

Data Use Category 1

SUPPORT ONGOING REGULATORY ACTIVITY AND
ANALYSIS OF POTENTIAL POLICY INITIATIVES



New Hampshire Insurance Department



Rhode Island Health Care Cost Trends Project Leveraging Multi-Payer Claims Databases



Tyler Brannen
Director of Health Economics

November 14, 2018 Page 2

NH's CHIS Database

Law creating NH's all-payer claims database passed in **2003**:

“ . . . the data shall be available as a resource for insurers, employers, providers, purchasers of health care, and state agencies to continuously review health care utilization, expenditures, and performance . . . and to enhance the ability of New Hampshire consumers and employers to make informed and cost-effective health care choices.”

NH RSA 420-G:11-a Development of a Comprehensive Health Care Information System

Focus: Regulatory Activity and Potential Policy Examples

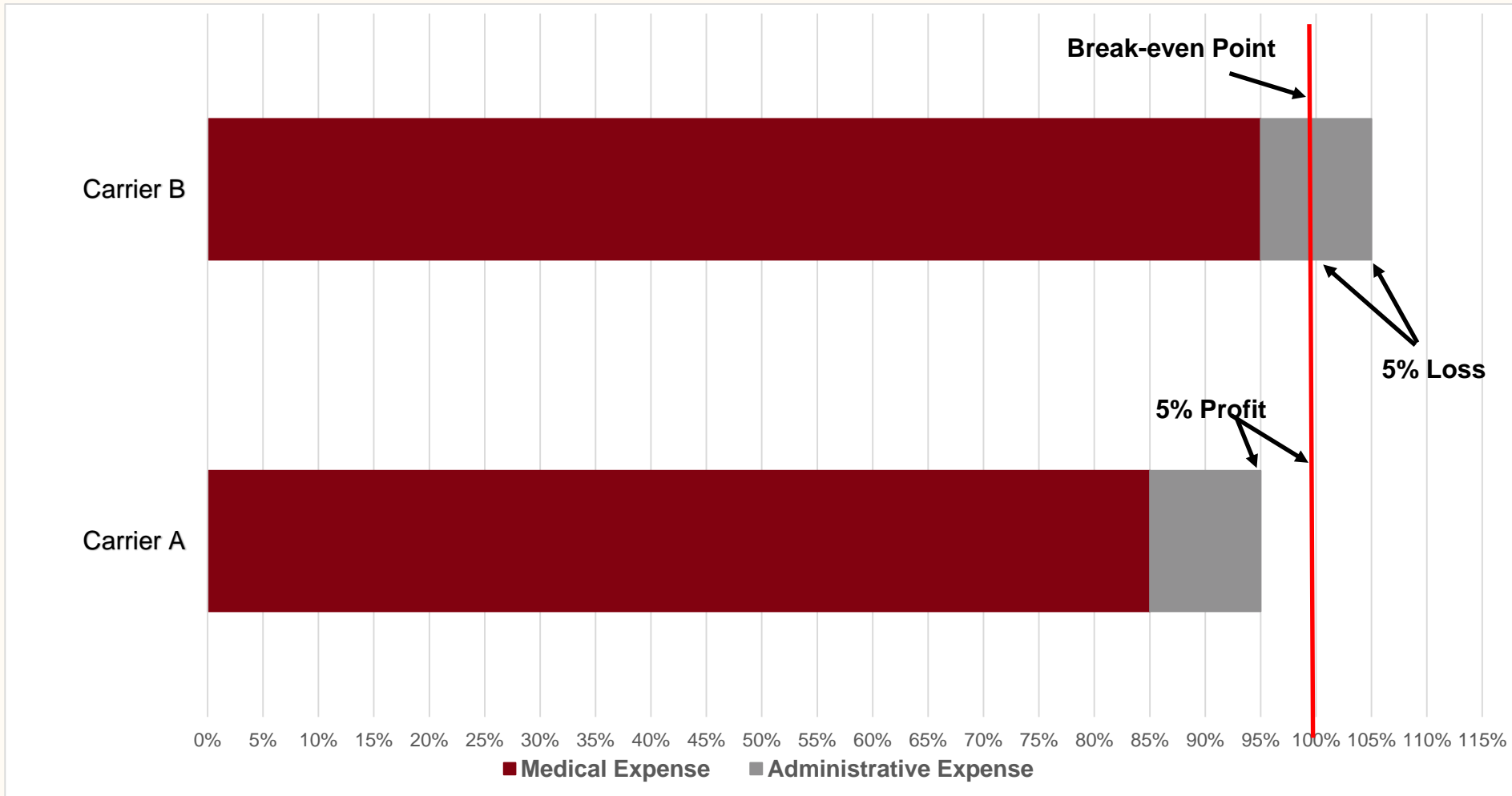
- Marketplace competitiveness – carrier discount studies
- Network adequacy
- Patient cost sharing
- Substance use disorder treatment – use patterns

Focus: Regulatory Activity and Potential Policy

Additional Examples

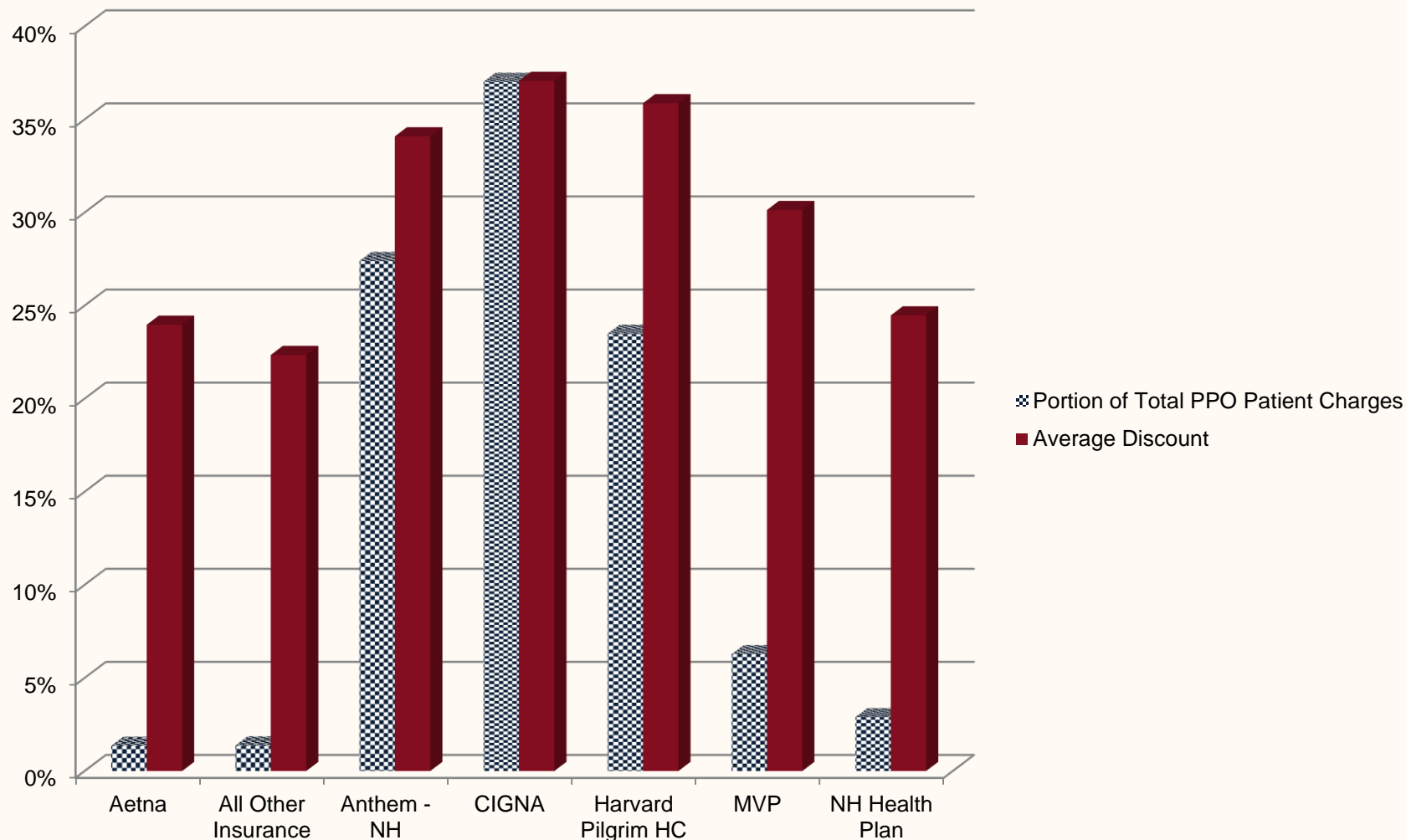
- Mental health parity requirements
- Annual hearing on costs and trends
- Hospital cost shifting
- Analysis of child vaccine use
- Ophthalmologists vs. optometrists
- Ambulance transport fees
- Mandate reviews – autism, hearing aids
- Dependent age expansion
- Market Shifts and Medicaid expansion options
- NHHealthCost

Why are discounts important?



An example of a twelve percent difference in payments to providers is a 40% discount vs. 33% discount.

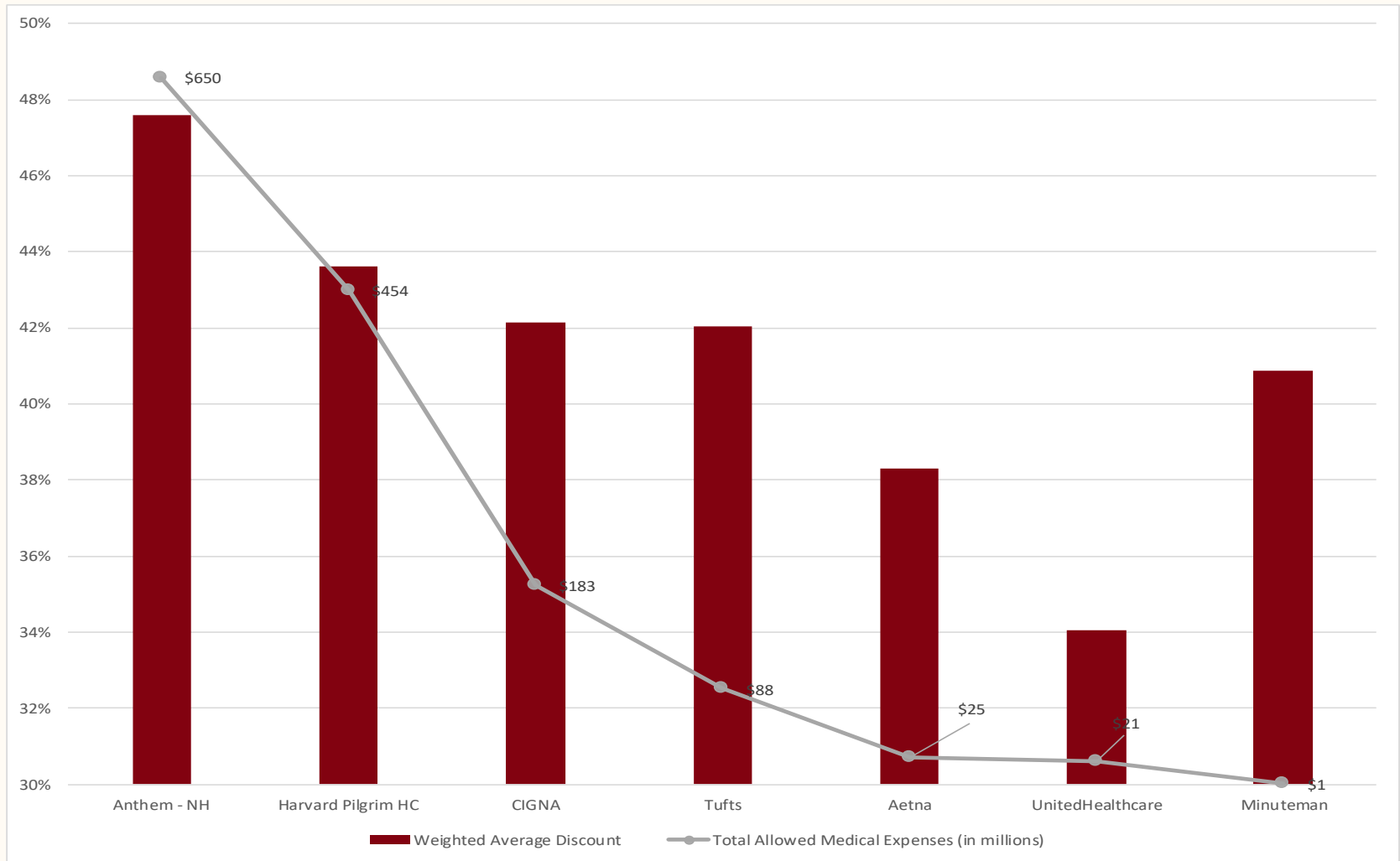
Discounts with Providers and Carrier Market Share – CY2011



11/14/2018

Source: NHCHIS CY2011

Group Market - 2017



11/14/2018

Source: NHCHIS. Analysis performed by BerryDunn Health Analytics Practice Area.

Network Adequacy Approach

- Identify providers who can satisfy the network adequacy requirements by looking at their claims data
- Obtain detailed listing of in network providers, by network, from carrier
- Merge results of claims analysis with submitted networks

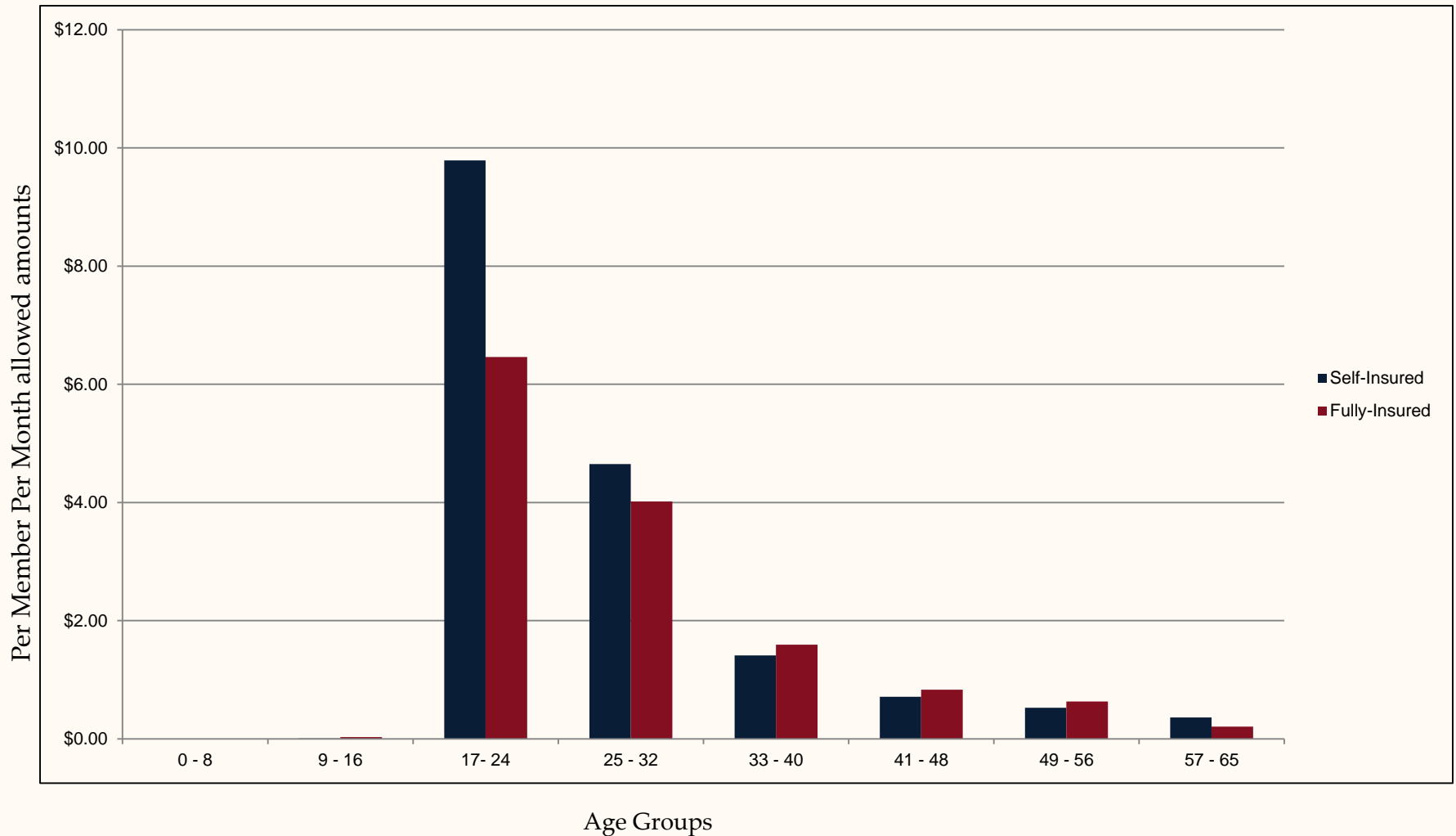
Network Adequacy Objectives

- Encourage competition among carriers and providers
- Use objective information to make compliance determinations
- Department directly performs the network review

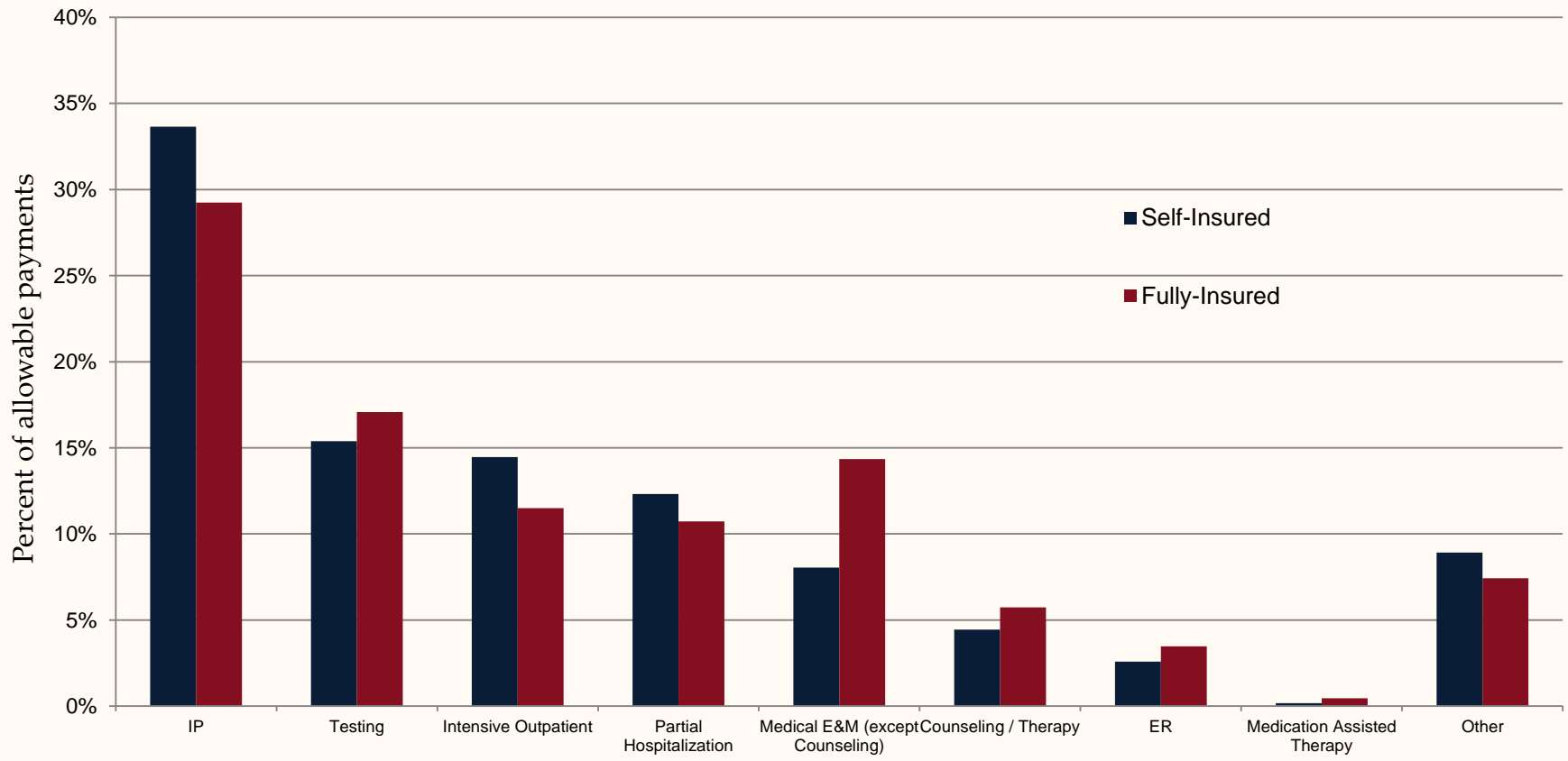
Patient Cost Sharing

- New laws regulating cost sharing –
 - Preventive care
 - Mental health parity
 - Oral chemo parity
 - Physical therapy and chiropractic care cost sharing parity with primary care
 - “Clawbacks” and Rx copay collections

Opioid Substance Use Disorder Age Group Treatment Costs



Opioid Substance Use Disorder Treatment Relative Costs



Thank You



Contact Information

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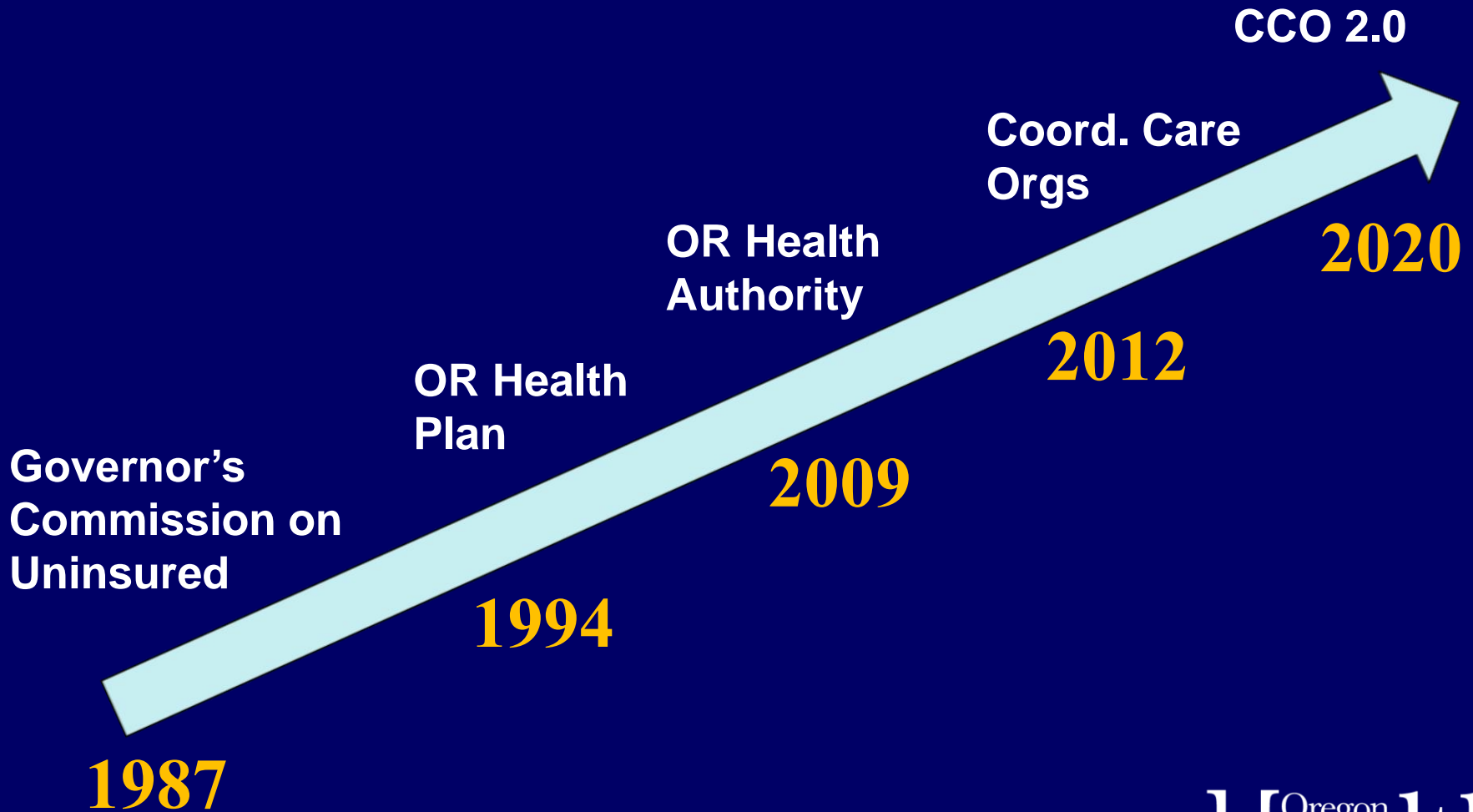
Oregon's All Payer All Claims (APAC) Data

