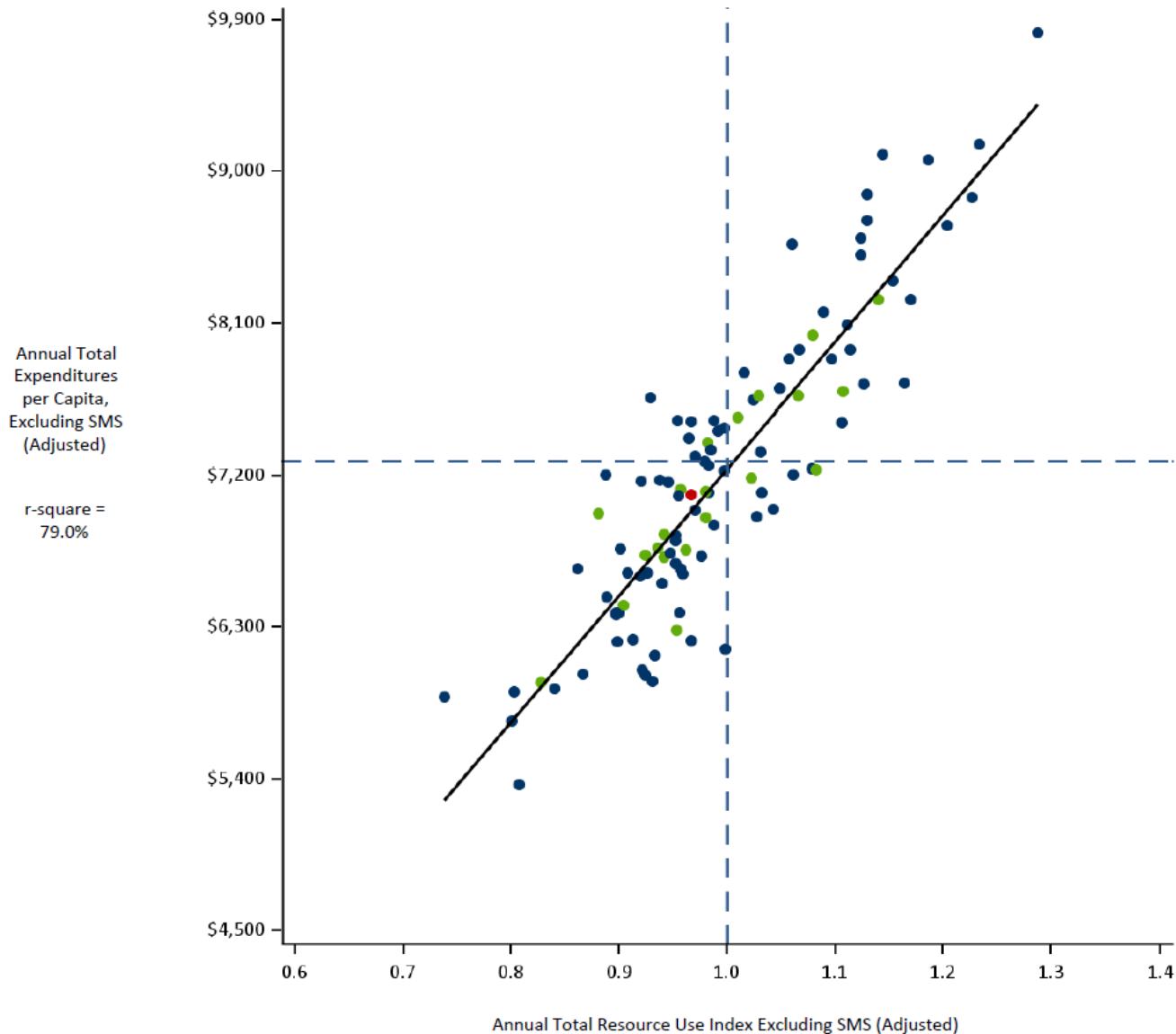
Annual Total Expenditures per Capita, Excluding SMS (Adjusted)

r-square = 79.0%

Annual Total Resource Use Index Excluding SMS (Adjusted)