Rhode Island Leveraging Multi-Payer Claims
Databases for Value Conference
November 14, 2018

OFFICE OF HEALTH ANALYTICS
Health Policy and Analytics Division

Oregon
Health
Authority

Oregon health care transformation timeline



Purpose and framework established in law

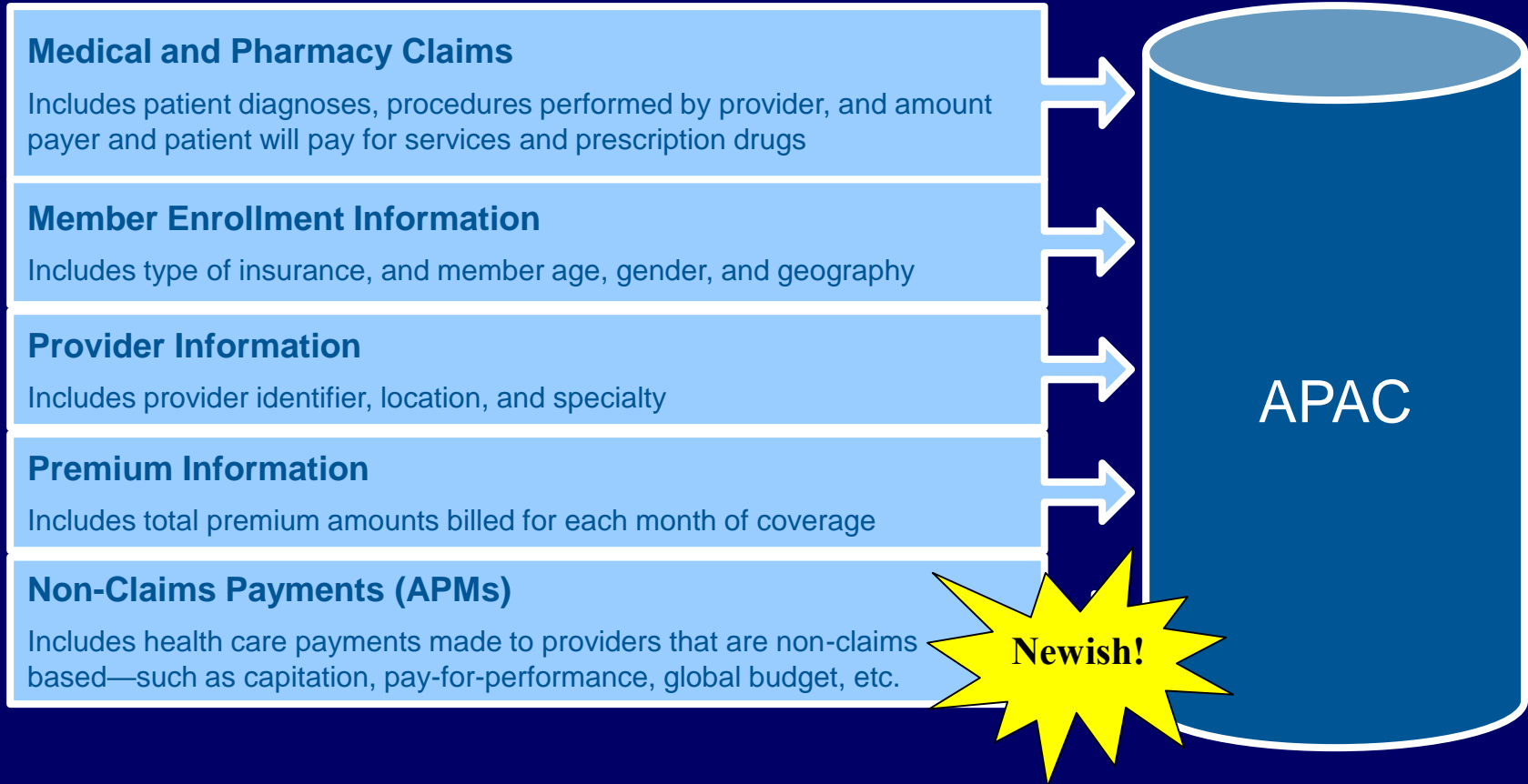


ORS 442.466 defines APAC:

- Directs OHA to establish a program to collect health care data;
- Define purposes for which data are collected;
- Requires establishment of limited data sets;
- Make information available for review of utilization, spending and performance;
- Requires compliance with state and federal privacy and security laws and protects trade secrets.

ORS 442.933 establishes civil penalties for failure to comply.

What data are included?



Who reports the data?

Does report:

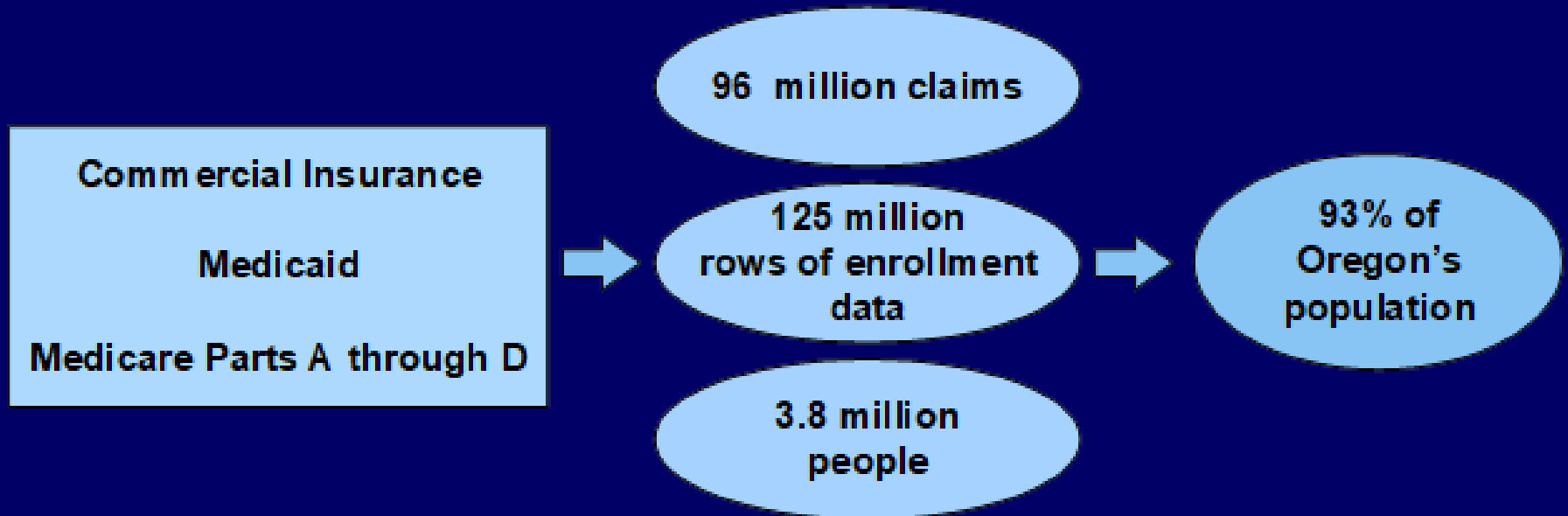
- Commercial carriers and TPAs with more than 5,000
- Pharmacy Benefit Managers
- Dual-eligible special needs
- Medicare Advantage
- Payers on Individual Market
- Medicaid
- **Medicare FFS**
- ERISA self-funded (only voluntarily)

Does not report:

- Most ERISA self-funded due to *Gobeille vs. Liberty Mutual*
- Federal programs other than Medicare (VA, IHS, Tricare)
- Other non-medical policies – *dental*, student, vision, stop-loss, accident, workers' compensation, etc.
- Uninsured individuals paying out of pocket (self-pay)

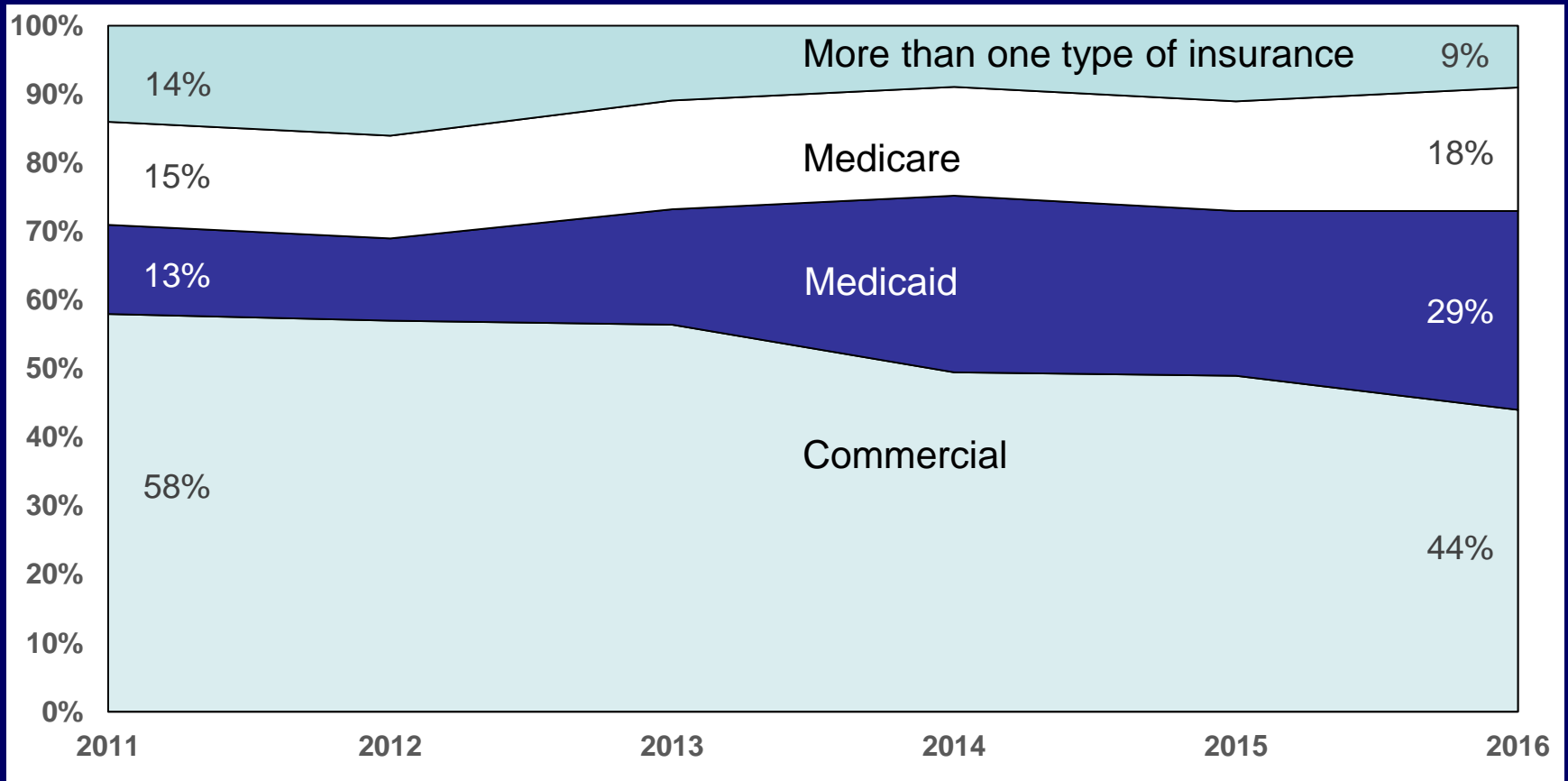
APAC by the numbers

- Six complete years of data are available (2011-2016)
- The chart below depicts some statistics about 2016 data



APAC by the numbers

Insurance coverage among individuals in APAC



APAC Use

- Since 2011, APAC has received 101 data requests from researchers and other interested parties
- 20% of data users are repeat customers, and request additional years of data as they are available
- Sixty-six use cases are summarized in this document:
<https://www.oregon.gov/oha/HPA/ANALYTICS/APAC%20Page%20Docs/APAC-Use-Cases.pdf>

Leveraging APAC to Advance Health Care System Improvement

PCPCH Evaluation

Patient Centered Primary Care Home (PCPCH):

- Program established by HB 2009 in 2009
- Primary care clinics 'recognized' in one of five tiers
- Recognition is based on six domains:
 - access to care,
 - accountability,
 - comprehensive whole-person care,
 - continuity,
 - coordination and integration,
 - person and family-centered care
- May result in eligibility for financial incentives

PCPCH Evaluation

- Used four years of APAC data
- Selection criteria:
 - One or more primary care visit
 - Oregon residents
 - Full-year medical and pharmacy coverage
 - Received PC exclusively from a PCPCH or a non-PCPCH clinic
- Difference-in-difference study design

PCPCH Evaluation

Results:

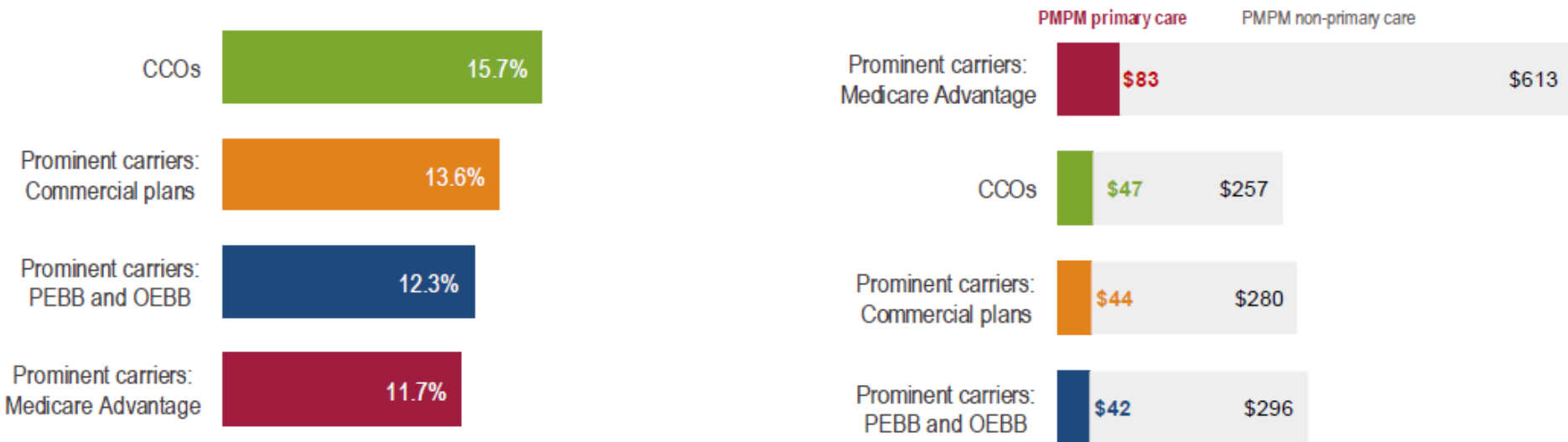
- For every \$1 increase in PC spending from the PCPCH program, average of \$13 in savings in other services
- Clinics recognized for a longer period demonstrated greater savings
- The six domains in combination had a greater effect on utilization and expenditures, than any one domain considered separately.

Primary Care Spending

- Work began in 2015 to establish a methodology to measure primary care spending
- APAC claims data plus separate non-claims file to look at variation in primary care spending by payer
- Work has informed the state's Primary Care Collaborative and the Legislature
- In 2017, SB934 established a 12% minimum spending on primary care by 2023

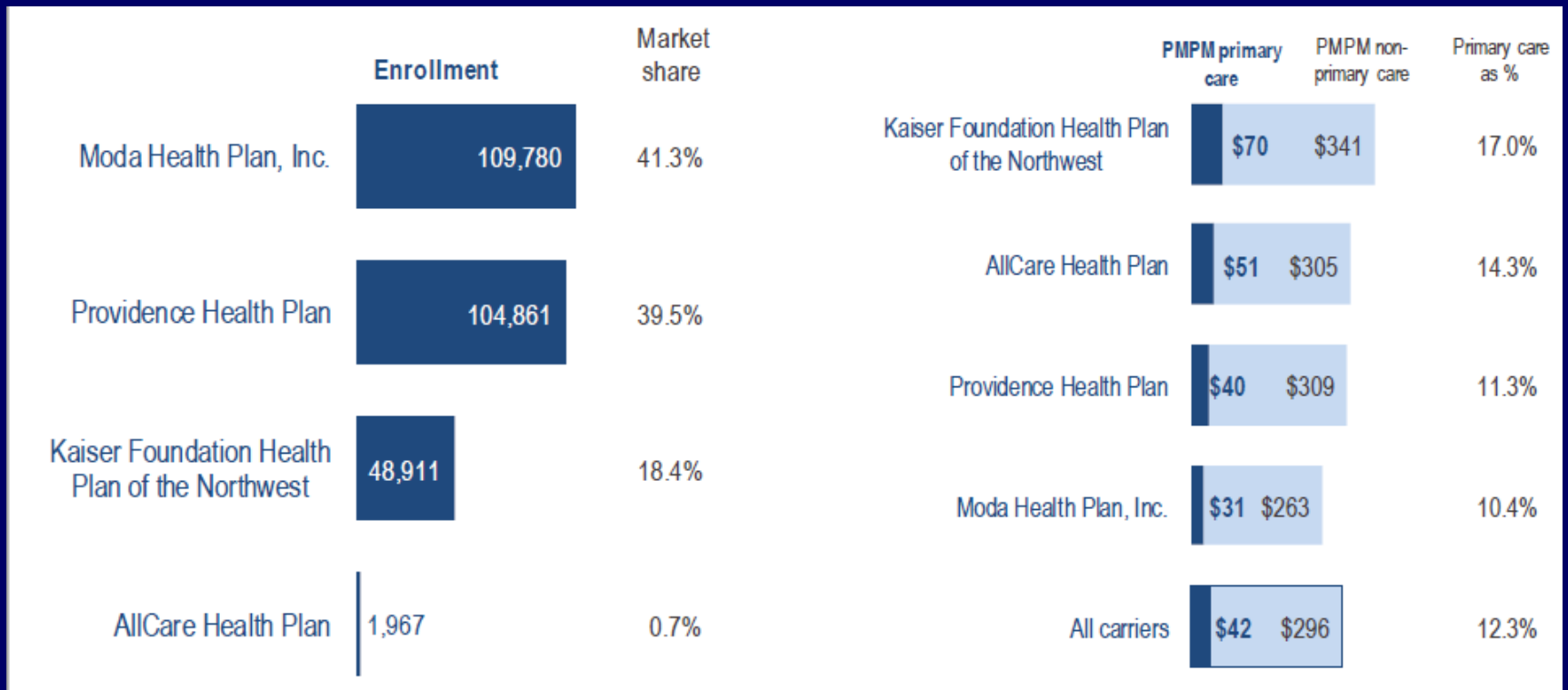
Primary Care Spending

Percentage of total medical spending and per-member per-month (PMPM), 2016



Primary Care Spending

Enrollment, per member per month and primary care for selected plans (OEBB and PEBB, 2016)



Surprise Billing

- 2017 Oregon law prohibited out-of-network health care providers from surprise billing patients, and directed DCBS to develop recommendations for the allowed reimbursement from payer to provider
- Considered other sources: percent of Medicare; FAIR Health data
- APAC was deemed the best source by advisory group of payer, provider and consumer representatives

Surprise Billing, cont'd.

- Developing recommendations for the allowed reimbursement methodology took over 18 months
- Many considerations had to be explored:
 - Use of modifiers
 - Uniqueness of anesthesiology claims
 - Geographic variability
- Proposed Excel rate sheet is 9,537 lines

Limitations to using APAC data

- Dataset is very complex
- When errors are identified, may need to be corrected
- Data gaps:
 - Dental claims
 - ERISA self-insured
 - Pharmacy rebate data
 - Substance use data due to 42 CFR Part 2

Addressing limitations

- Complex data:
 - Beginning to release interactive data displays in early 2019
 - Improving data documentation
- Errors: The more the data are used, the better the quality
- Data gaps:
 - Plan to add dental insurance claims as a reportable line of business effective January 2020
 - Investigating collecting pharmacy rebate data
 - Future plans to assess data gaps related to ERISA and 42 CFR Part 2, and develop plans to address

Questions?

Contact information

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APAC Use Cases:

<https://www.oregon.gov/oha/HPA/ANALYTICS/APAC%20Page%20Docs/APAC-Use-Cases.pdf>

Data Use Category 2

PROMOTE TRANSPARENCY FOR CONSUMERS AND
POLICYMAKERS WITH COST AND QUALITY
REPORTING AND TOOLS

Promoting Transparency for Consumers and Policymakers with Cost and Quality Reporting Tools

Washington Health Alliance:
Leading Health System
Improvement Since 2005

Rhode Island Health Care Cost Trends Project
Data Use Strategies
November 14, 2018

Alliance: Two Main Functions

We are a trusted convener for stakeholders, promoting a collective conversation to transform care delivery and financing.

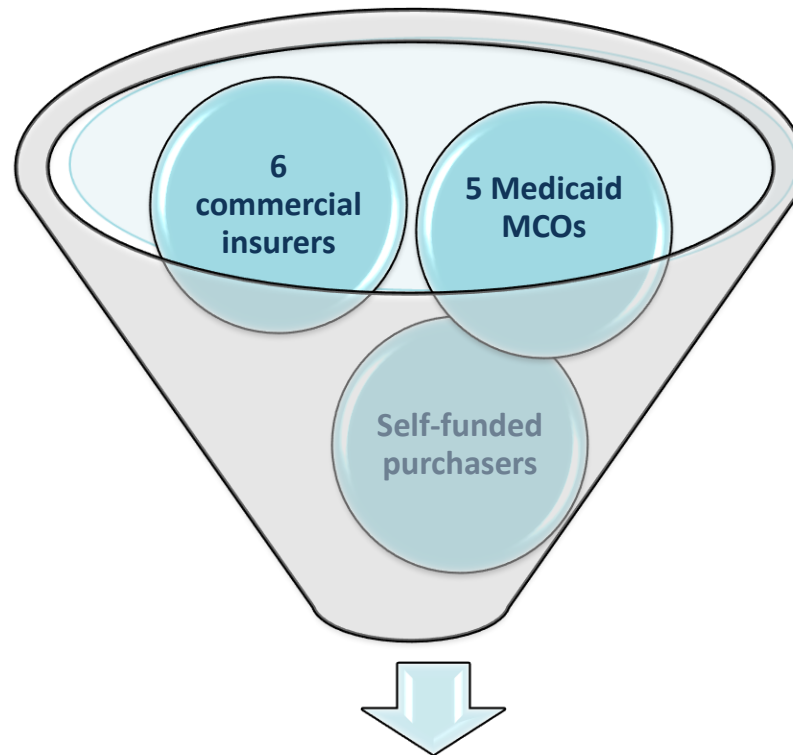


Performance measurement and reporting is a core competency of the Washington Health Alliance.

Today: Performance Measurement is Core Competency of the Alliance

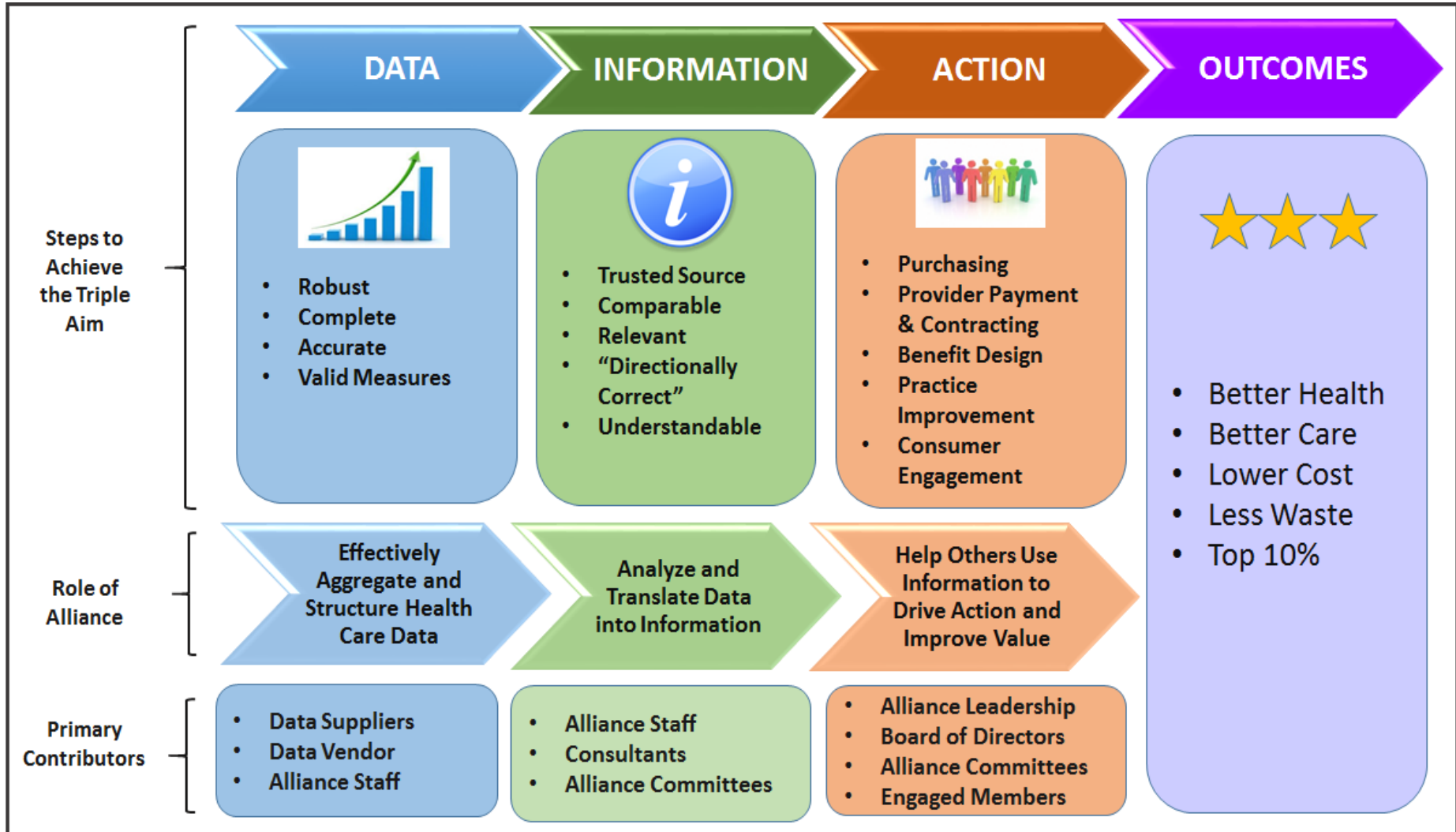


Data Sources:
Washington
Health Alliance
All Payer Claims
Database



- Began aggregating data in 2007
- Data going back to 2004
- Today: 35 Data Submitters

**Medical and pharmacy claims
for ~4 million Washingtonians**

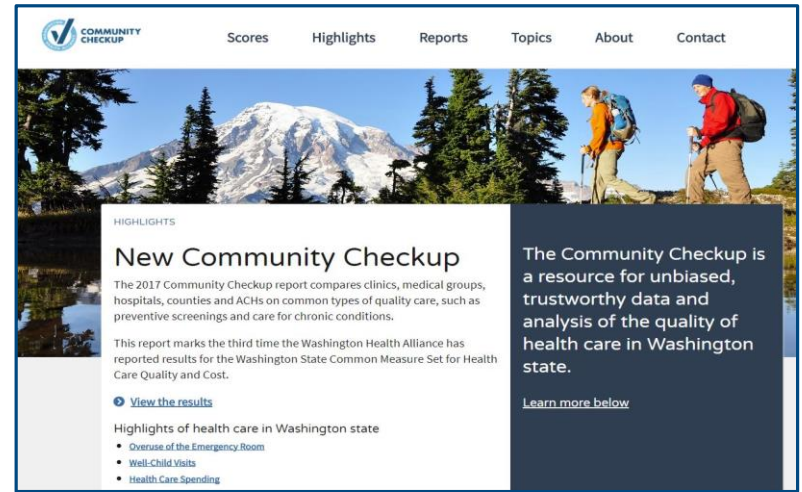
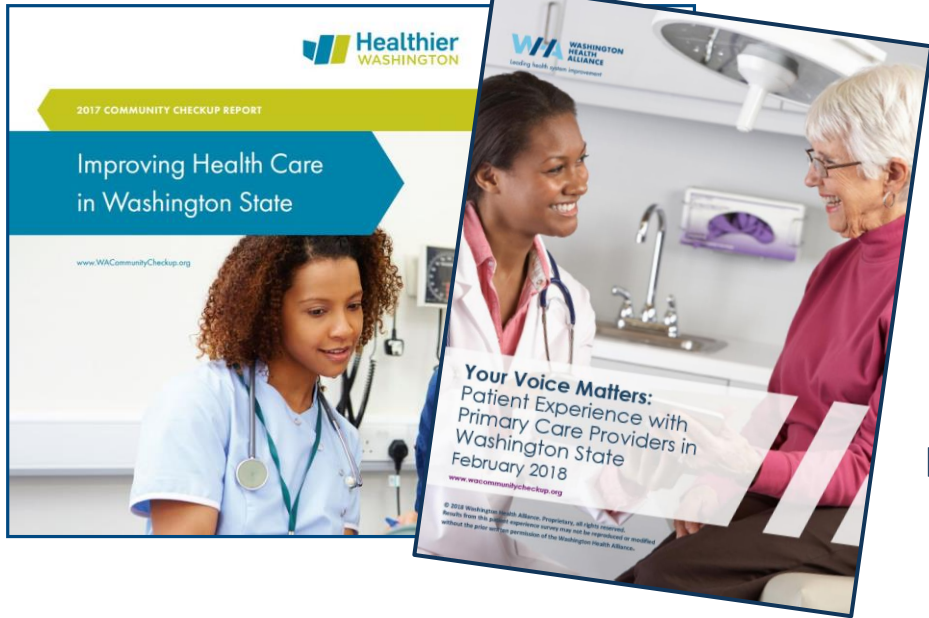


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The Community Checkup

www.wacommunitycheckup.org

Results shared publicly
via our website:

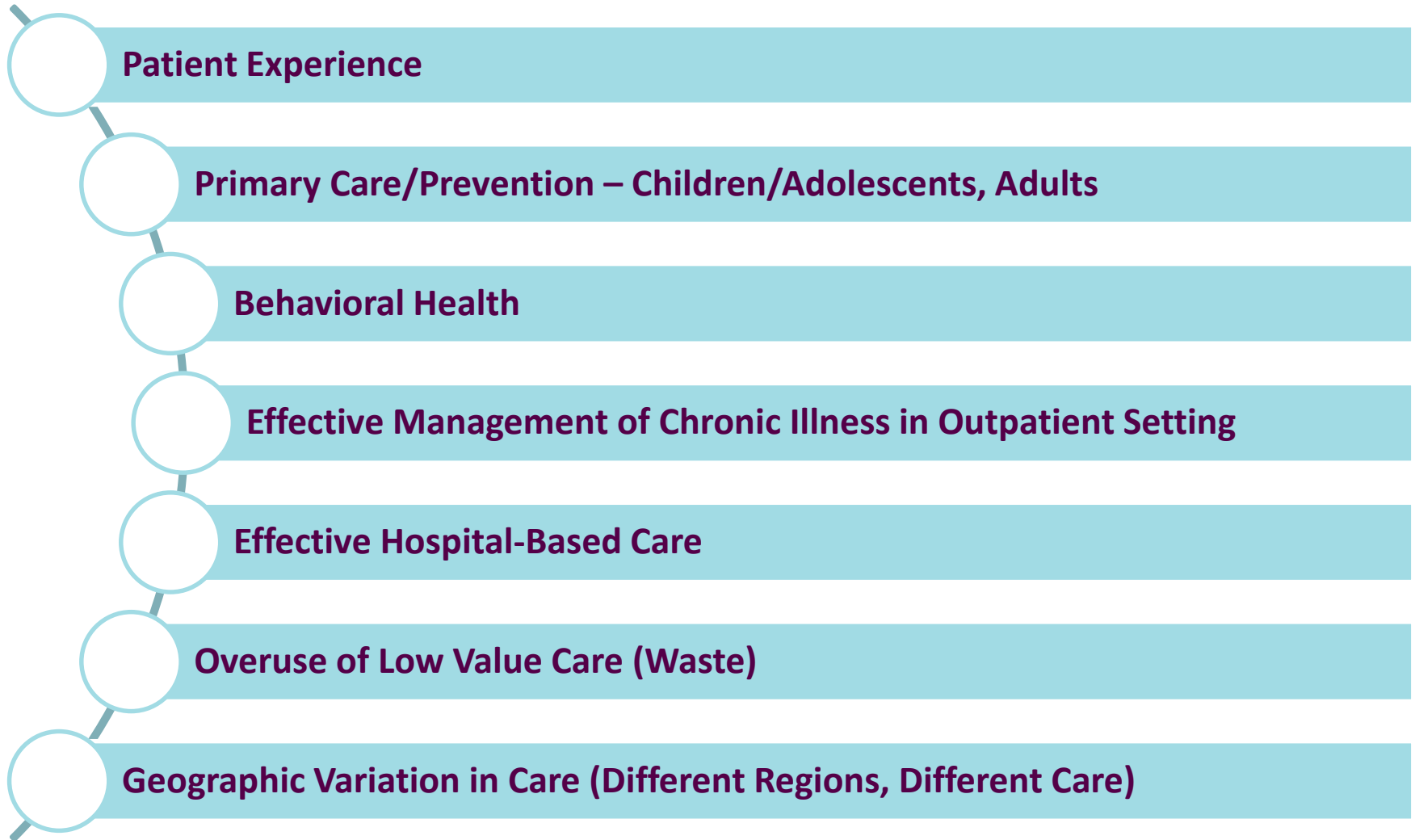


In meetings:



And via a monthly, electronic newsletter to
our members and the community at-large

Focus of Our Measurement (>100 measures)



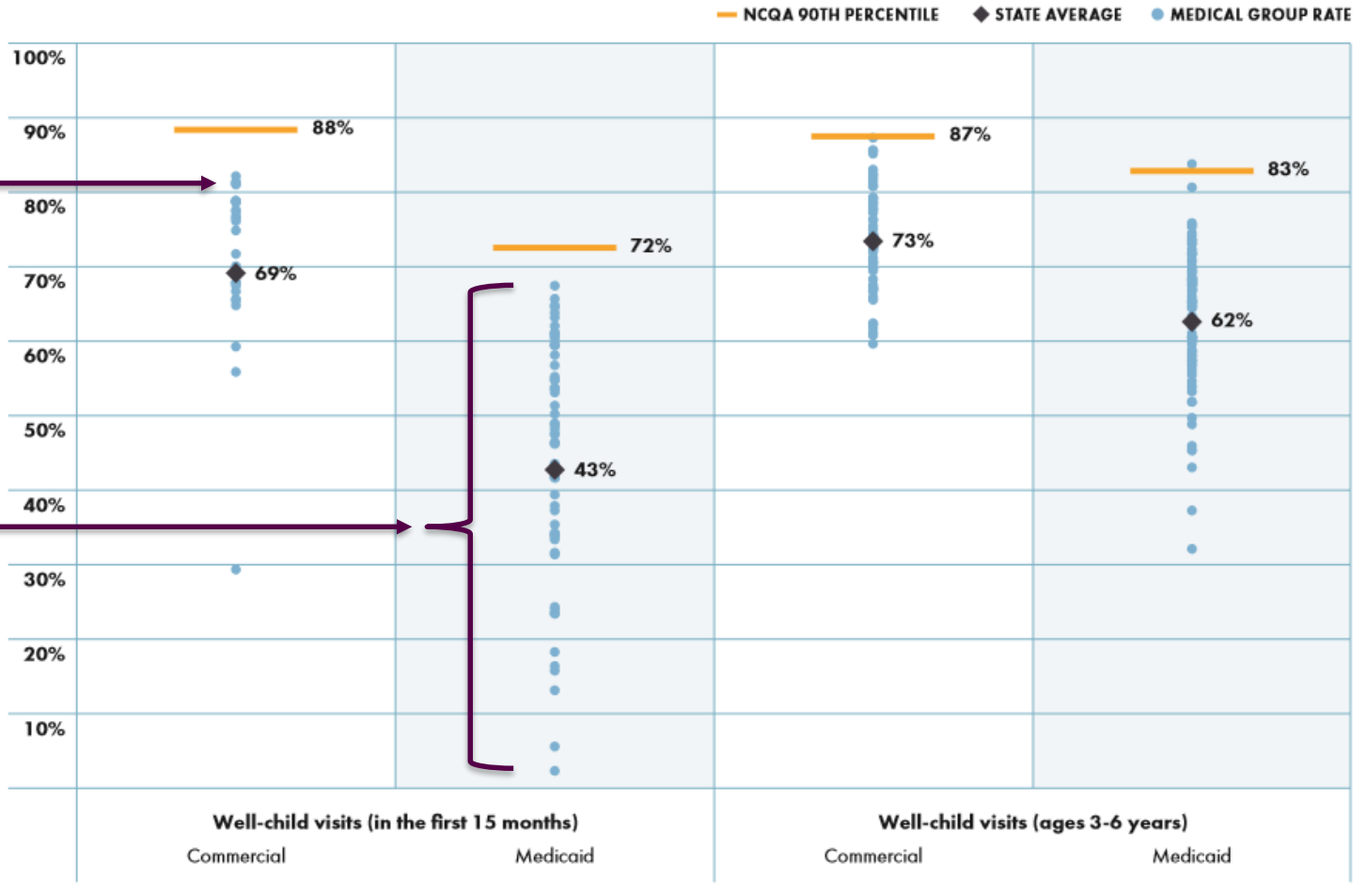
Measurement By “Units of Analysis”



***Primary care and some specialty medical groups and clinics, statewide**

Variation in health care

Figure 3: Variation among **Medical Groups** for Well-Child Visits



Each dot is a medical group

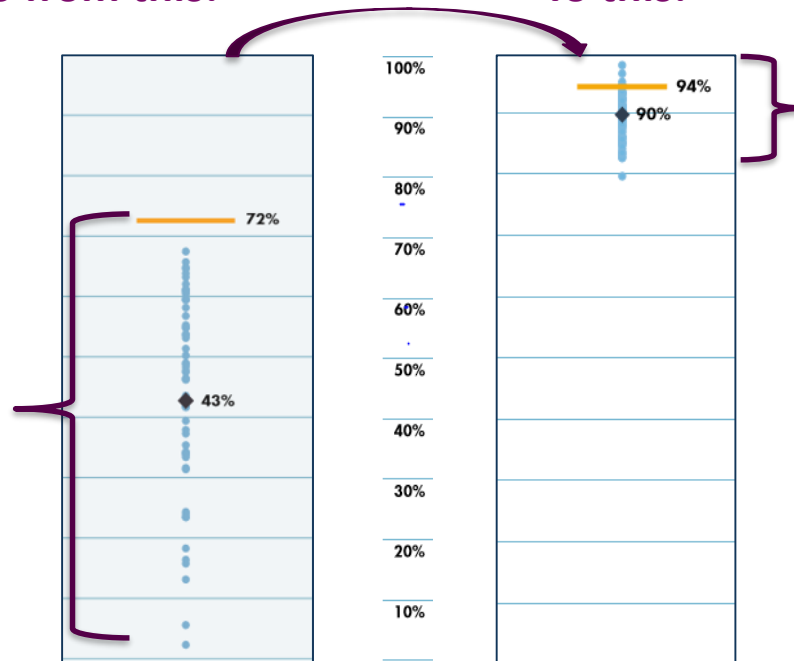
Wide variation on important measures of quality

On all important measures of quality:

We want to go from this:

To this:

Wide variation in performance around the mean and considerable distance between the state average and national 90th percentile



Much narrower variation in performance around the mean and minimal distance between the state average and national 90th percentile

Variation in health care by Medical Group

Type of Care	State Average	Highest Performing Medical Group		Lowest Performing Medical Group
Eye exams for people w/ diabetes	75%	97.6%	← 43 →	54.4%
Blood sugar testing for people w/ diabetes	91%	96.3%	← 15 →	81.4%
Managing meds for people w/ asthma	43%	53.4%	← 25 →	28.5%
Monitoring patients on high blood pressure meds	84%	97.7%	← 36 →	61.1%
Statin therapy for patients w/CVD	80%	94.6%	← 18 →	76.6%
Staying on anti-depressants for 6 months	57%	68.8%	← 25 →	43.8%
Avoiding antibiotics in adults with acute bronchitis	38%	64.6%	← 43 →	21.9%
Avoiding imaging for low back pain during first six weeks	81%	85.5%	← 12 →	74.0%

Ranking Medical Group Performance



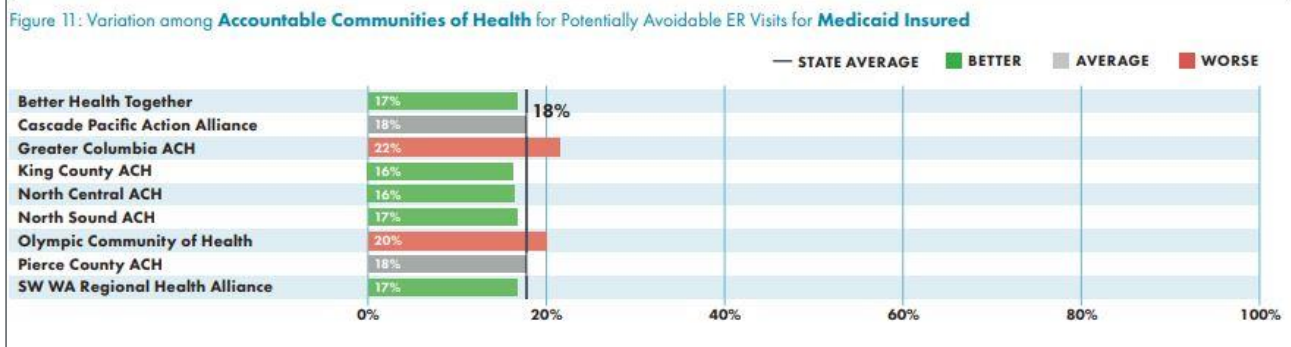
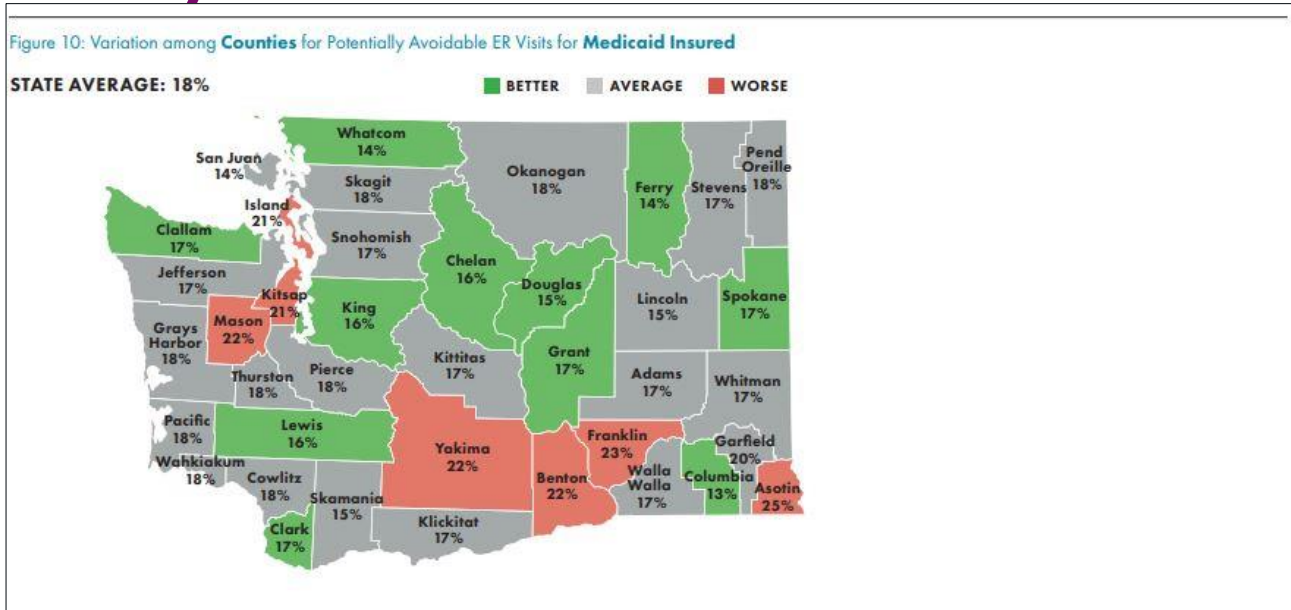
Figure 18: Ranking Medical Group Performance for **Commercially Insured**: Medical Groups That Have Results for **15 or More** Measures



Variation in health care by county

Type of Care	State Average	Highest Performing County	Lowest Performing County
Access to Care (7-11 years old)	85%	92.7%	60.3%
Access to Care (12-19 years old)	86%	93.7%	61.5%
Vaccinations by Age 13	15%	27.7%	4.6%
HPV Vaccination Boys	14%	26.8%	5.0%
HPV Vaccination Girls	17%	30.0%	6.0%

Reducing Waste: Potentially Avoidable ER Visits



Different Regions, Different Care

- Rate variation by geographic area across the entire state, broken down by age and gender, for multiple procedures (22), in five categories:
 - Bariatric Surgery
 - Diagnostic Tests
 - Ear/Throat
 - Obstetrics/Gynecology
 - Ortho/Neuro
- Special Topic:
 - Opioid Prescribing
- Geography has an impact on how frequently patients get certain treatments and procedures. In other words, where you live matters when it comes to the care you get.



What do we mean by geographic variation?*

- **Young women (ages 20-44) in Everett are more than 2.5 times more likely to have bariatric surgery.**
- **Men in Yakima (ages 45-64) are 70% more likely to have spine surgery; their counterparts in Seattle are 50% less likely.**
- **Children in Spokane are between 70% and 120% more likely to have eardrum surgery (depending on age and gender).**
- **Boys and girls in Puyallup, ages 12-19, are 60% more likely to have tonsils and adenoids removed**
- **Women in Shelton, ages 20-44, are 450% more likely to have spine injection procedures**
- **Women in Olympia, ages 45-64, are 60% more likely to have knee replacement surgery**

**Compared to all residents of the same age and gender living elsewhere in the state*

Bariatric surgery

Bariatric Surgery Rates

- Insurance Type**
 - All
 - Commercial
 - Medicaid
- Hospital Referral Region**
 - (All)
 - Everett
 - Olympia
 - Seattle
 - Tacoma
- Age Group**
 - (All)
 - 20 - 44
 - 45 - 64

- Legend**
- Lower
 - Average
 - Higher

Age Group	Gender	Hospital Referral Region	Hospital Service Area	Year		
				2015	2016	
20 - 44	Female	Everett	Everett	0.21%	0.18%	
			Seattle		0.03%	
			Tacoma		0.16%	
			Tacoma		0.11%	
45 - 64	Female	Everett	Everett	0.23%	0.22%	
			Olympia	0.19%	0.18%	
			Seattle	Renton		0.16%
				Seattle	0.06%	0.05%
			Tacoma	Puyallup		0.17%
Tacoma	0.12%	0.10%				
	Male	Everett	Everett	0.11%		

2018

Bariatric Surgery Rates Increasing



April 2018 — Bariatric surgery, also called weight loss surgery, helps people with extreme obesity to lose weight. It may be an option for people who cannot lose weight through diet and exercise or have serious health problems caused by obesity. All types of bariatric surgery have risks and complications and should be considered carefully. Our latest report shows that rates of bariatric surgery are increasing in Washington state.

[See our key findings](#)

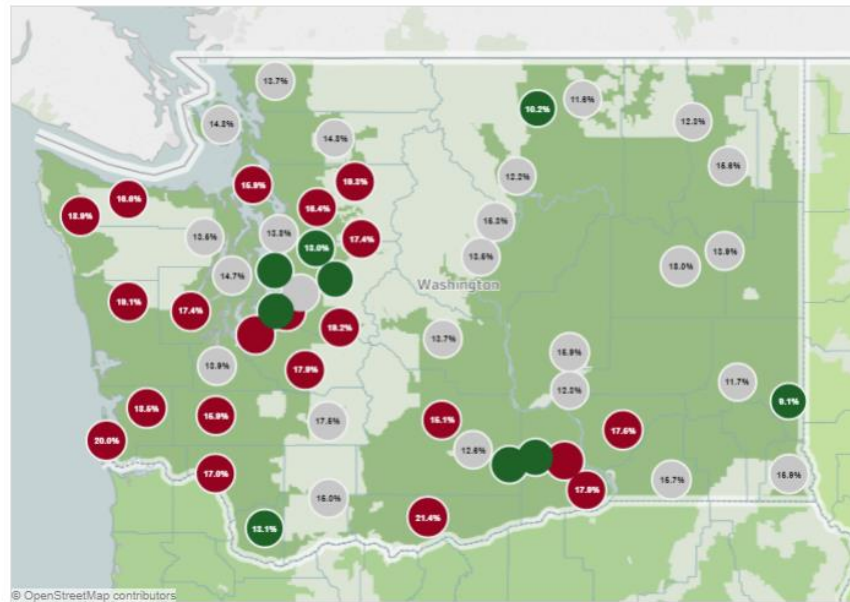


Opioid prescribing rates

Opioid Prescribing Rates in Washington State

Percentage of individuals receiving at least one prescription during the measurement period.