HSA Profile

Annual Total Expenditures per Capita vs. Resource Use Index (RUI)
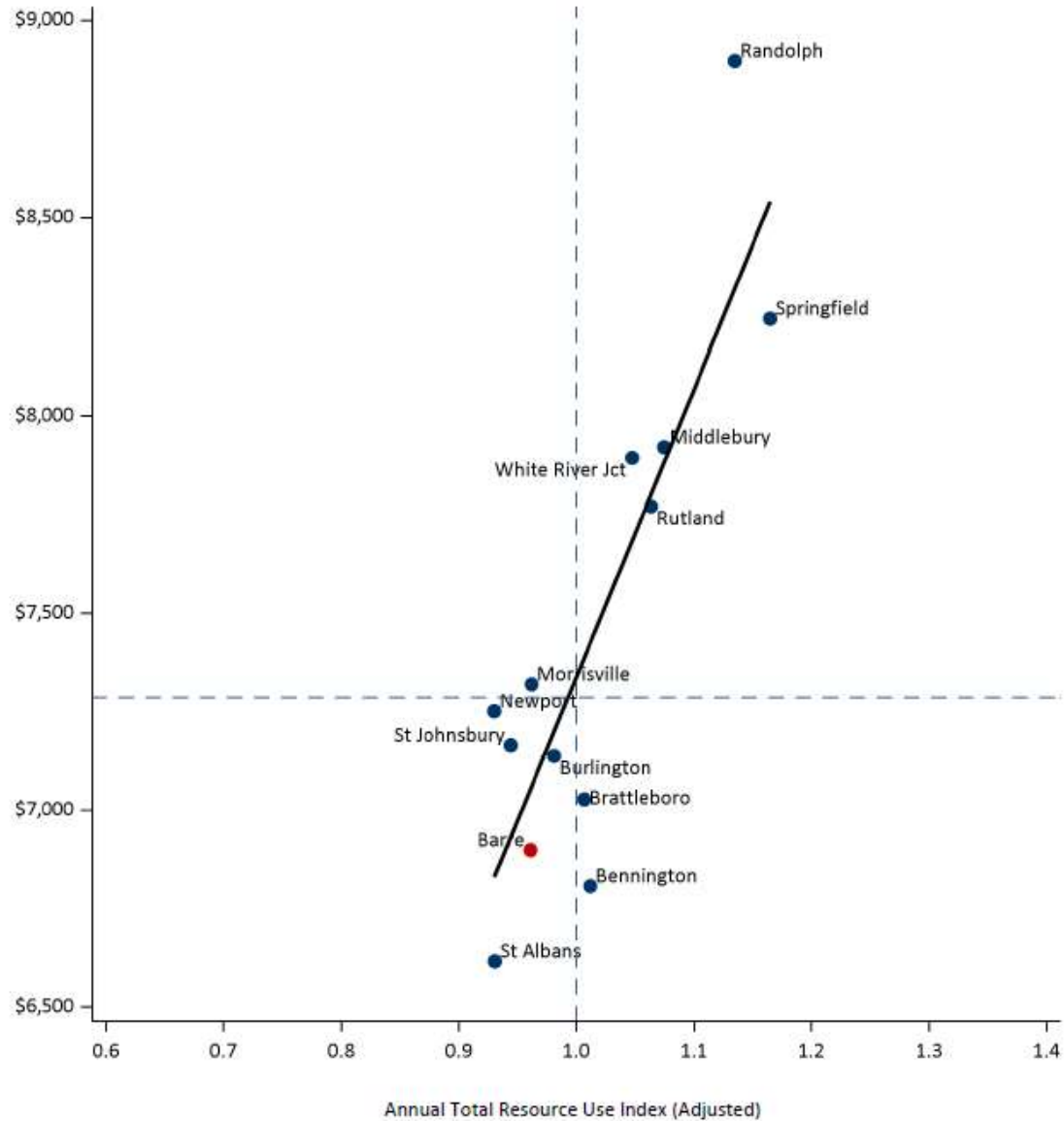
Linked Clinical Data: Obesity & Hypertension

Practice Profile

Measure (N = Count of distinct members)	Practice N=4,556	HSA N=34,022	Statewide N=283,153
	Rate %	Rate %	Rate %
% linked to clinical data	86%	84%	48%
% with BMI data	79%	76%	40%
% meeting obesity criteria	42%	38%	38%
% with blood pressure data	85%	81%	43%
% meeting hypertension criteria	23%	17%	20%
Measure (N = Count of distinct members with diabetes)	Practice N=383	HSA N=2,423	Statewide N=19,098
	Rate %	Rate %	Rate %
% linked to clinical data	97%	96%	63%
% with BMI data	94%	93%	50%
% meeting obesity criteria	73%	72%	71%
% with blood pressure data	97%	94%	53%
% meeting hypertension criteria	25%	23%	27%
% with BMI and blood pressure data	94%	92%	50%
% meeting obesity and hypertension criteria	20%	18%	20%

Table 3: Presents the proportion of distinct members and distinct members with diabetes linked to clinical data with valid body mass index (BMI) and blood pressure data meeting the criteria for obesity (BMI >= 30.0) and hypertension (mmHg >= 140/90).