- Year**
 - 2013
 - 2014
 - 2015
 - 2016
- Insurance Type**
 - All
 - COMMERCIAL
 - MEDICAID
- Hospital Referral Region**
 - (All)
 - Everett
 - Olympia
 - Portland
 - Seattle
 - Spokane
 - Tacoma
 - Yakima
- Age Group**
 - 2. 1 year
 - 3. 2 - 6 years
 - 4. 7 - 11 years
 - 5. 12 - 19 years
 - 6. 20 - 44 years
 - 7. 45 - 64 years
 - 8. 65+ years
- Gender**
 - F
 - M
- Legend**
 - Better
 - Average
 - Worse



HRR City	HSA City	Age Band / Gender 45 - 64 years	
		F	M
Everett	Anacortes	16.6%	14.8%
	Arlington	21.9%	19.3%
	Coupeville	16.6%	15.9%
	Everett	18.7%	16.4%
	Monroe	20.5%	17.4%
	Mount Vernon	16.6%	14.8%
Olympia	Centralia	17.9%	15.9%
	Morton	18.4%	17.5%
	Olympia	16.4%	13.9%
	Shelton	21.1%	17.4%
	South Bend	20.3%	18.5%
Portland	Goldendale	20.0%	21.4%
	Ilwaco	19.1%	20.0%
	Longview	19.2%	17.0%
	Vancouver	15.7%	13.1%
	White Salmon	17.8%	15.0%
Seattle	Aberdeen	21.3%	19.1%
	Auburn	19.4%	16.5%
	Bellevue	12.9%	11.3%
	Bellingham	15.2%	13.7%
	Bremerton	17.5%	14.7%

2017

Opioids in Washington State



Oct. 2017 — The opioid epidemic is widely recognized to be one of the most devastating health care problems facing the nation. Sadly, the epidemic is entirely man-made—a lethal combination of aggressive marketing on the part of pharmaceutical manufacturers, relaxed regulations and policies, and a lack of understanding of the consequences of long-term opioid use. Learn more about opioid prescribing patterns in Washington state.

[▶ See our key findings](#)

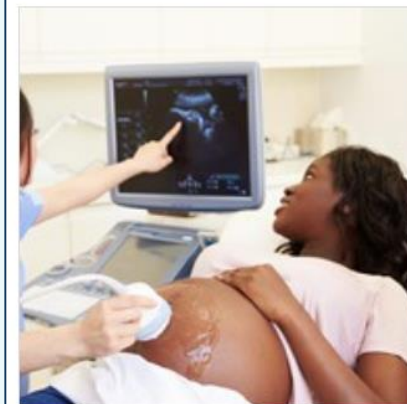
C-section rates



Community (HRR)	C-Section Rate Women ages 20-44
Yakima	21%
Spokane	24%
Bellingham	25%
Seattle	25%
Everett	26%
Edmonds	27%
Tacoma	29%
Kirkland	30%
Bellevue	32%
Aberdeen	39%

2018

Variation in C-Section Rates



Feb. 2018 — When medically necessary, such as during a complicated birth, a C-section can help save the life of mother and/or baby. However, nearly one-third of all babies in the U.S. are born via C-section, and this is well above what most experts consider medically necessary. Learn about the C-section rates in Washington state.

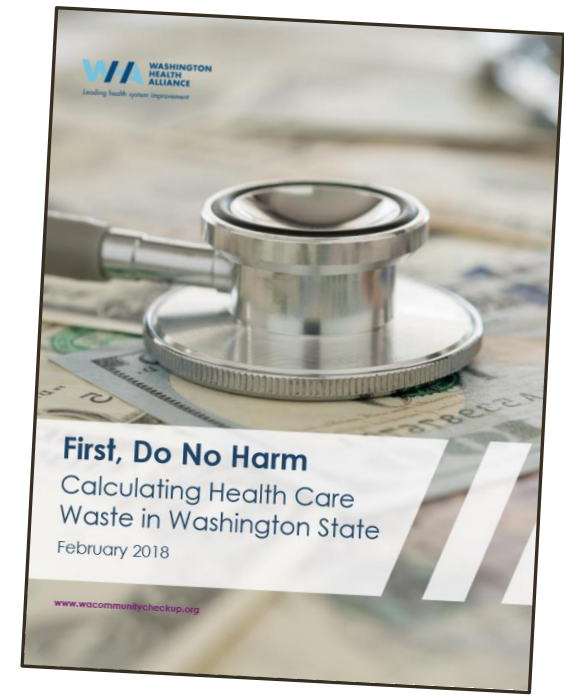
➤ [See our key findings](#)

Based on where patients live

Specific hospital C-section rates also available on Community Checkup website

First, Do No Harm

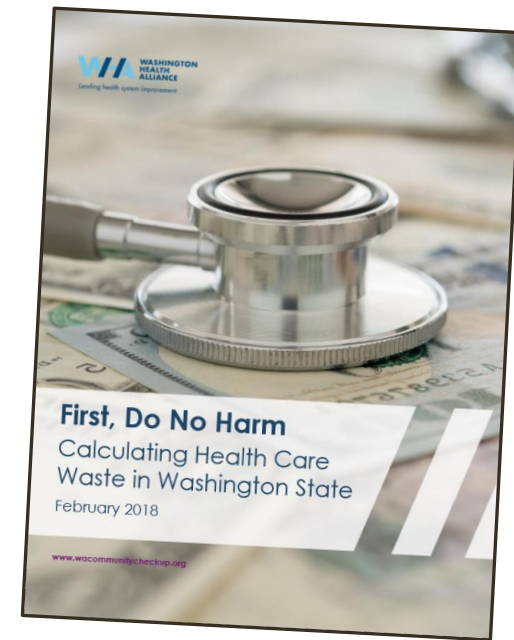
- Used Version 5 of the Health Waste Calculator
- 47 measures all tied to national Choosing Wisely Campaign
- Results based on 2.4 million commercially insured lives in Washington
- July 2015 – June 2016 (measurement year)
- We view results as directional, not absolute



First, Do No Harm

47 measures, 1 year

- 1.5 million services examined
45.7% were determined to be low value
(likely wasteful + wasteful)
- 1.3 million individuals received services
47.9% (622,340 people) received low value services
- Estimated \$785 million spent on services
36% (~\$282 million) spent on low value services



Focus areas for Washington:



	People Receiving Low Value Services*	Estimated Spend on Low Value Services*
Pre-op lab studies and EKG, chest X-Ray, and PFT before low-risk surgery	100,000	\$92 M
Cardiac Testing <ul style="list-style-type: none"> - Annual EKG in low-risk, asymptomatic people - Cardiac Stress Testing 	102,600	\$73 M
Unnecessary Screening <ul style="list-style-type: none"> - Too frequent cervical cancer screening - PSA Screening for prostate cancer - Vitamin D deficiency screening 	205,200	\$41 M
Unnecessary Imaging <ul style="list-style-type: none"> - For eye disease in asymptomatic people - Low back pain, first 6 weeks - Uncomplicated headache 	96,400	\$45 M
Antibiotics for URI within 7 days of diagnosis	73,700	\$2 M

**Numbers rounded; includes wasteful and likely wasteful services*

DROP THE PRE-OP!

Physicians Agree: All patients need pre-op EVALUATION, but a low-risk patient having a low-risk procedure does **not** need pre-op TESTING.

Providing high-quality care to patients includes eliminating unnecessary tests, treatments and procedures.

A recent study in Washington state¹, reveals that at least 100,000 patients received unnecessary pre-op testing during a one-year period, at an estimated cost of over \$92 million—a very conservative estimate.

Routine preoperative lab studies, pulmonary function tests, X-rays and EKGs on healthy patients before low-risk procedures are **not** recommended because they are unlikely to provide useful, actionable information.

Choosing Wisely® Recommendations

- “ Don't obtain baseline laboratory studies in patients without significant systemic disease (ASA I or II) undergoing low-risk surgery – specifically complete blood count, basic or comprehensive metabolic panel, coagulation studies when blood loss (or fluid shifts) is/are expected to be minimal.”
—American Society of Anesthesiologists
- “ Don't order annual electrocardiograms (EKGs) or any other cardiac screening for low-risk patients without symptoms.”
—American Academy of Family Physicians

There are a variety of reasons why unnecessary pre-op tests are ordered, such as:

- Broadly ordering the same pre-op tests for all patients/procedures—based on habit without thoughtful reflection—regardless of a patient's health or a procedure's risk.
- A desire to be “thorough” and/or concern that an incomplete pre-op form may delay the procedure for the patient.
- Discomfort with uncertainty and concern about malpractice.
- A mistaken belief that all insurers require pre-op testing.

¹ First, Do No Harm. <https://www.wacomunitycheckup.org/media/47156/2018-first-do-no-harm.pdf>

Benefits of Reducing Unnecessary Pre-op Testing

For patients:

- Reduces unnecessary time spent at a lab or clinic.
- Reduces patient's financial burden.
- Reduces waiting for test results and anxiety from false-positive results.
- Reduces unnecessary delay before procedure.

For physicians:

- Provides evidence-based care to patients and avoids unnecessary care.
- Reduces time spent reviewing, documenting and explaining test results that add no value and won't impact a decision regarding procedure.
- Reduces risk exposure from not carefully documenting follow-up on all pre-op tests.

Pre-op Testing Prior to Low-Risk Procedures for Low-Risk Patients

	Physical Status of Patient Undergoing Low-Risk* Procedure (determined based on history and evaluation)		
	↓	LOWER RISK PATIENTS	HIGHER RISK PATIENTS
Pre-op Test	ASA I A normal healthy patient	ASA II A patient with mild stable systemic disease	ASA III-V A patient with severe systemic disease or a patient who is not expected to survive without the operation
Chest X-ray	DO NOT ROUTINELY ORDER		DO NOT ROUTINELY ORDER
Coagulation studies			CONSIDER ORDERING PER GUIDELINES
Complete metabolic panel			
EKG or echocardiography			
Full blood count test			
Pulmonary function test			
Urinalysis	DO NOT ROUTINELY ORDER. (unless urologic procedure)		

* Examples of Low-Risk Procedures: arthroscopy and orthopedic procedures that only require local anesthesia; cataract, corneal replacement and other ophthalmologic procedures; cystoscopy and other minor urologic procedures; dental restorations and extractions; endoscopy; hernia repair; minor laparoscopic procedures; superficial plastic surgery.

Recommended Actions

Physicians, Hospitals and Other Health Care Organizations

- Educate physicians and team members (e.g. RN, MA) involved in pre-op testing decision-making.
- Delete prompts for pre-op testing in electronic health record (EHR) order sets designed for low-risk patients undergoing low-risk procedures.
- Use evaluation checklists to optimize surgical outcomes (e.g. nutrition, glycemic control, medication management and smoking cessation).
- In hand-off communication to the surgeon or anesthesiologist after your pre-op evaluation, add this or similar language: “This patient has been evaluated and does not require any pre-operative lab studies, chest X-ray, EKG or pulmonary function test prior to the procedure.”
- Provide prompt and clear peer-to-peer feedback when unnecessary pre-op testing occurs; make this a topic of departmental and inter-departmental quality improvement discussions, including gathering patient data to inform discussions.
- Measure current rate of pre-op testing on low-risk patients prior to a low-risk procedure and track improvement.



Payers

- Review medical policies and prior-authorization requirements to ensure they clearly do **not** require routine testing prior to low-risk procedures on low-risk patients.
- Utilize health plan data and analytics to measure and monitor use of pre-op testing on low-risk patients prior to low-risk procedures.
- Provide feedback on pre-op testing on low-risk patients prior to low-risk procedures to physicians and health care organizations.



WASHINGTON STATE TASK FORCE



For more information and resources, visit:
wsma.org/Choosing-Wisely



WASHINGTON STATE TASK FORCE



For more information and resources, visit:
wsma.org/Choosing-Wisely

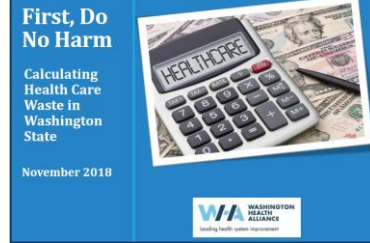
First, Do No Harm -Part Deux



Many of the same areas of care remain in our “top 10” list, for example:

- Annual EKGs and other cardiac screening for low-risk patients
- Imaging tests for eye disease in people w/out significant eye disease
- Baseline lab studies, EKGs, chest X-rays and pulmonary function testing for healthy individuals before *low-risk procedures*
- Too frequent screening for prostate cancer and cervical cancer
- Population-based screening for Vitamin D deficiency
- Antibiotics for URI and ear infections

First, Do No Harm -Part Deux



But a couple of new areas of low value health care are evident, for example:

- Opiates prescribed for acute low back pain in first 4 weeks
- Two or more concurrent antipsychotic medications

New Reports Coming: Variation in Pricing



Three Reports due out in early 2019

1. Price of Potentially Avoidable ER Visits and Hospital Readmissions
2. Spending Trend Analysis
3. Price Variation by Clinical Condition

Price of Potentially Avoidable Events

Example of existing report output:

HOSPITALS WITH HIGHEST RATES OF POTENTIALLY AVOIDABLE ER VISITS FOR COMMERCIALY-INSURED PATIENTS <i>(SIGNIFICANTLY HIGHER THAN PUGET SOUND AVERAGE)</i>	
Hospital	Avoidable ER rate (%)
1. Snoqualmie Valley Hospital	14.0%
2. Swedish Medical Center – Mill Creek	10.8%
3. MultiCare Allenmore Hospital	10.3%
4. Swedish Medical Center - Issaquah	9.8%
5. Capital Medical Center	9.7%

MEDICAL GROUPS WITH HIGHEST POSSIBLE COMMERCIALY INSURED AVOIDABLE ER VISIT RATES PATIENTS <i>(SIGNIFICANTLY HIGHER THAN PUGET SOUND AVERAGE)</i>	
Medical Groups	Avoidable ER rate (%)
Community Health Center of Snohomish County	17.4%
LG Steck Memorial Clinic	15.4%
Hall Health Primary Care Center	12.9%
Birth and Family Clinic	12.5%
St. Peter Family Practice	12.2%

Adding a new panel:

Average Price per Potentially Avoidable Visit	Total Spending for Potentially Avoidable Visits
\$#,###	\$#,###,###
\$#,###	\$#,###,###
\$#,###	\$#,###,###
\$#,###	\$#,###,###
\$#,###	\$#,###,###

Average Price per Potentially Avoidable Visit	Total Spending for Potentially Avoidable Visits
\$#,###	\$#,###,###
\$#,###	\$#,###,###
\$#,###	\$#,###,###
\$#,###	\$#,###,###
\$#,###	\$#,###,###

Spending Trend Analysis

- Geared toward self-funded purchasers who supply data to the Alliance
- Enables them to zero in on some of the drivers of their health care spending, allowing them to sharpen their strategic and operational options for addressing the impact on their budget over time

Service	THIS YEAR'S Spending (PMPM)	LAST YEAR'S Spending (PMPM)	Change (%)	Change (PMPM)	What is contributing to the change in spending? (PMPM)				Total Change in Spending
					changes in Age/Gender Mix account for:	changes in Service Frequency account for:	changes in Treatment Intensity account for:	changes in Price Level account for:	
Pulmonary Edema	\$22.90	\$21.99	4.2%	\$0.92	\$0.08	(\$0.05)	(\$0.01)	\$0.89	\$20,612
COPD	\$18.99	\$17.66	7.5%	\$1.33	\$0.11	\$0.25	\$0.44	\$0.53	\$29,908
Pneumonia	\$27.32	\$25.40	7.5%	\$1.91	\$0.17	\$0.14	\$0.16	\$1.43	\$43,023
Perc CV Procedures	\$26.45	\$25.13	5.3%	\$1.32	\$0.15	\$0.03	\$0.03	\$1.12	\$29,756
Circulatory Disorders	\$18.88	\$18.12	4.2%	\$0.76	\$0.09	\$0.00	\$0.01	\$0.65	\$16,988
Heart Failure	\$22.77	\$22.31	2.0%	\$0.46	\$0.06	(\$0.00)	(\$0.00)	\$0.40	\$10,246
Cardiac Arrhythmia	\$27.33	\$26.51	3.1%	\$0.82	\$0.09	\$0.01	\$0.05	\$0.66	\$18,445
Spinal Fusion	\$13.70	\$12.88	6.4%	\$0.82	\$0.06	\$0.33	\$0.08	\$0.35	\$18,492
Major Joint Replacement	\$16.08	\$15.11	6.4%	\$0.96	\$0.08	\$0.14	\$0.20	\$0.55	\$21,706
Cellulitis	\$28.26	\$25.72	9.9%	\$2.54	\$0.13	\$1.53	\$0.01	\$0.89	\$57,227
Metabolic disorders	\$19.26	\$17.53	9.9%	\$1.73	\$0.07	(\$0.06)	(\$0.01)	\$1.73	\$39,006
Urinary Tract Infections	\$23.01	\$22.55	2.0%	\$0.46	\$0.03	\$0.18	\$0.27	(\$0.01)	\$10,355
Septicemia	\$10.93	\$10.60	3.1%	\$0.33	\$0.01	\$0.12	\$0.13	\$0.07	\$7,377
	\$275.87	\$261.51	5.5%	\$14.36	\$1.13	\$2.62	\$1.35	\$9.27	\$323,141
					8%	18%	9%	65%	

Price Variation by Clinical Condition or Episode of Care

- Aggregates allowed charges by clinically similar inpatient events (APR-DRGs) and display multi-payer price variation by provider organization
 - Episodes of care in Phase 2
- Shows the (total amount spent for all procedures, the median price per case, and the lower and higher case prices (to show range)

	Neck & back joint degeneration, localized, with surgery	Infections of lower genitourinary system	Major bacterial infections of skin, w/o surgery	Coronary artery disease, w/o AMI, with angioplasty
State of Washington	\$74,639,868	\$31,978,835	\$25,942,849	\$63,329,559
	\$64,583	\$12,819	\$13,113	\$48,067
	\$32,291 \$75,346	\$4,273 \$17,091	\$10,927 \$15,298	\$40,056 \$80,111
Admitting hospital or attributed medical group 001	\$3,326,009	\$815,264	\$885,097	\$5,152,765
	\$32,291	\$7,691	\$6,556	\$38,453
	\$21,528 \$48,437	\$6,409 \$8,973	\$3,278 \$10,927	\$32,045 \$57,680
Admitting hospital or attributed medical group 002	\$9,493,656	\$2,049,696	\$802,488	\$5,407,519
	\$96,874	\$16,664	\$7,868	\$43,260
	\$64,583 \$161,457	\$11,109 \$19,442	\$5,245 \$10,490	\$28,840 \$57,680
Admitting hospital or attributed medical group 003	\$4,585,371	\$676,823	\$2,386,485	\$7,873,348
	\$32,291	\$10,255	\$17,046	\$62,487
	\$26,909 \$43,055	\$6,837 \$13,673	\$11,364 \$19,887	\$31,243 \$72,901
"	"	"	"	"
"	"	"	"	"
Admitting hospital or attributed medical group 00N	\$3,461,632	\$722,970	\$767,084	\$4,412,536
	\$51,666	\$7,691	\$6,556	\$43,260
	\$43,055 \$60,277	\$5,127 \$8,973	\$3,278 \$10,927	\$14,420 \$72,100

Total Amount Spent for All Procedures	
Median Price per Case	
Lower case price	Higher case price

Additional Information

Washington Health Alliance

- **13 year history.** Grassroots effort gave us our start in 2005.
- **Multi-stakeholder.** 185+ member organizations statewide representing health care purchasers, health plans, providers and other health partners.
- **Governed by a diverse, multi-stakeholder** board of directors
- **Purchaser-led.** The majority of our *governing* members represent employers and labor union trusts.
- **Non-profit.** We are a designated 501 (c)3.
- **Non-partisan.** We engage in lobbying efforts on a very limited basis and only on topics that are directly related to our mission and core work.
- Started in Puget Sound, **expanded statewide in 2013.**

The Alliance's Mission and Vision

Mission

The mission of the Washington Health Alliance is to build and maintain a strong alliance among purchasers, providers, health plans, and consumers to promote health and improve the quality and affordability of the health care system in Washington state.

Vision

Physicians, other providers and hospitals in Washington will achieve top 10% performance in the nation in the delivery of equitable, high quality, evidence-based care and in the reduction of unwarranted variation, resulting in a significant reduction in the rate of medical cost trend.

Examples of the Alliance's Broad Membership



The Everett Clinic



MultiCare Rockwood Clinic



The Polyclinic



We do all of our work with key stakeholders

Board of Directors	Purchaser-led, chaired by a purchaser, multi-stakeholder, 24 members	Sets strategy direction and policy, financial oversight
Quality Improvement Committee	24 members, all clinician leaders from medical groups, hospitals and health plans statewide	Improving transparency of quality, patient-safety, patient experience, access, and disparities in care
Health Economics Committee	22 members, multi-stakeholder	Improving transparency of utilization and price variation
Consumer Education Committee	15 members, multi-stakeholder	Patient-centered and culturally competent communication strategies that enable best practice in consumer education
Purchaser Affinity Group	Open to all purchaser members of the Alliance	Information, education and alignment of strategy related to purchasing value-based health care

Questions?



**Nancy A. Giunto, Executive Director
Washington Health Alliance**

**Washington Health Alliance:
Leading Health System Improvement
Since 2005**



MASSACHUSETTS
HEALTH POLICY COMMISSION

Massachusetts Health Policy Commission

Research based on the APCD

Nov 14, 2018

In 2012, Massachusetts became the first state to implement an all-payer target for reducing health care spending growth

Chapter 224 of the Acts of 2012

An Act **Improving the Quality** of Health Care and **Reducing Costs** through Increased **Transparency, Efficiency, and Innovation.**



GOAL

Reduce total health care spending growth to meet the **Health Care Cost Growth Benchmark**, which is set by the HPC and tied to the state's overall economic growth.



VISION

A **transparent** and **innovative** healthcare system that is **accountable** for producing **better health** and **better care** at a **lower cost** for the people of the Commonwealth.

The HPC employs four core strategies to advance its mission

RESEARCH AND REPORT
INVESTIGATE, ANALYZE, AND REPORT
TRENDS AND INSIGHTS



CONVENE

BRING TOGETHER STAKEHOLDER
COMMUNITY TO INFLUENCE THEIR
ACTIONS ON A TOPIC OR PROBLEM



WATCHDOG

MONITOR AND INTERVENE WHEN
NECESSARY TO ASSURE MARKET
PERFORMANCE



PARTNER

ENGAGE WITH INDIVIDUALS, GROUPS,
AND ORGANIZATIONS TO ACHIEVE
MUTUAL GOALS



The Massachusetts All Payer Claims Database

- Data is collected by the Center for Health Information and Analysis (CHIA) from private payers and government (Medicare and MassHealth)
- Calendar-year data are made available to researchers, government agencies and the public – including roughly 6-months claim rollout after the end of the calendar year
 - 2017 data is just now becoming available
- CHIA does some reporting and analysis based on the APCD
 - E.g. price transparency tool (CompareCare)



- Compare Treatment Costs
- Get Quality Care
- Ask Informed Questions
- Troubleshoot an Issue

Endoscopy-43239 w/ Colonoscopy

Endoscopy with biopsy of the esophagus, stomach, and/or upper small intestine with colonoscopy - 43239 with 45378,45380,G0105,or G0121 - includes costs for facility, physician, and anesthesiologist, but not for surgical pathology
 Procedure code 43239 w/ Colonoscopy.



To get a precise cost, ask for a quote from your insurance company.

The cost of a service will vary based on your insurance company and health care provider.
[Learn why.](#)

GET A QUOTE



Talking to your doctor about this treatment can help you get better outcomes.

[Learn the right questions to ask](#) before having this procedure.

I'M LOOKING FOR CARE PROVIDERS

Within from of

FIND A PROVIDER BY NAME

MY INSURANCE COMPANY IS

(What if I'm not insured?)

COMPARE SELECTED

Provider	Type of provider	Town/City	What might this procedure cost? ⓘ	Details
<input type="checkbox"/> Children's Hospital Boston	Acute Hospital	Boston	\$ 6,778	<input type="button" value="QUALITY"/>
<input type="checkbox"/> Massachusetts General Hospital	Acute Hospital	Boston	\$ 4,877	<input type="button" value="QUALITY"/>
<input type="checkbox"/> Brigham And Women's Hospital,Inc.	Acute Hospital	Boston	\$ 4,625	<input type="button" value="QUALITY"/>
<input type="checkbox"/> Tufts Medical Center	Acute Hospital	Boston	\$ 3,893	No details available. Why?

The Health Policy Commission's use of the APCD

- The HPC obtains the data each year and produces reports and analysis using APCD to support its policy mission
- HPC employs a contractor to clean, validate, and enhance the data
 - Construction of person-year summary files of utilization and spending by category of care (using Health Care Cost Institute methods)
 - Calculation of risk-scores and chronic disease flags based on Johns Hopkins ACG grouper
 - Addition of prescription drug category and class groupers
 - Assemble costs and utilization into discrete inpatient stays and ambulatory visits

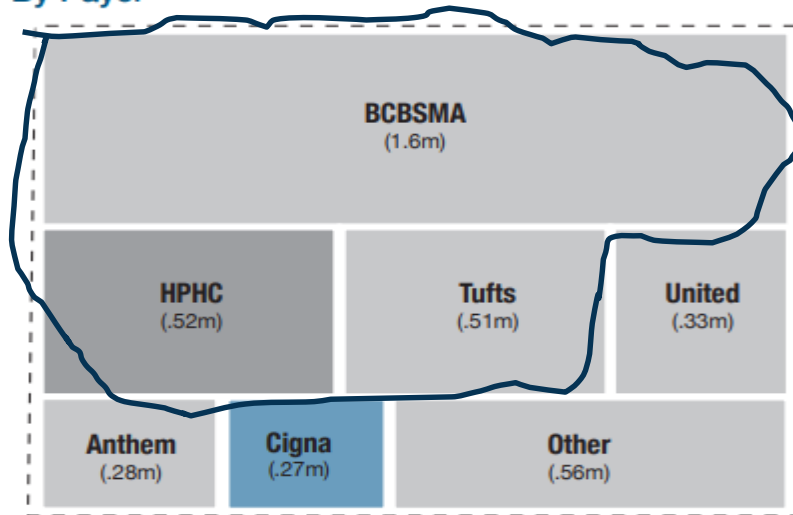
The Health Policy Commission primarily uses commercial claims from the 3 largest payers in Massachusetts

Private Commercial Enrollment

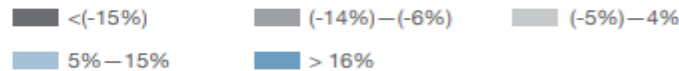
March 2018

4.1 Million Primary, Medical Members (+0.5% Since March 2017)

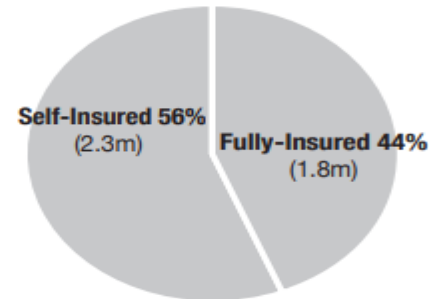
By Payer



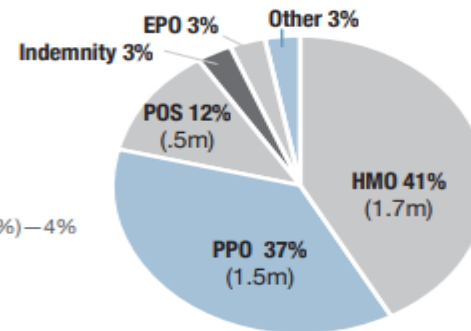
Change Over Past Year



By Funding Type



By Product Type



Source: MA APCD, supplemental payer

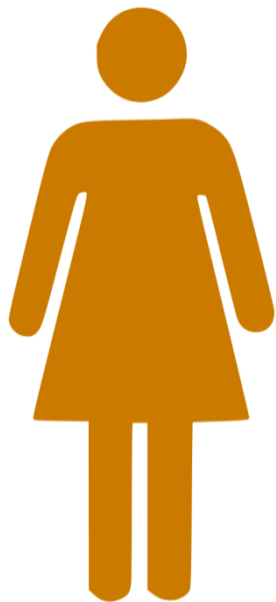
Notes: Data for Health Plans Inc. is included under its parent company, Harvard Pilgrim Health Care. Data for Network Health is included under its parent company, Tufts Health Plan. "Other" includes Aetna, Boston Medical Center Healthnet Plan (BMCHP), Celticare, Fallon, Health New England (HNE), Minuteman, and Neighborhood Health Plan (NHP).

Private commercial data includes enrollment in subsidized health plans offered through the Massachusetts Health Connector (ConnectorCare and Advance Premium Tax Credits).

Examples of HPC analyses using APCD

- Copayments for contraception
- Out of Network spending
- Variation in hospital prices for low-risk births
- Spending patterns by attributed provider group
 - Total spending
 - Spending by category of service
 - Spending on low-value care

From 2012-2014, cost sharing on prescription drugs decreased substantially for women, due in large part due to the ACA



Year	Women	Men
	Percent of claims with \$0 cost sharing	Percent of claims with \$0 cost sharing
2012	3.2%	0.9%
2013	10.7%	1.6%
2014	13.4%	2.4%



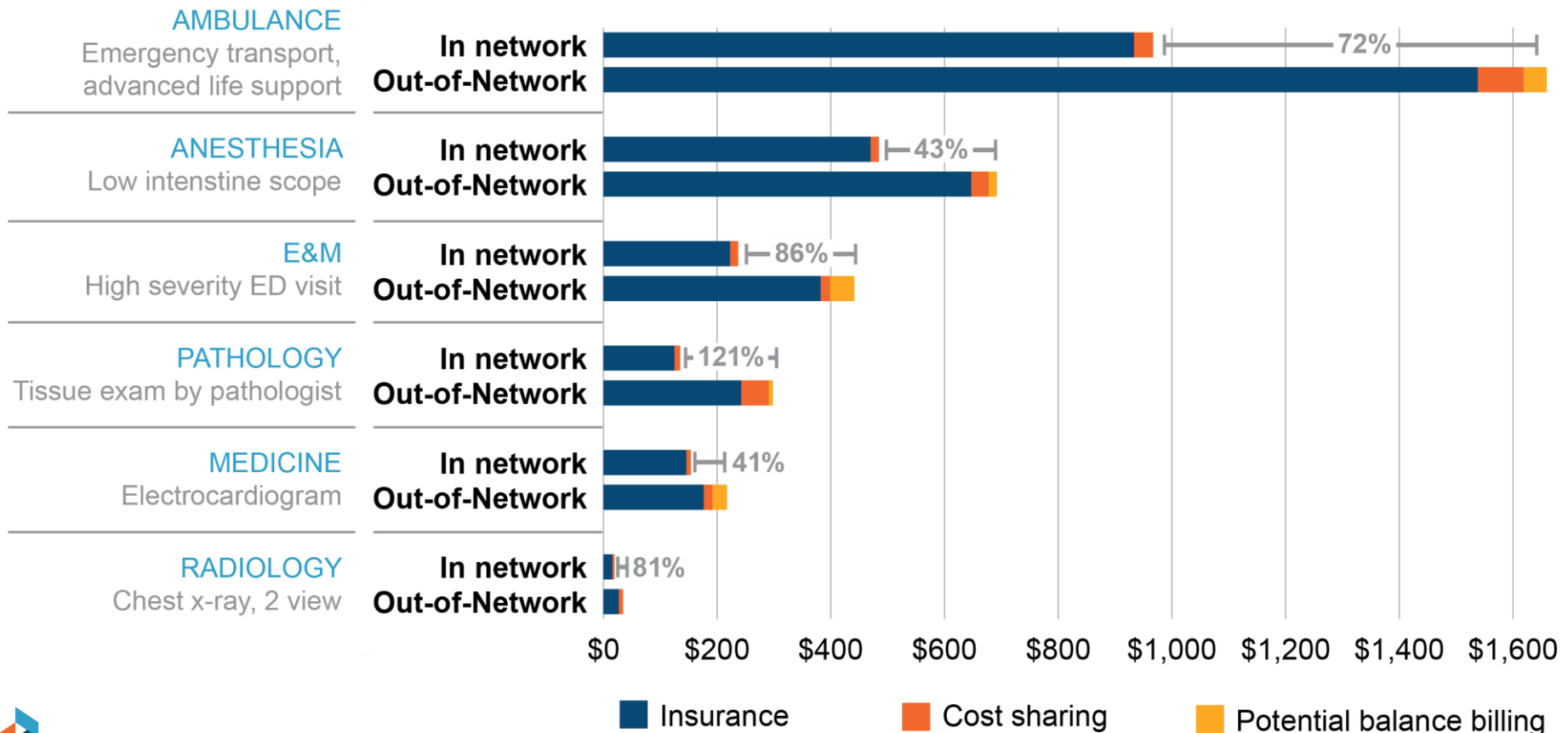
- Many contraceptive methods are included under the ACA's mandatory coverage
- Average annual cost sharing particularly dropped for women from 2012 to 2014 – a **14%** decline (\$205 to \$176) versus a **4%** decline for men (\$202 to \$193)

Notes: PMPY= per member per year. Data include privately insured individuals covered by Tufts Health Plan, Blue Cross Blue Shield of MA, and Harvard Pilgrim Health Care who use the prescription drug benefit at least once in the calendar year. Figures exclude impact of rebates.

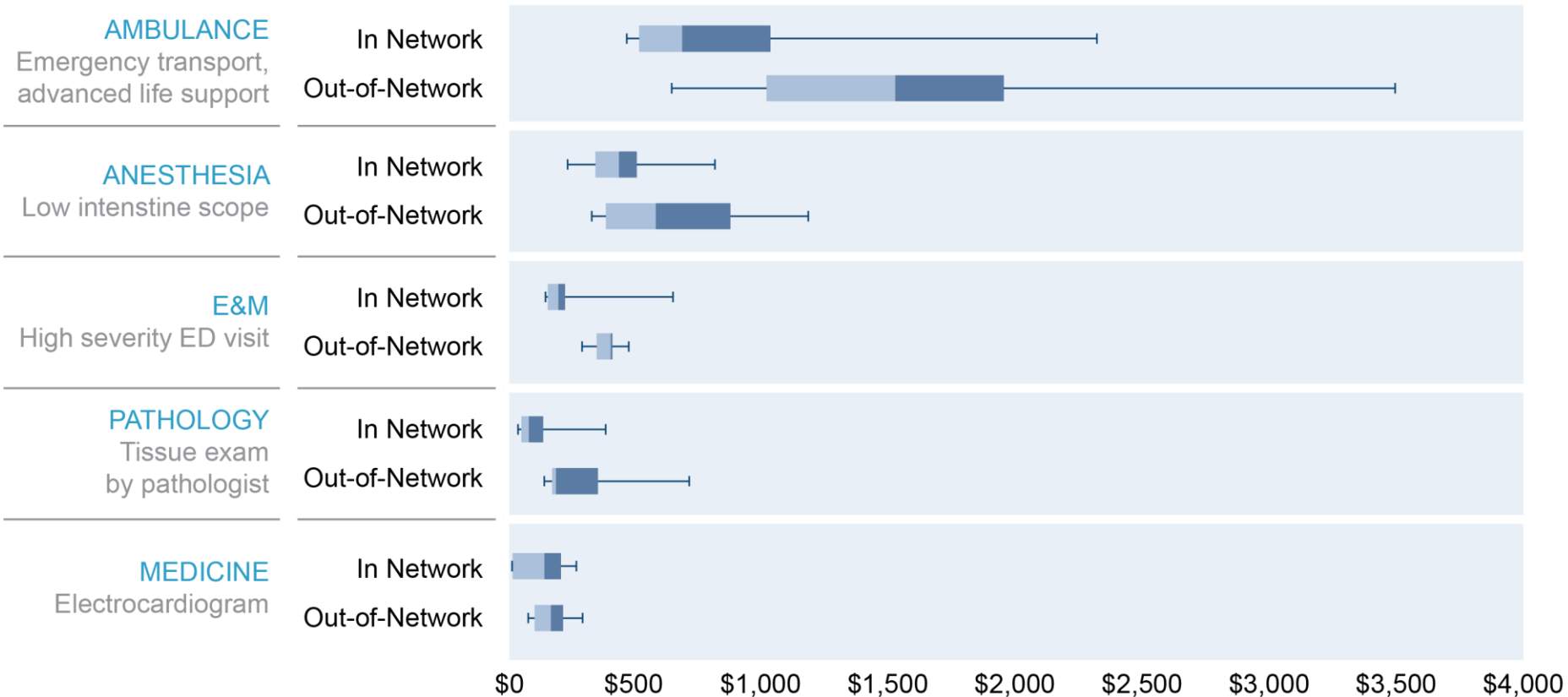
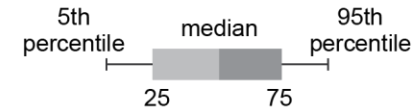
Source: HPC analysis of Massachusetts All-Payer Claims Database, 2012-2014

Across a range of services, the average spending on out-of-network claims far exceeds the average spending on in-network claims

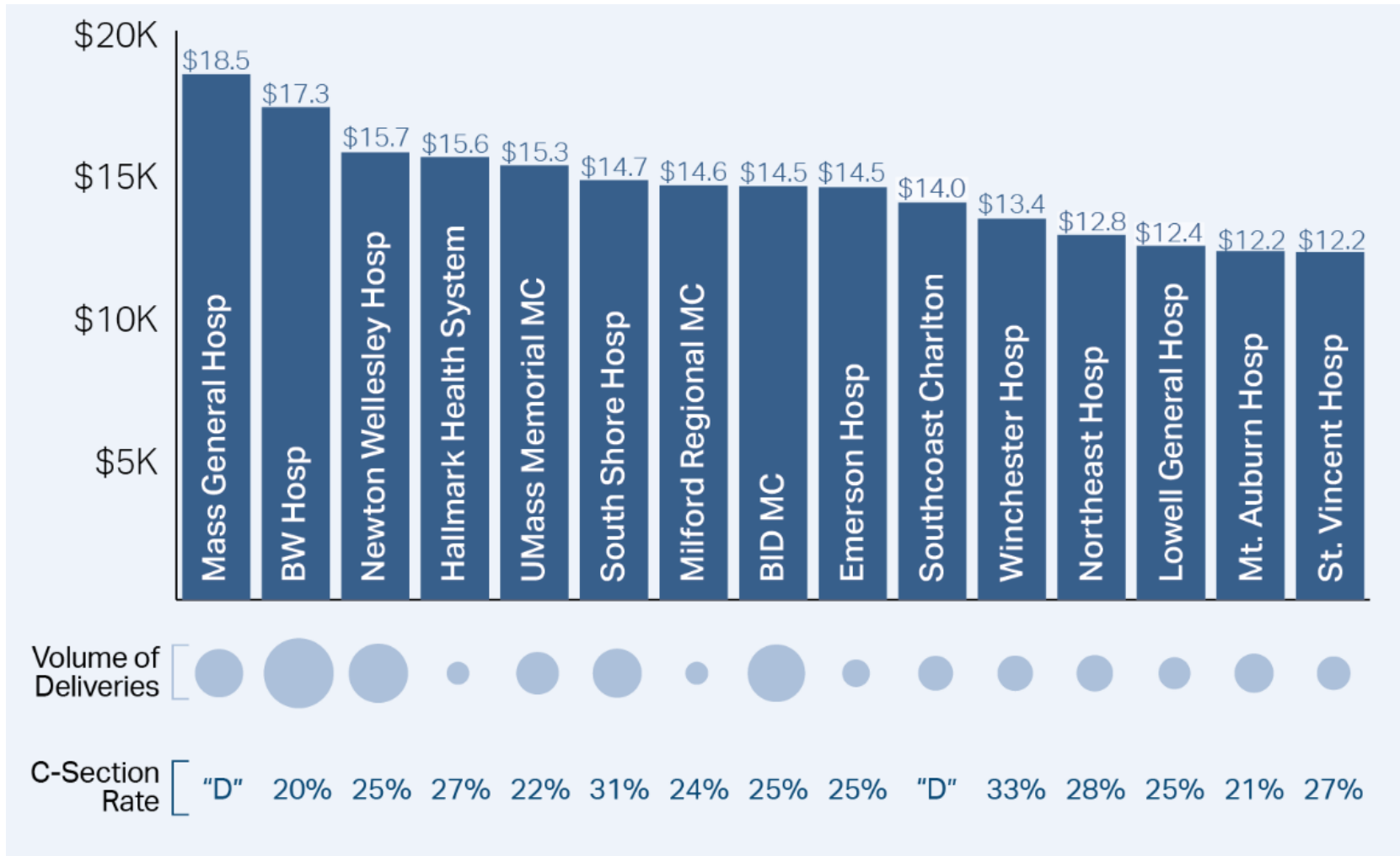
- Combined spending on out-of-network professional claims for both payers in the sample totaled **\$28.7 million** in 2014.
 - \$27.0 million** paid by insurers
 - \$2.2 million** that might have been balance billed to patients



For the same services, the range of spending on out-of-network claims is often larger than for in-network claims



Price varies extensively without any associated variation in quality

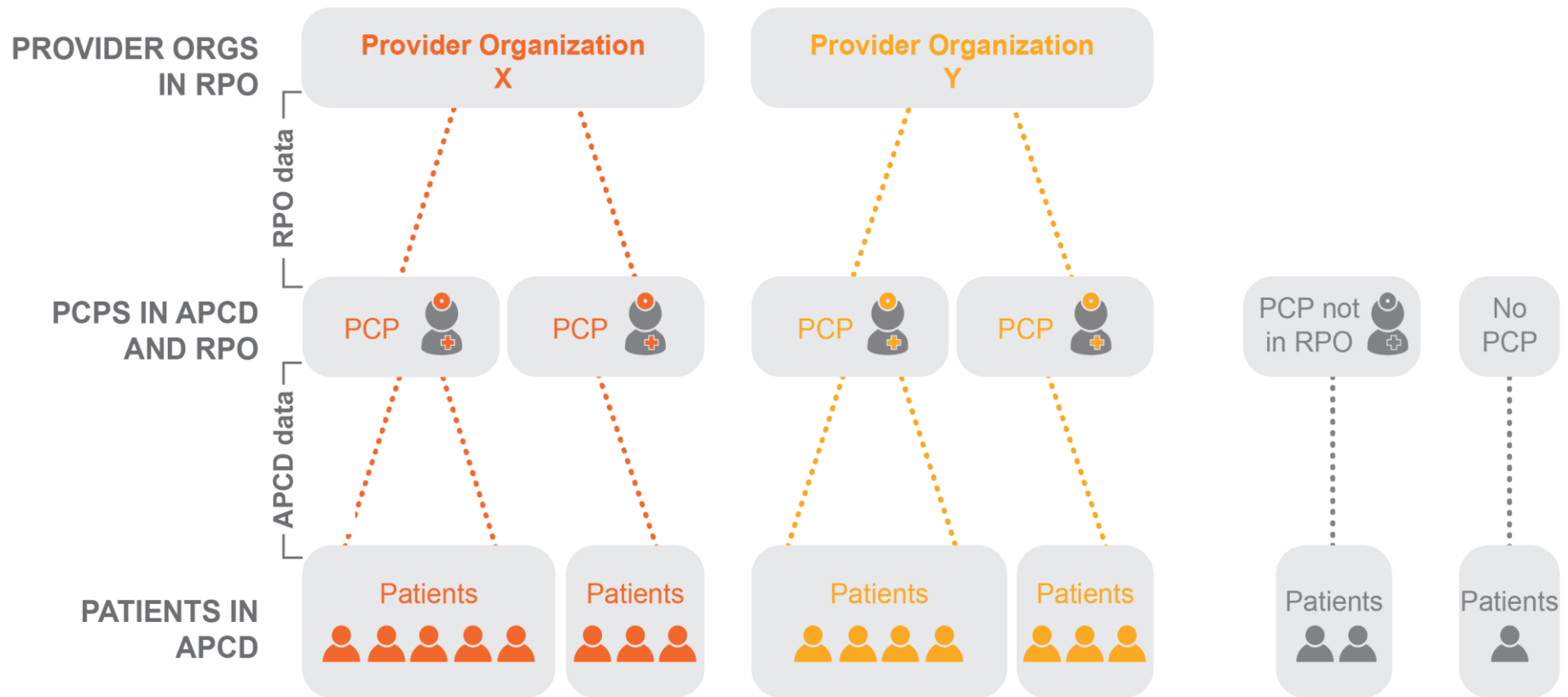


Source: HPC Analysis—CHIA, All Payer Claims Database, 2011-2012, CHIA, Hospital Inpatient Discharge Database, 2014, Leapfrog Group, 2015

Notes: C-Section Rate is the NTSV C-Section Rate calculated from the Leapfrog Group, 2015, "D" means the hospital declined to provide the data

Volume of deliveries is all commercial deliveries for 2014

Organizations are compared by averaging spending and utilization among patients assigned or attributed to them



Provider organizations in Massachusetts vary across a number of dimensions

Data for 1.44m attributed adult commercial patients, 2014

	Risk score	Zip-code income	Area deprivation index*	% over 55	% Self-insured	% Female
Atrius	.96	\$83,284	76.7	26%	52%	56.4%
BMC	.89	\$63,319	88.5	20%	52%	54.2%
Lahey	1.05	\$85,677	77.8	31%	43%	51.7%
MACIPA	.94	\$85,615	70.1	28%	47%	53.5%
Partners	1.03	\$86,017	76.6	29%	44%	55.5%
Southcoast	1.09	\$59,721	97.6	30%	50%	51.4%
Steward	1.05	\$70,131	90.1	30%	48%	52.4%
<i>All physician-led</i>	.96	\$81,723	80.2	25.8%	47.8%	55.3%
<i>All other hospital-anchored</i>	1.02	\$74,485	86.6	29.8%	45.7%	52.6%
<i>All AMC-anchored</i>	1.02	\$81,646	80.7	28.3%	44.5%	53.7%

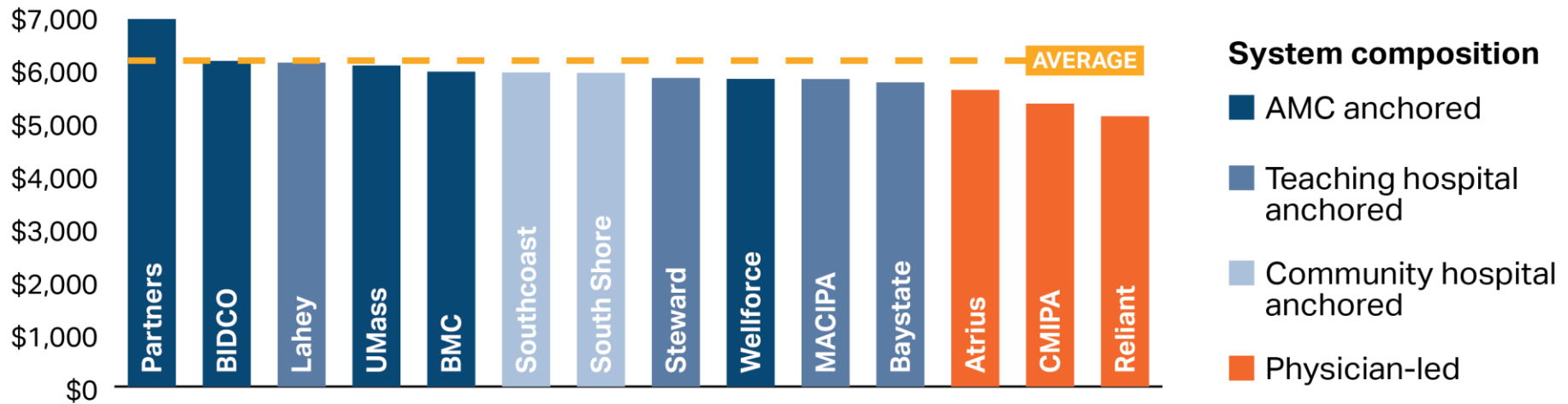
Note: *The area deprivation index combines a number of socio-economic-related measures by census block in the U.S. (including home values and amenities, employment, poverty, and education levels) measured at the 9-digit-zip code level. It is collapsed to 5 digits in this data. Values in Massachusetts range from 120 (greatest deprivation) in parts of Boston and Springfield to -12 (least deprivation) in Weston.