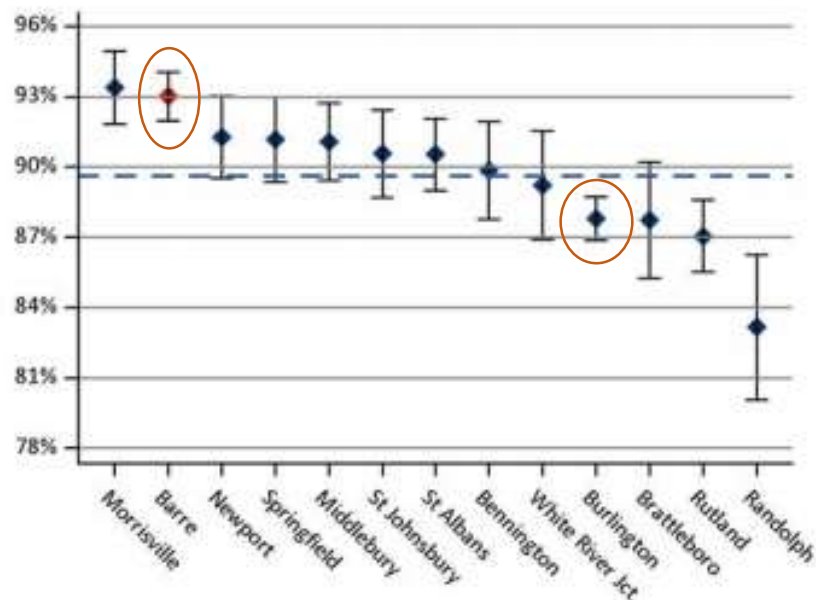# HSA Profiles

Diabetes: HbA1c Testing

Figure 9: Presents the proportion, including 95% confidence intervals, of continuously enrolled members with diabetes, ages 18–75 years, that received a hemoglobin A1c test during the measurement year. The blue dashed line indicates the statewide average.

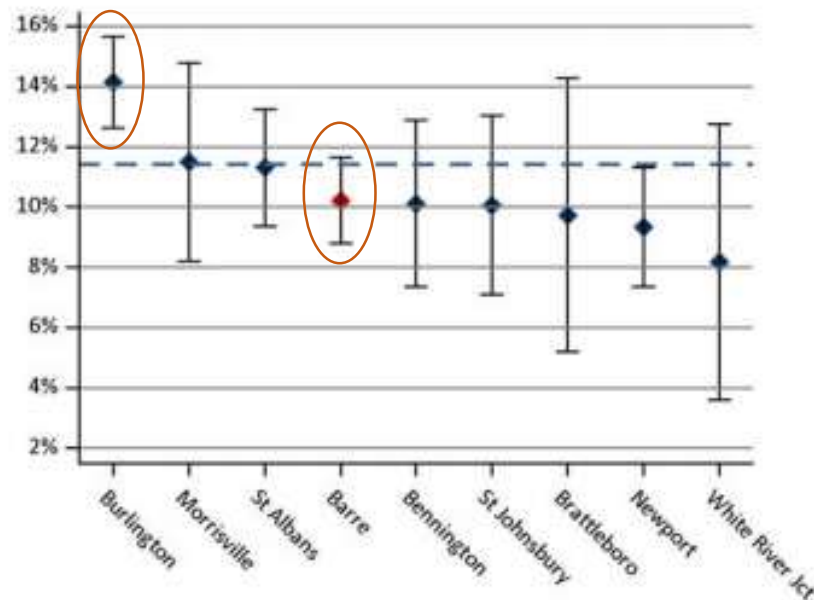**Diabetes: HbA1c Not in Control (Core-17, MSSP-27)**

Figure 10: Presents the proportion, including 95% confidence intervals, of continuously enrolled members with diabetes, ages 18–75 years, whose last recorded hemoglobin A1c test in the DocSite clinical database was in poor control (>9%). Members with diabetes were identified using claims data. The denominator was then restricted to those with DocSite results for at least one hemoglobin A1c test during the measurement year. The blue dashed line indicates the statewide average.

Statewide Population Health Evaluations

- Diabetes: reviewing link between HbA1c, common comorbidities, and near-term expenditures and utilization patterns

- Hypertension: reviewing links between hypertension diagnosis, blood pressure and cholesterol treatment, comorbidities, and expenditures and utilization patterns.

- Predictive Analytics: generating projections for policy recommendations under alternative payment models

- Linking with other Statewide datasets
  - Corrections
  - Meals on Wheels