Member spending in the highest-cost organization was 36% higher than in the lowest-cost organization

Average commercial PMPY spending, by PCP group, 2014

Risk adjusted

Commercial members

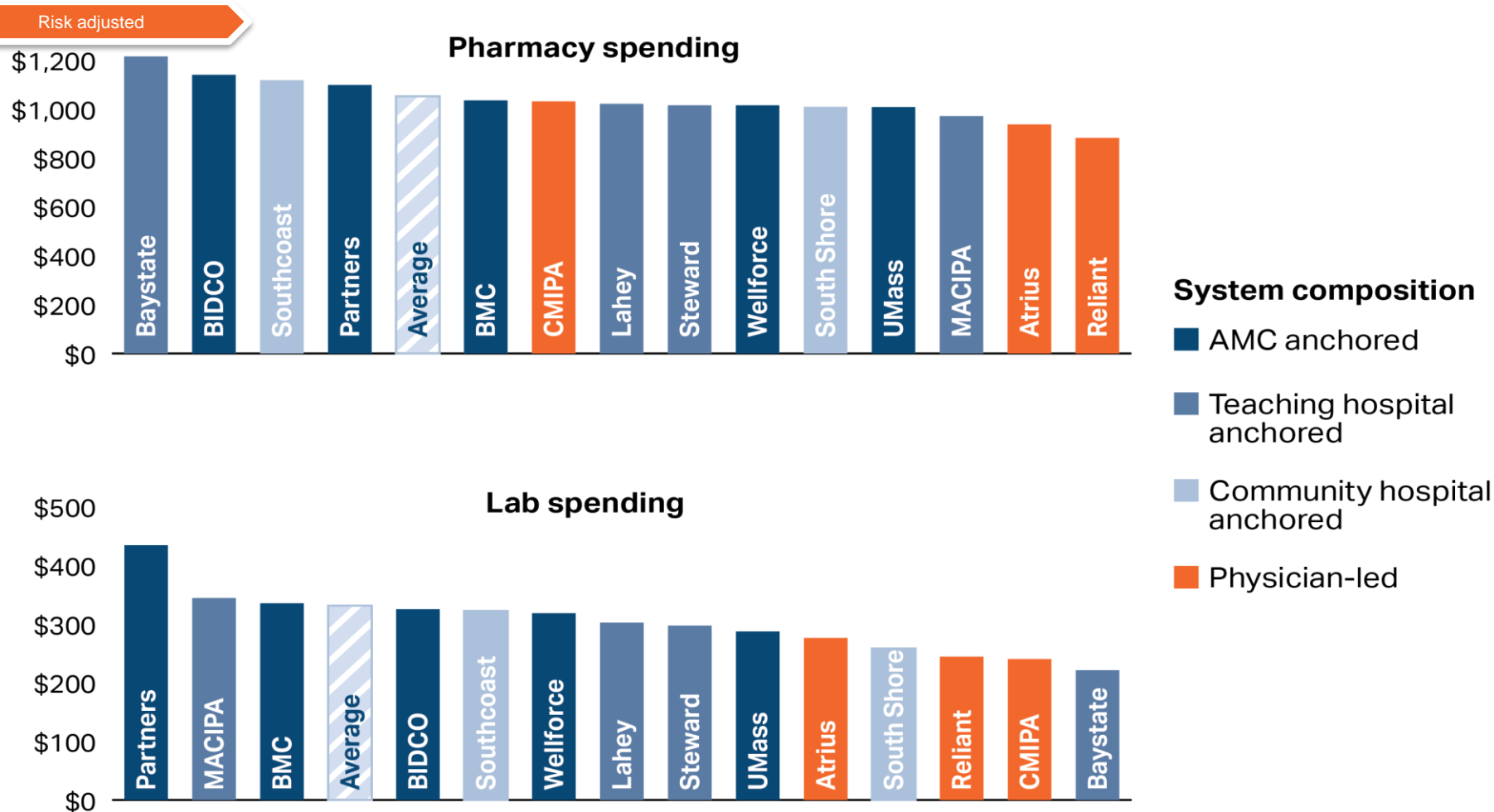


Notes: PMPY= per member per year, PCP= primary care provider, AMC= academic medical center. Spending adjusted using ACG risk-adjuster applied to claims data. Data includes only adults over the age of 18. Commercial payers include Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. MassHealth includes only MCO enrollees who had coverage through BMC HealthNet, Neighborhood Health Plan, or Network Health/Tufts. Members in the MassHealth Medical Security Program (MSP) were excluded. Shown here are the 14 largest PCP groups as identified by number of patients attributed in the All-Payers Claims Database. Average calculated using all attributed adult members in the sample, not just those with a PCP associated with one of the 14 largest provider groups.

Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2014; Registry of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

Pharmacy spending varied 38% across organizations and laboratory spending varied two-fold

Average commercial PMPY spending, by PCP group, by category of spending, 2014



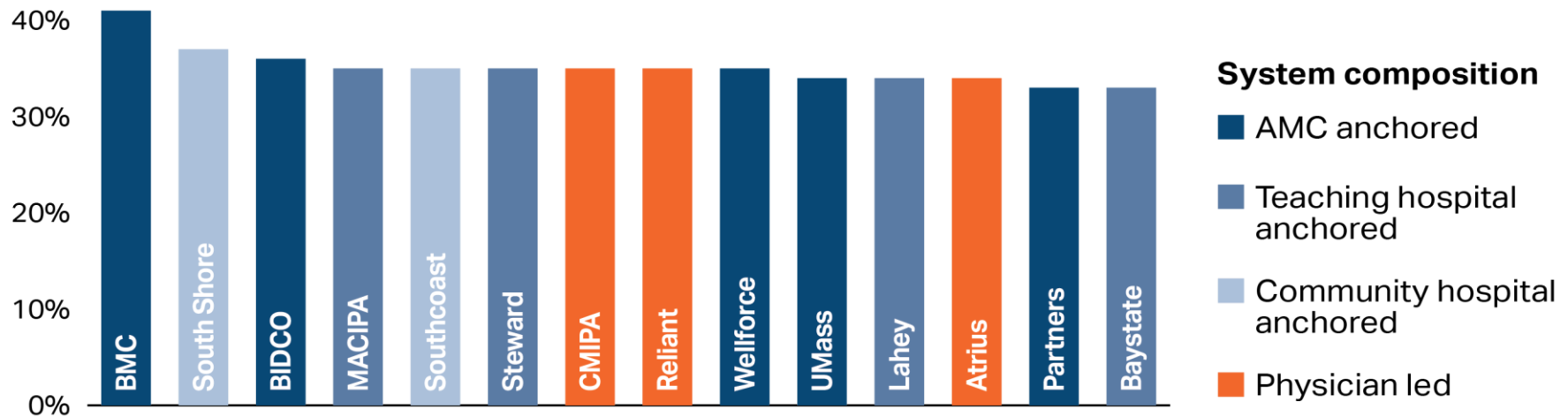
Notes: PMPY= per member per year; PCP= primary care provider, AMC= academic medical center. Laboratory spending includes both professional and outpatient claims. Spending adjusted using ACG risk-adjuster applied to claims data. Data include only privately insured adults (ages 18+) covered by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. Shown here are the 14 largest PCP groups as identified by number of patients attributed in the All-Payers Claims Database. Average calculated using all attributed adult members in the sample, not just those with a PCP associated with one of the 14 largest provider groups.

Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2014; Registry of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

The percentage of ED visits that were potentially avoidable varied from 41% to 33%

Percent of avoidable ED visits, by system composition, 2014

Risk and demographic adjusted



Notes: ED= emergency department; PCP= primary care provider, AMC= academic medical center. Adjusted avoidable ED visits by provider group were defined according to the NYU Billings Algorithm and calculated after adjusting for the following patient characteristics: risk score, median community income, area deprivation index, fully insured (commercial patients only), age, gender, and payer. Data include only privately insured adults (ages 18+) covered by Blue Cross Blue Shield of Massachusetts, Harvard Pilgrim Health Care and Tufts Health Plan. Shown here are the 14 largest PCP groups as identified by number of patients attributed in the All-Payers Claims Database. Average calculated using all attributed adult members in the sample, not just those with a PCP associated with one of the 14 largest provider groups.

Sources: HPC analysis of Massachusetts All-Payer Claims Database, 2014; Registry of Provider Organizations, 2016; SK&A Office and Hospital Based Physicians Databases, December, 2015

Comparison of GIC members with PCPs in physician-led provider groups with those with PCPs in AMC-anchored groups

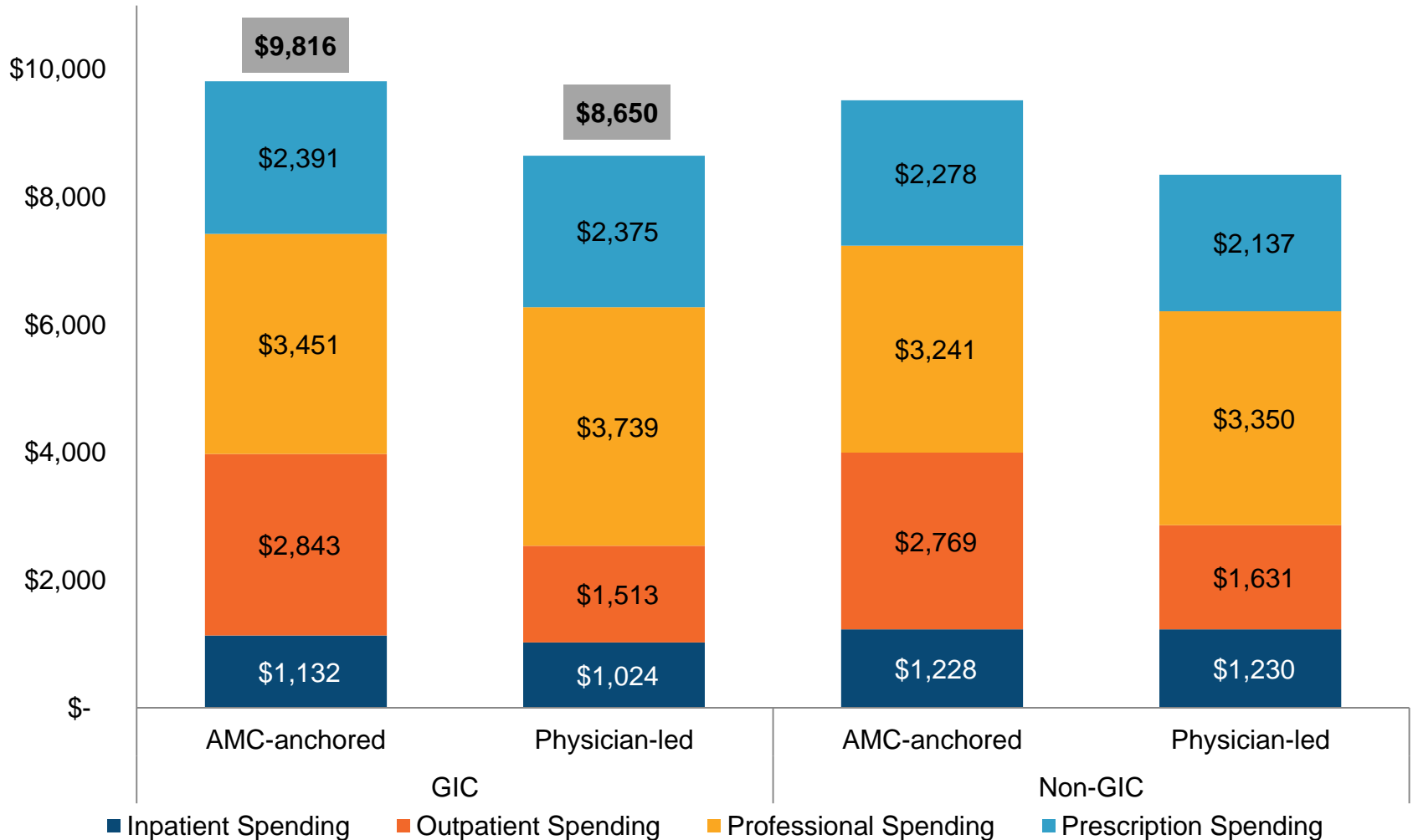
- Use homogeneous subpopulations of GIC members to compare spending and utilization based on provider group:
 - Healthy Cohort (No chronic diseases)
 - Cardio Metabolic Cohort (Members may have cardiovascular disease, hypertension, and/or diabetes)
- Compare two provider group categories:

Physician-led
<ul style="list-style-type: none">• Atrius (76%)• Reliant (18%)• CMIPA (6%)

AMC-anchored
<ul style="list-style-type: none">• Partners (46%)• BIDCO (21%)• Wellforce (20%)• UMass (13%)

Spending is 13% higher for GIC members with chronic cardio metabolic diseases and PCPs in AMC-Anchored groups

On average, there is \$1,200 higher spending for individuals with a PCP in an AMC-Anchored group compared to a Physician-Led group; trends are similar for Non-GIC members.

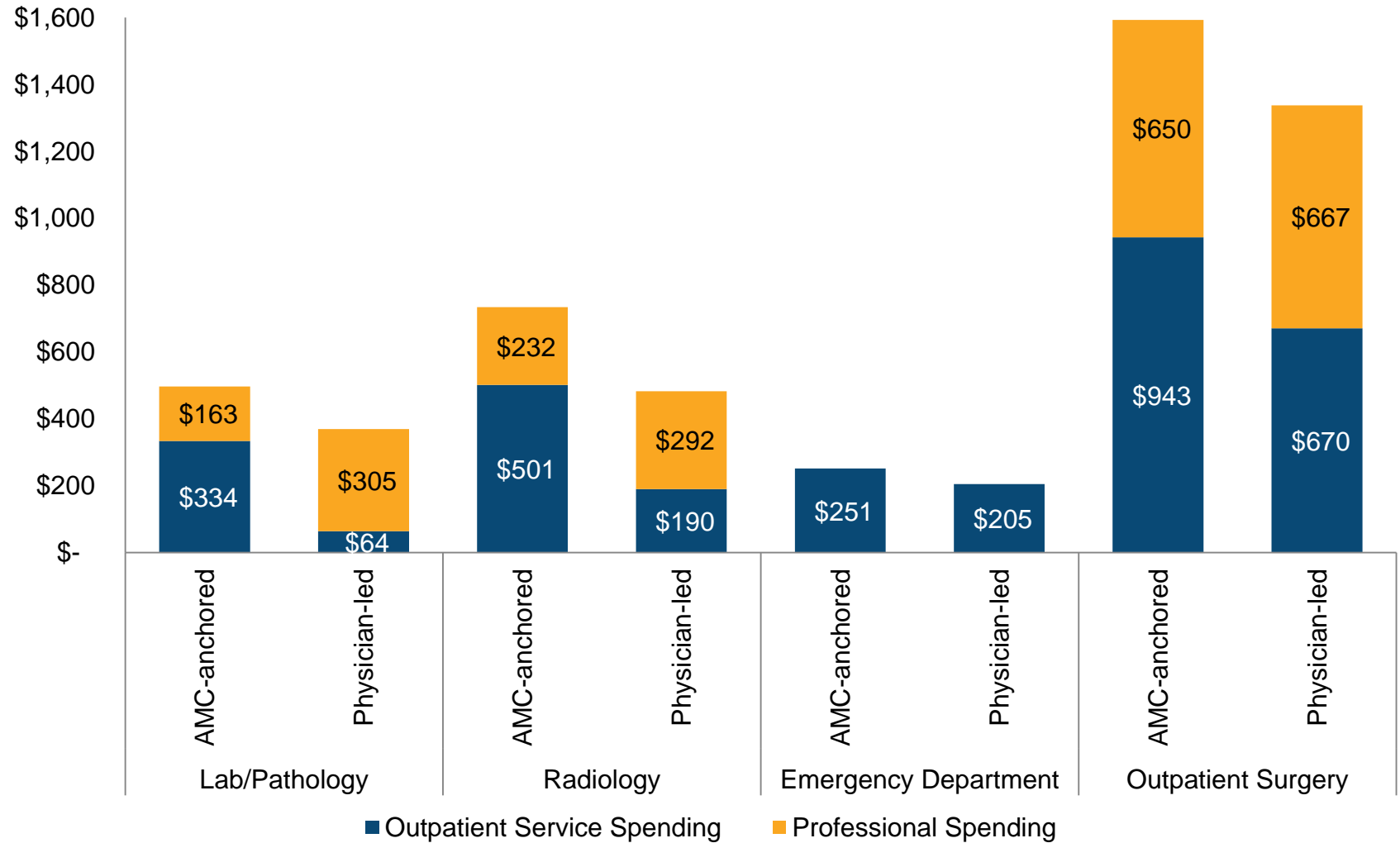


Underlying data correspond with the cardio metabolic cohort (n1 = 17,439 for GIC members; n2 = 141,531 for Non-GIC members). This cohort follows earlier mentioned inclusion criteria, and includes individuals with hypertension, diabetes, and cardiovascular disease.

Source: HPC analysis of 2015 APCD Commercial analytic file.

Spending differences occur across all categories of outpatient spending, including labs and radiology

GIC members with cardiovascular disease, diabetes, and/or hypertension.

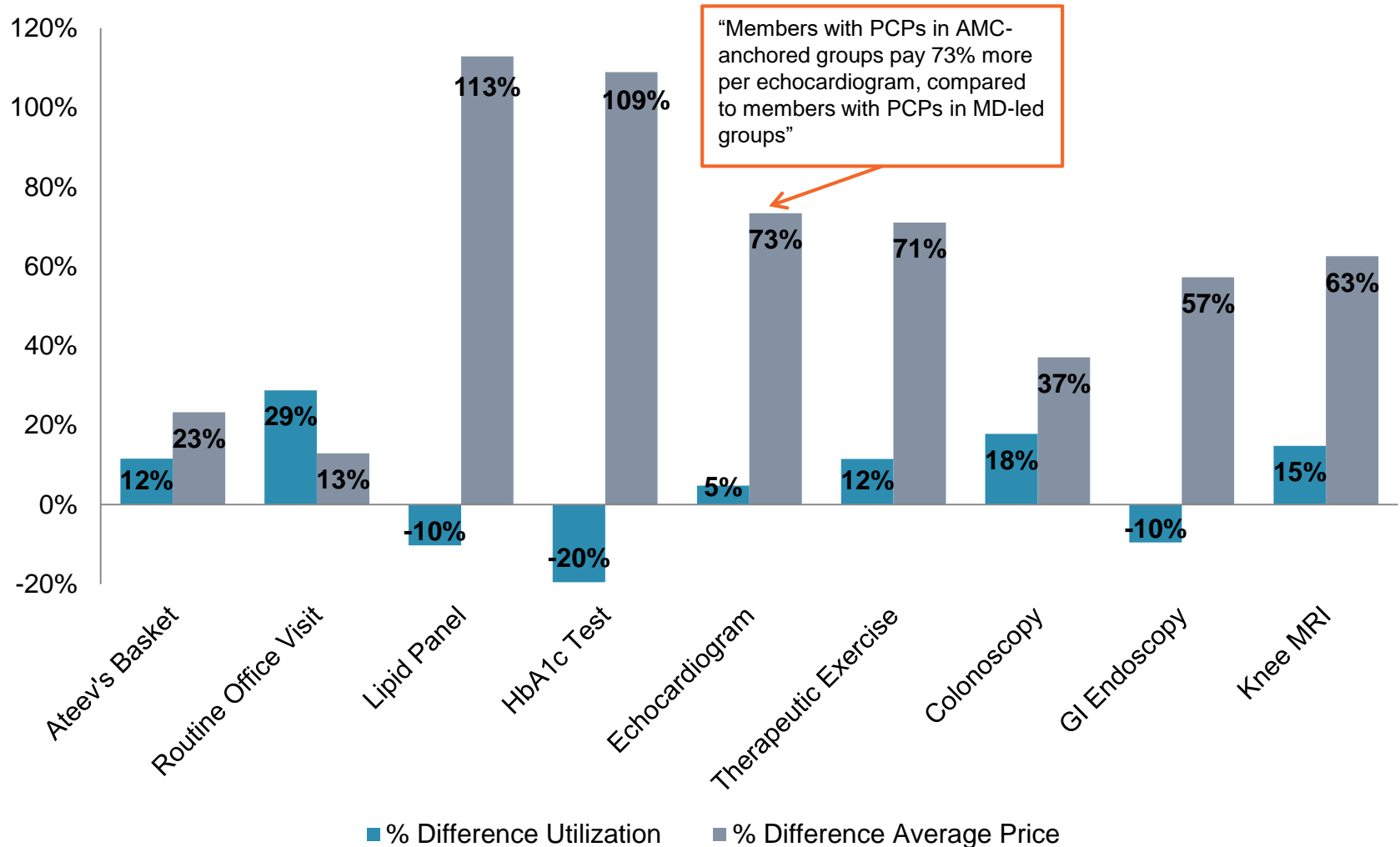


Underlying data correspond with GIC members of the cardio metabolic cohort (n = 17,439). This cohort follows earlier mentioned inclusion criteria, and includes individuals with hypertension, diabetes, and cardiovascular disease.

Source: HPC analysis of 2015 APCD Commercial analytic file.

Spending differences by provider group are driven more by price than utilization

Percentage difference in utilization rates for GIC members of the cardio metabolic cohort in AMC-anchored groups compared to Physician-led groups.



Underlying data correspond with GIC members of the cardio metabolic cohort (n = 17,439). This cohort follows earlier mentioned inclusion criteria, and includes individuals with hypertension, diabetes, and cardiovascular disease.

Source: HPC analysis of 2015 APCD Commercial analytic file.

Low value imaging has a high cost

- As reflected in the May Data Points, “Variation in Imaging Spending”, Massachusetts spends more than the national average on imaging
- Part of this spending is low value care
 - \$35.2 million was spent 2013-2015 on 7 low value care imaging procedures*
 - These patients paid a total of \$7.2 million out-of-pocket for these procedures.

Low Value Care Imaging, Commercial APCD 2013-2015

Measure	Low value encounters	Denominator encounters	Encounter rate	Total spending	Patient cost sharing
Back imaging for nonspecific low back pain	44,974	778,456	5.5%	\$15,867,346	\$3,668,908
Head imaging for headache	14,792	266,643	5.3%	\$10,148,895	\$1,926,428
Imaging for syncope	9,819	73,283	11.8%	\$4,343,888	\$506,342
CT for Sinusitis	5,595	367,764	1.5%	\$2,298,151	\$587,270
Imaging for Plantar Fasciitis	13,302	106,999	11.1%	\$696,350	\$392,370
Abdomen CT with and without contrast*	5,814	117,378	5.0%	\$610,470	\$29,070
EEG for headache	436	483,824	0.1%	\$181,339	\$31,620
Neuroimaging for febrile seizure	71	2,163	3.2%	\$58,876	\$4,192
Thorax CT with and without contrast*	648	80,977	0.8%	\$20,088	\$15,876

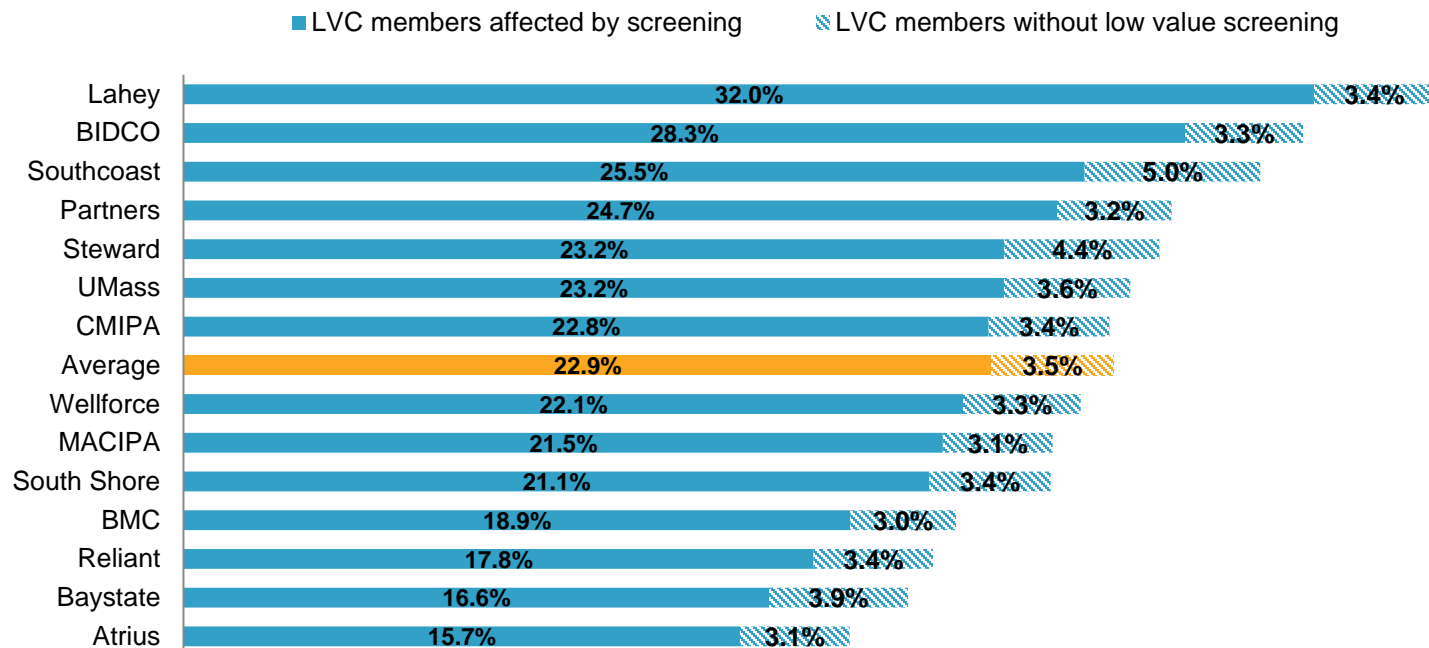
Notes: APCD Commercial Claims data for 3 major payers, 2013-2015).

*The low value care of this measure is that it is not necessary to repeat imaging both with & without contrast (rather, clinical decisions can be made with one imaging result). In order to account for the cost of this procure, abdomen & thorax CT are estimates based on marginal cost of the procedure (eg, with contrast only as opposed to both with and without contrast

Variation in rates of low value care by provider organization are driven primarily by low value screening

- 1.6 million members were attributed to one of the top 14 largest provider organizations based on their primary care provider
- Members experiencing at least one low value care service by attributed provider organization varies from 18.8% (Atrius) to 35.4% (Lahey)
- If low value screening is excluded, exposure to low value care ranges from 3.0% (BMC) to 5.0% (Southcoast)

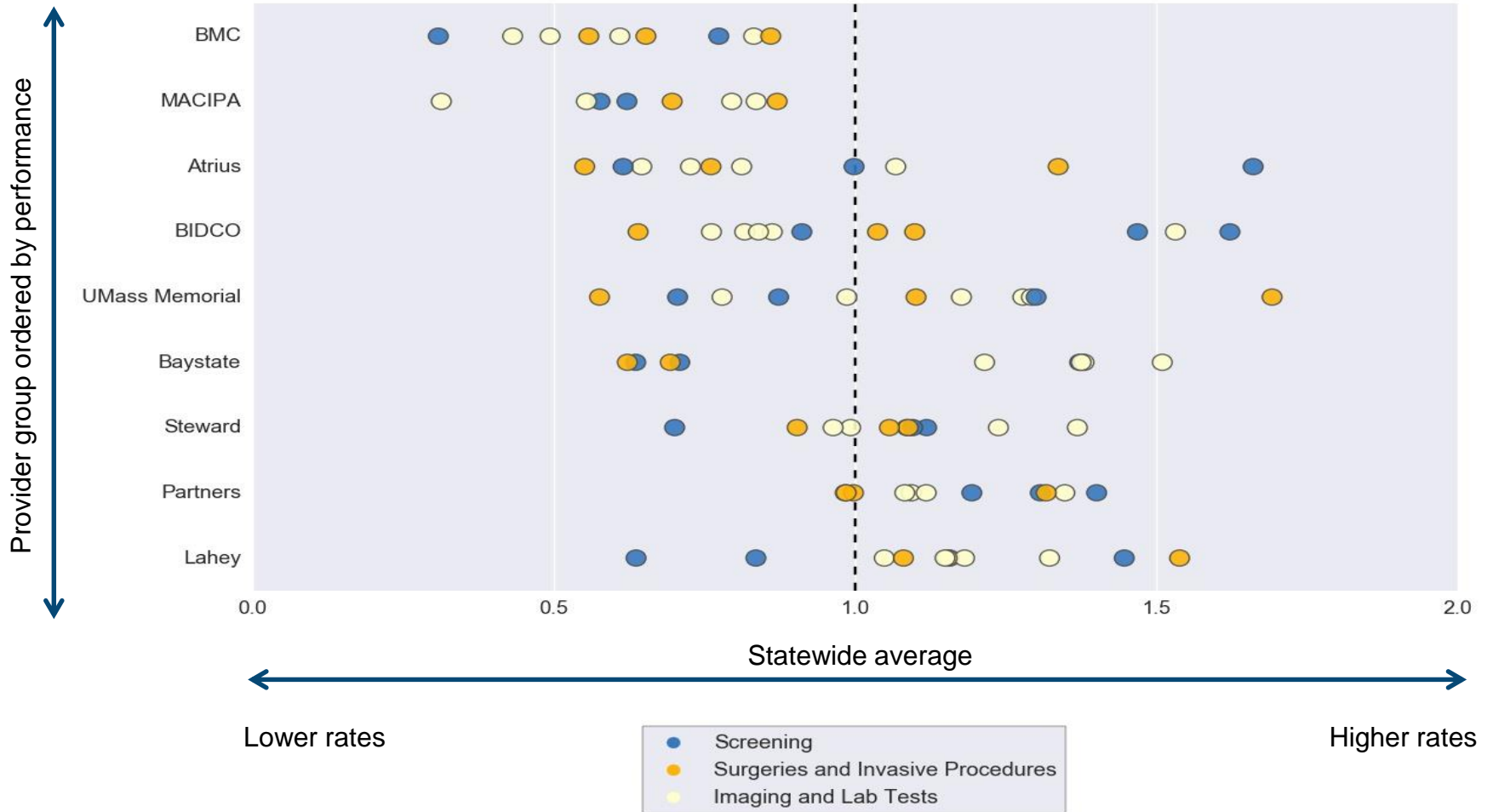
Percentage of members exposed to any low-value service



Note: Applied HPC provider attribution methodology to assign patients to a provider organization. A total of 1.6 million members were attributed to 1 of the 14 top provider organizations. Please see CTR 2017 for more information on this methodology.

Some provider groups had consistently low or high rates of non-recommended care across measures

Rates of non-recommended care, by provider group relative to the statewide average (indexed to 1.0 for each measure), 2013

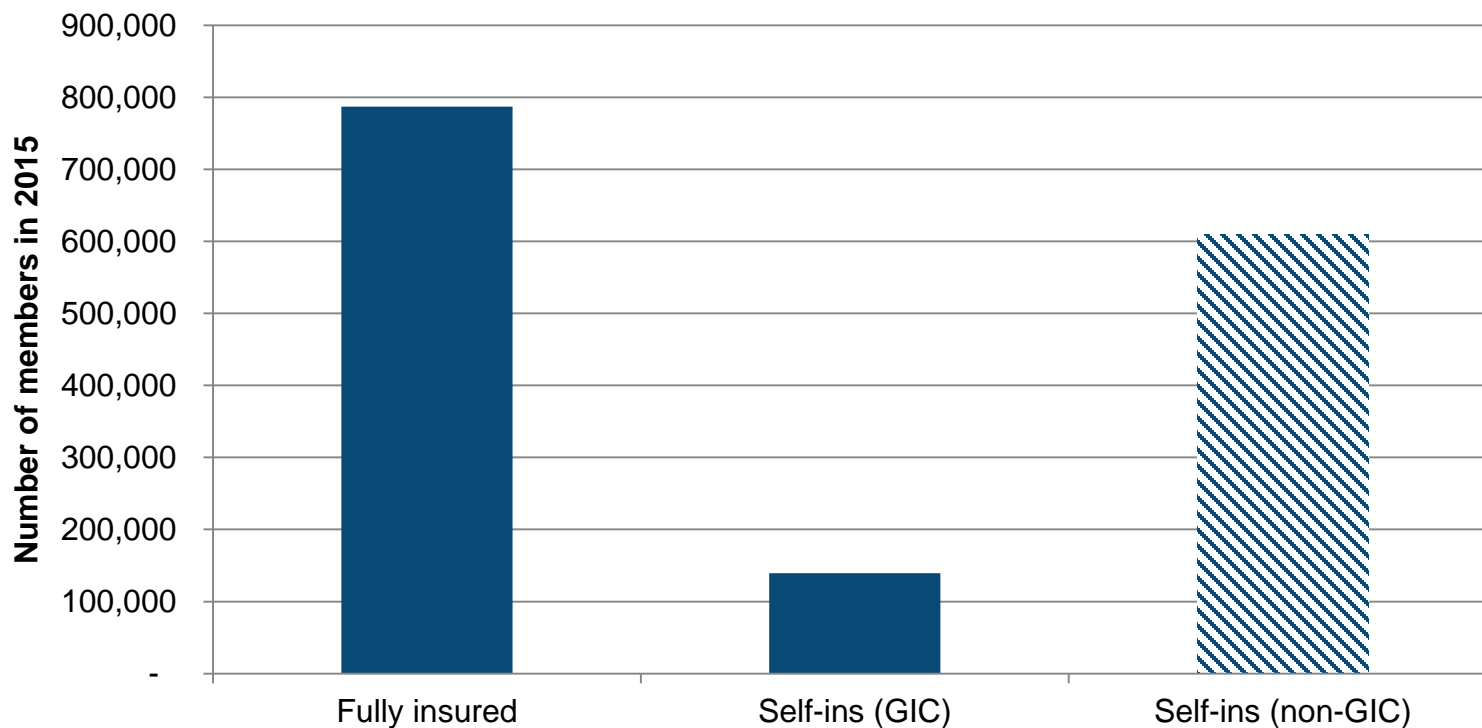


Notes: Analysis includes the same provider groups in the Total Medical Expenses (TME) analysis with the exception of NEQCA. Some measures are not reported for some organizations due to cell size limitations. Data include only privately insured individuals covered by Tufts Health Plan, Blue Cross Blue Shield of MA, and Harvard Pilgrim Health Care.

Source: HPC analysis of Massachusetts All-Payer Claims Database, 2013 and Registry of Provider Organizations, 2016

Members in HPC's APCD analyses are affected by the Gobeille decision starting in 2016

- Fully insured: 51% (retained)
- GIC self-insured: 9% (retained)
- Non-GIC self-insured: 40% (majority absent)



Data Use Category 3

SUPPORT SPECIFIC REGIONAL OR PROVIDER-LEVEL
DELIVERY SYSTEM ACTIVITY

VHCURES

Data Use Cases for Vermont's All-Payer Claims Database

Mary Kate Mohlman, PhD, MS
Health Services Researcher, Blueprint for Health
Department of Vermont Health Access

November 14, 2018

Community and Health Practice Profiles

- Uses To Date:
 - Increasing data fluency and data-driven decision making
 - Quality improvement initiatives
 - Practice and regional priority setting
 - ACO priority setting
- Challenges:
 - Data timeliness
 - Ability to trend over time
- Future uses
 - Broader and deeper analyses on trend and association
 - Inform data uses for other entities such as ACOs

Community Health Profiles



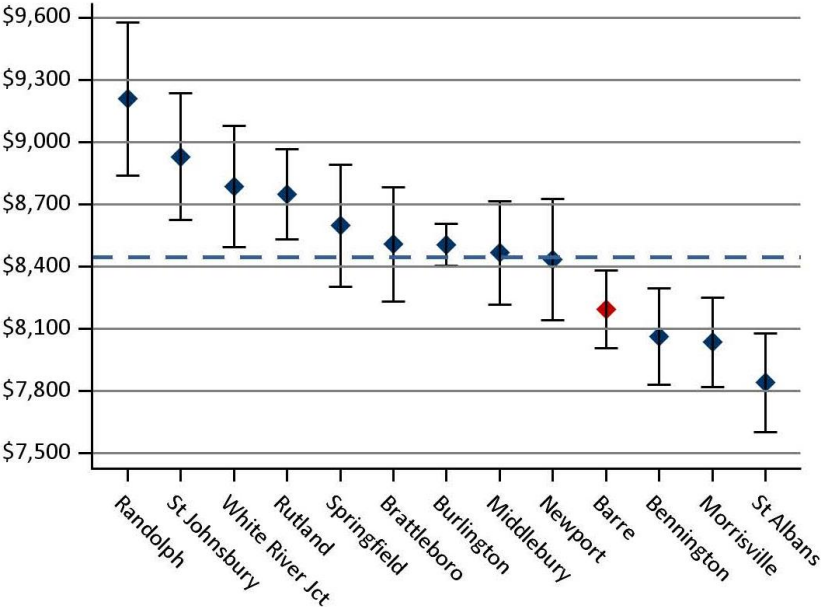
Demographics & Health Status

	HSA	Statewide
Average Members	23,120	229,377
Average Age	52.1	52.0
% Female	54.5	55.7
% Medicaid	18.8	23.1
% Medicare	32.5	34.1
% Maternity	6.8	7.1
% with Selected Chronic Conditions	44.7	43.1
Health Status (CRG)		
% Healthy	23.5	25.3
% Acute or Minor Chronic	14.4	14.7
% Moderate Chronic	26.5	26.7
% Significant Chronic	33.5	31.0
% Cancer or Catastrophic	2.0	2.2

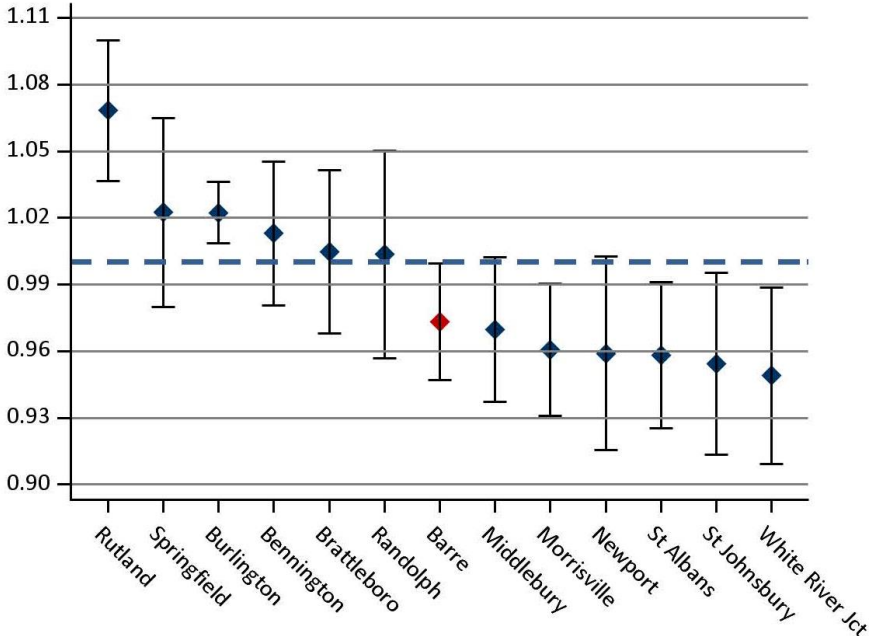
Table 1: This table provides comparative information on the demographics and health status of the specified HSA and of the state as a whole. Included measures reflect the types of information used to generate adjusted rates: age, gender, maternity status, and health status.

Community Health Profiles

Total Expenditures per Capita (Excluding SMS)



Total Resource Use Index (RUI) (Excluding SMS)

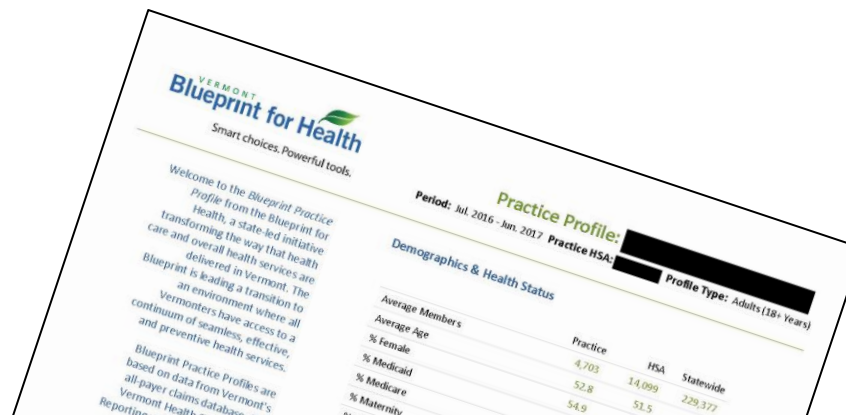


Linked Clinical Data: Obesity, Hypertension, & HbA1c

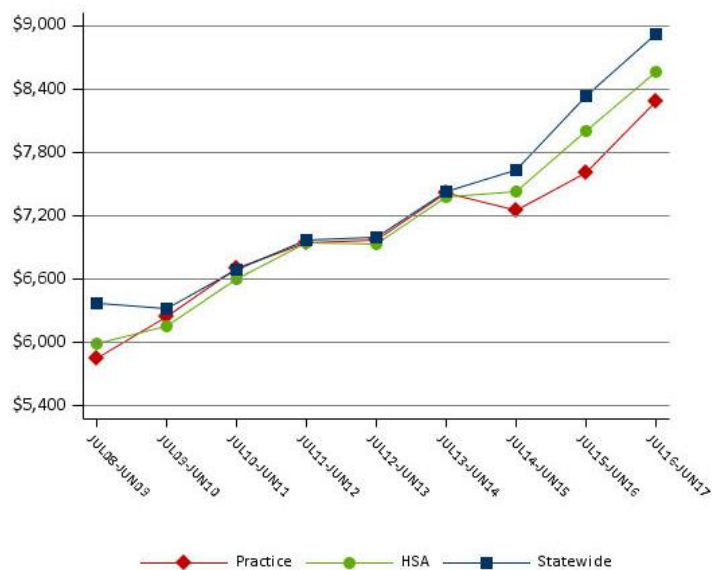


Measure (N = Count of distinct members)	HSA N=25,123	Statewide N=250,844
	Rate %	Rate %
% linked to clinical data	84%	54%
% with BMI data	69%	37%
% meeting obesity criteria	38%	39%
% with blood pressure data	79%	46%
% meeting hypertension criteria	16%	21%
% with BMI and blood pressure data	68%	37%
% meeting obesity and hypertension criteria	8%	10%
Measure (N = Count of distinct members with diabetes)	HSA N=1,914	Statewide N=18,231
	Rate %	Rate %
% linked to clinical data	93%	66%
% with BMI data	80%	47%
% meeting obesity criteria	72%	69%
% with blood pressure data	89%	55%
% meeting hypertension criteria	22%	28%
% with valid HbA1c	76%	43%
% with HbA1c >9%	10%	6%

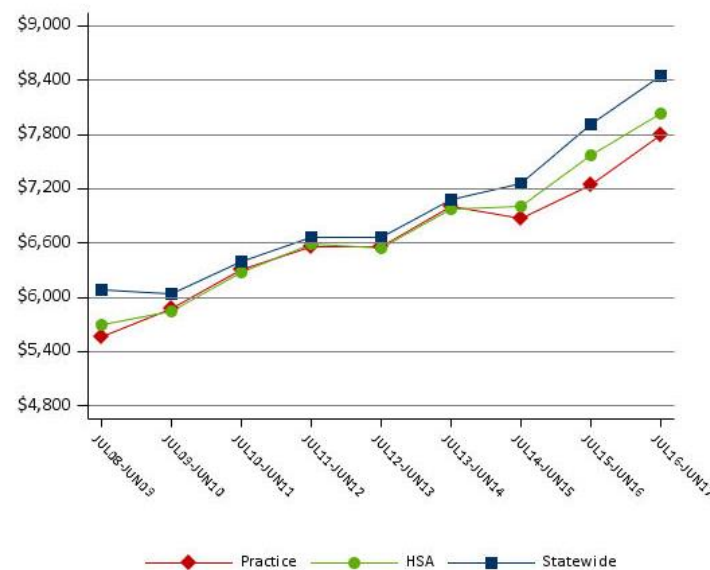
Practice Profiles



Total Expenditures per Capita JUL08-JUN17



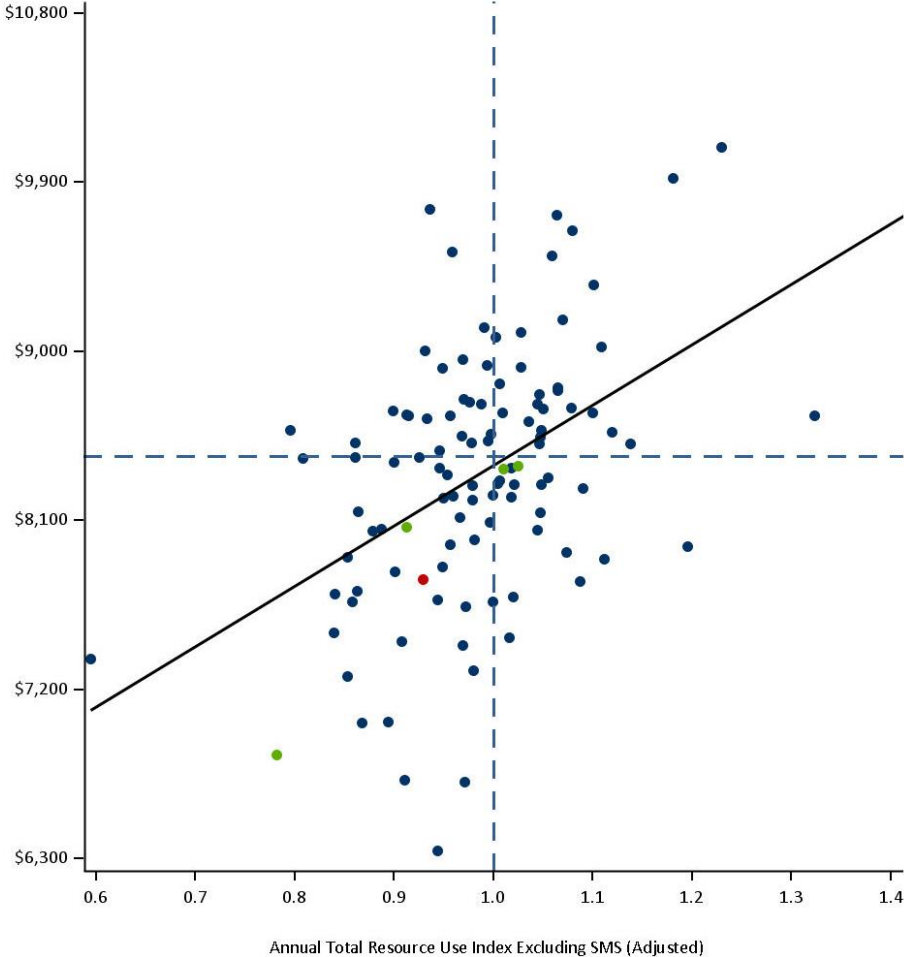
Total Expenditures per Capita (Excluding SMS) JUL08-JUN17



Practice Profiles

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

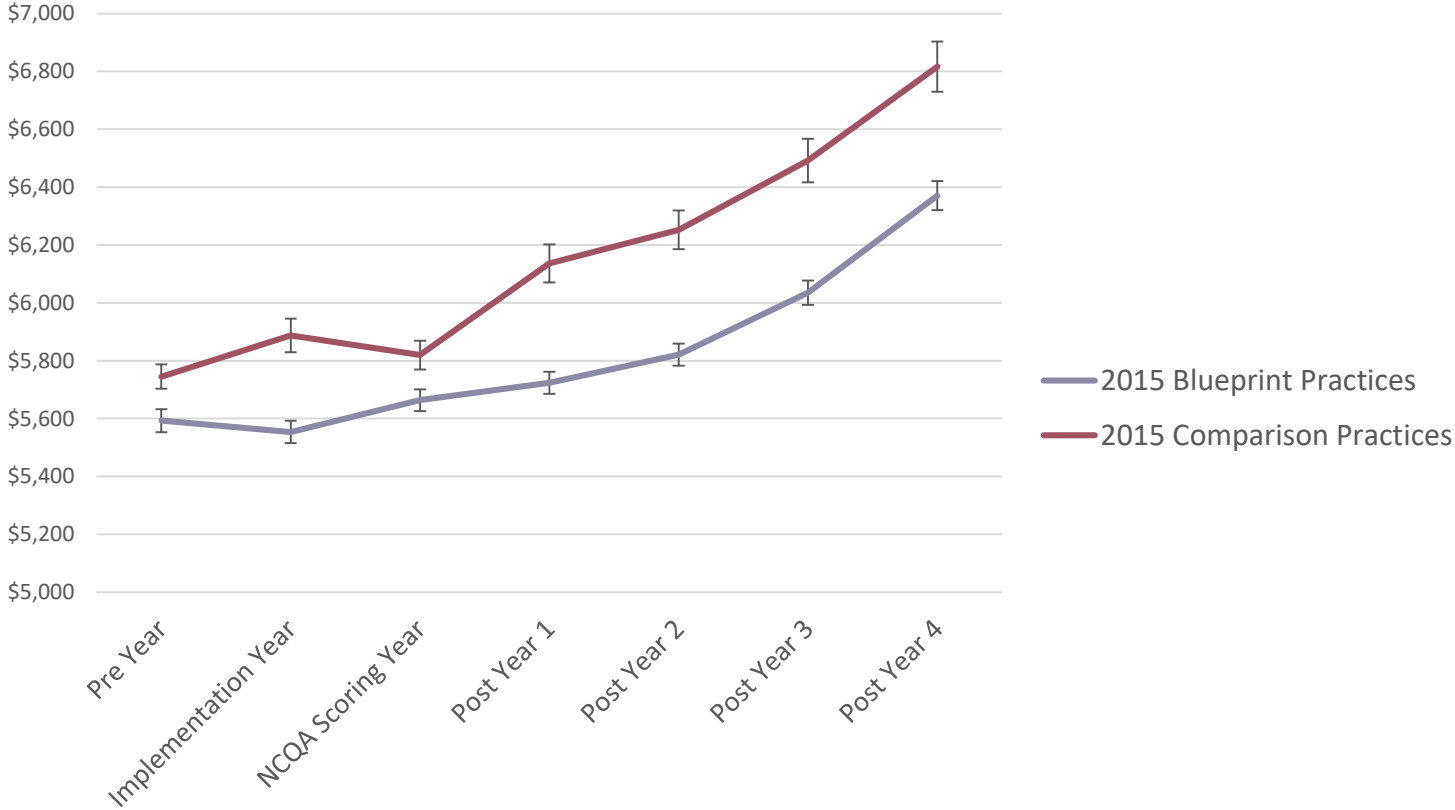
Annual Total Expenditures per Capita, Excluding SMS (Adjusted)
r-square = 27.4%



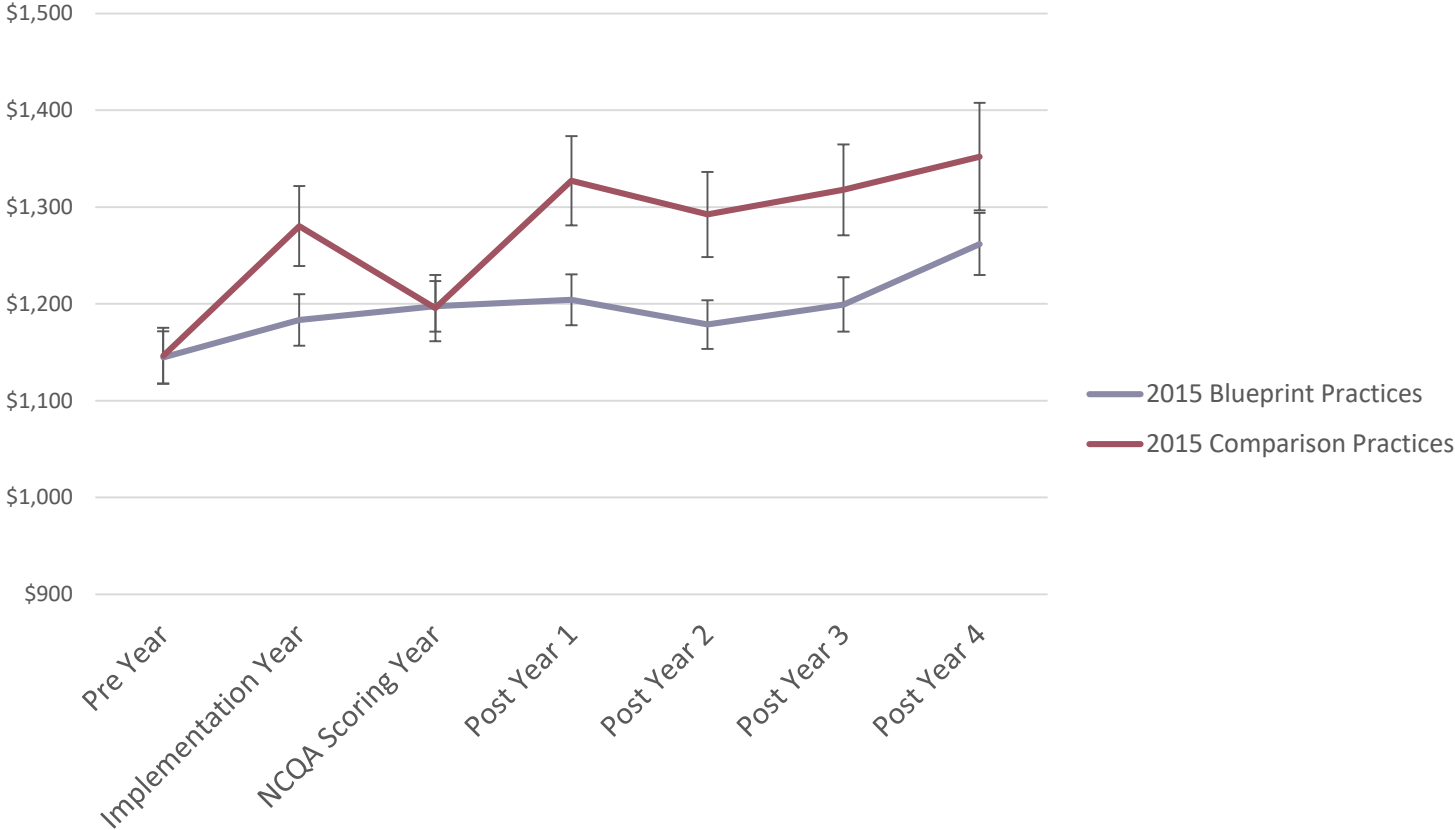
Evaluation of the Blueprint for Health – Programmatic Stage

- Goal: To identify how the maturation of a PCMH affects patient outcomes.
- Based on all-payer claims data from calendar years 2008 through 2015
- PCMH patients were identified as those receiving the majority of their primary care from a PCMH at each stage.
- Comparison patients were identified as those receiving the majority of their primary care at sites not recognized as PCMHs

Total Expenditures per Capita Excluding SMS 2008-2015 All Insurers Ages 1 Year and Older

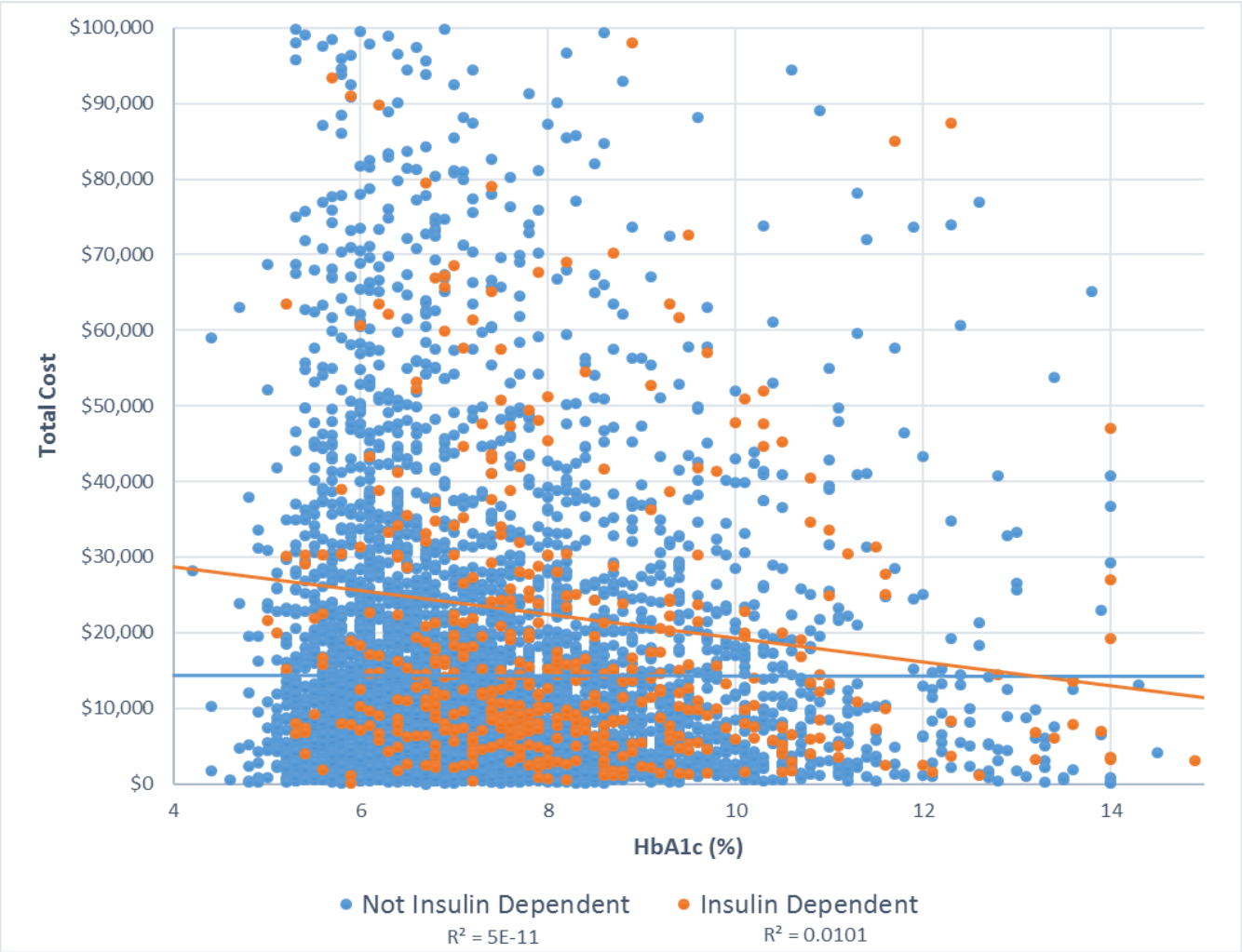


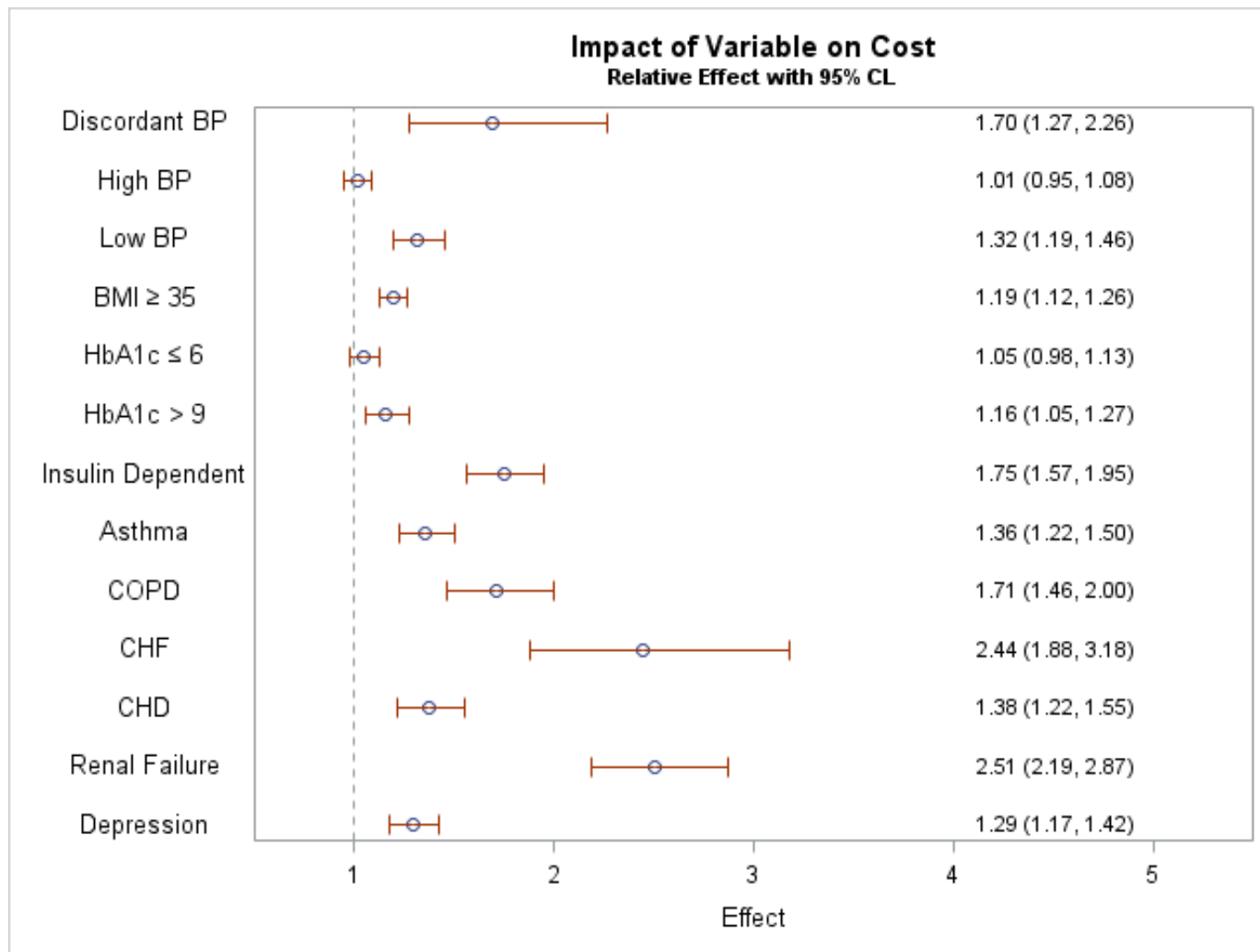
Total Inpatient Expenditures per Capita 2008-2015 All Insurers Ages 1 Year and Older

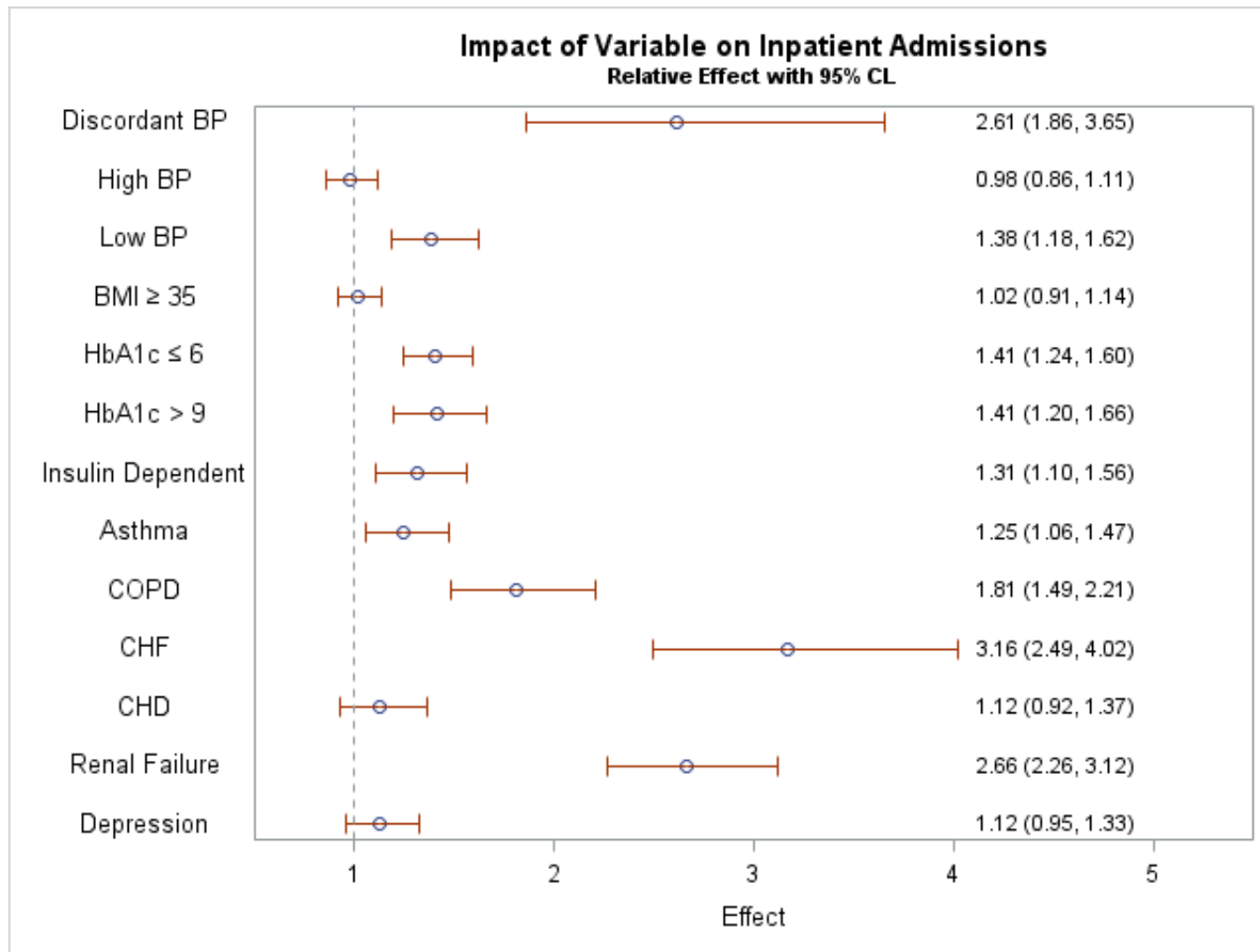


Population Health Management: Diabetes Case Study

- Goals:
 1. Evaluate whether glycemic control was associated with same-year expenditures
 2. Which clinical risk factors and comorbid conditions had strong associations with same-year expenditures.
 3. Identify selection criteria for outreach and panel management
- Study population included commercial, Medicaid, and Medicare beneficiaries 18-75 with continuous enrollment identified as having diabetes in the year 2014
- Data: VHCURES claims data linked to clinical data







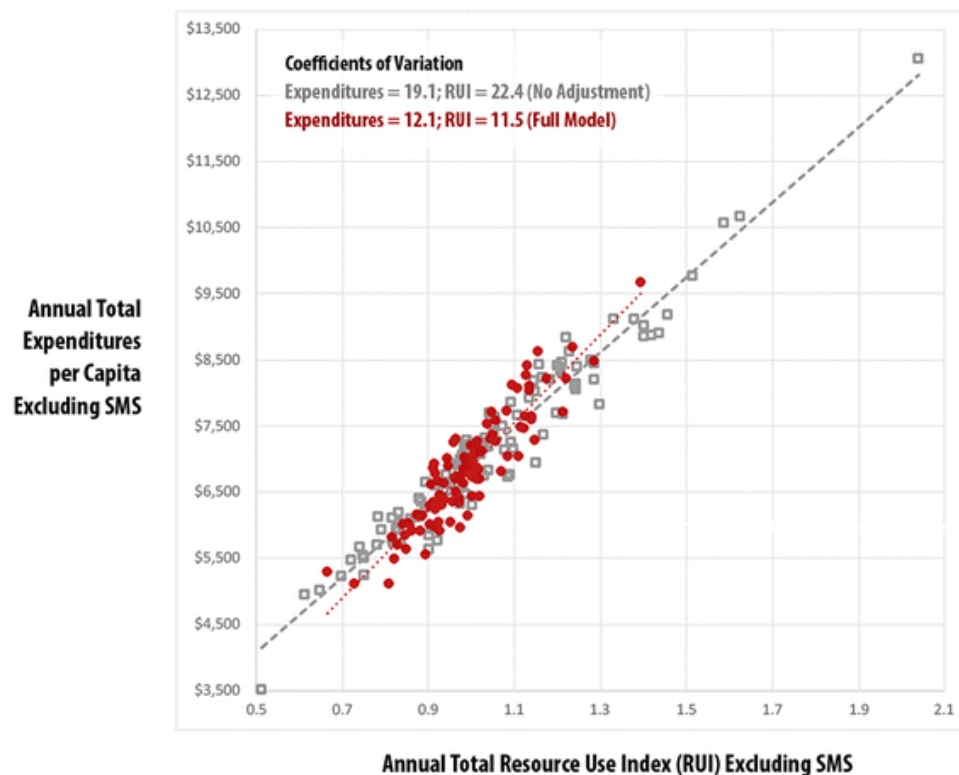
All-Payer Risk Adjustment Methods

- Goal: To assess different risk adjustment methods for whole population reporting on utilization, cost, and quality measures
- Purpose:
 - Clinicians do not differentiate patients by type of coverage; need all-payer, “whole population” look at outcomes for population health priority setting and quality improvement initiatives
 - Risk adjustment for performance-based payments across multiple payers.
- Populations: members with data in VHCURES attributed to a patient-centered medical home (283,153 adults; 78,162 pediatric patients)

Risk Adjustment Results - Adults

- Models:
 - No Adjustment
 - Adjustment for Age and Gender
 - Adjustment for Age, Sex, and CRG
 - Full Model
- Reduction in variation across the population
 - No adjustment, PMPY range: \$3,506 to \$13,056 (Diff: \$9,550)
 - Full adjustment model, PMPY range: \$5,113 to \$9,666 (Diff: \$4553)

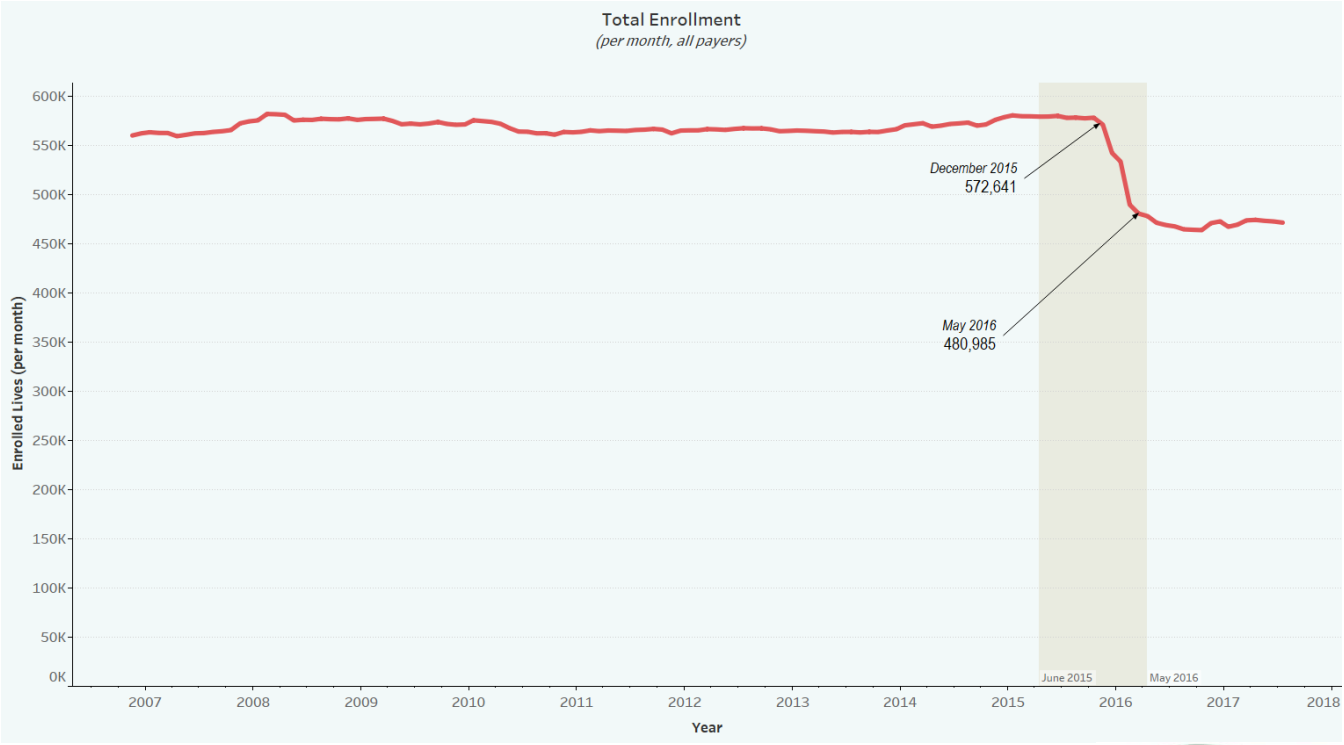
Impact on Coefficient of Variation



Impact of Gobeille vs. Liberty Mutual

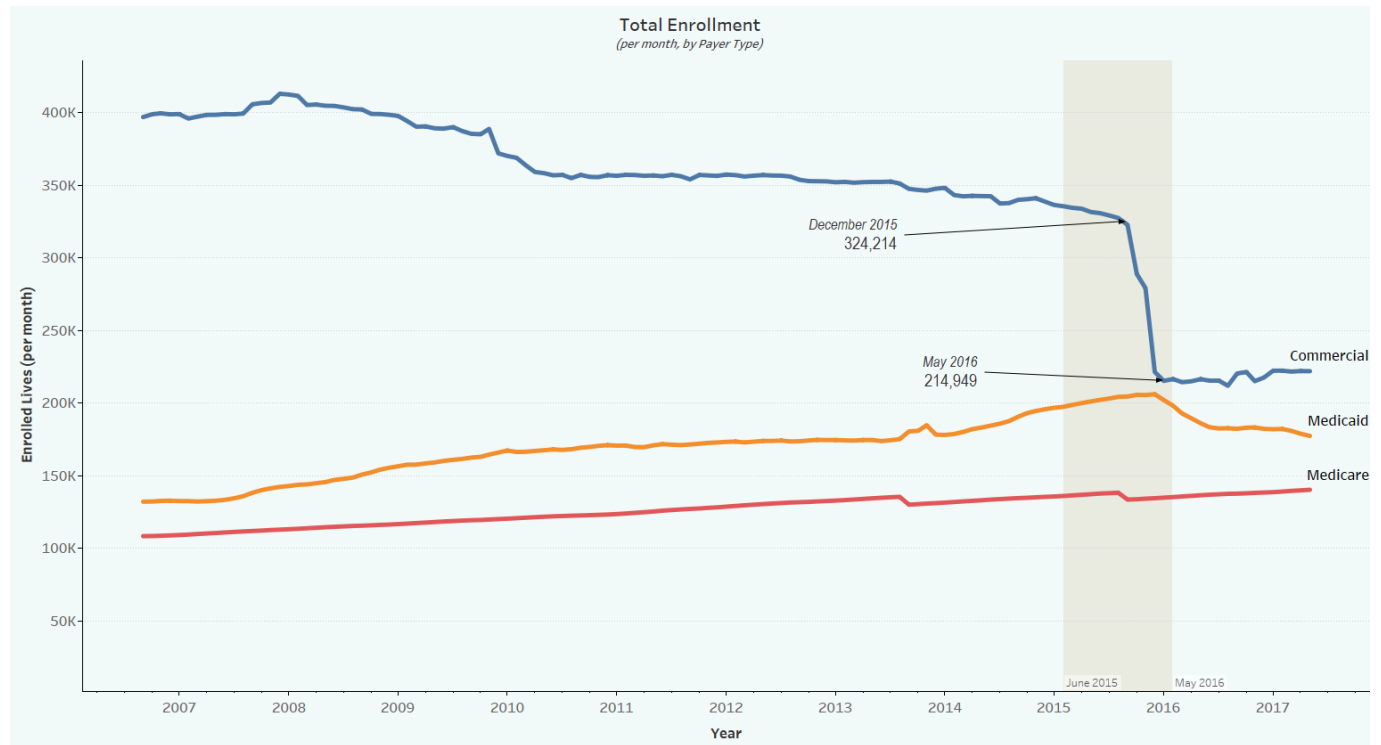
Impact of Gobeille vs. Liberty Mutual

Total
Enrolled
Lives



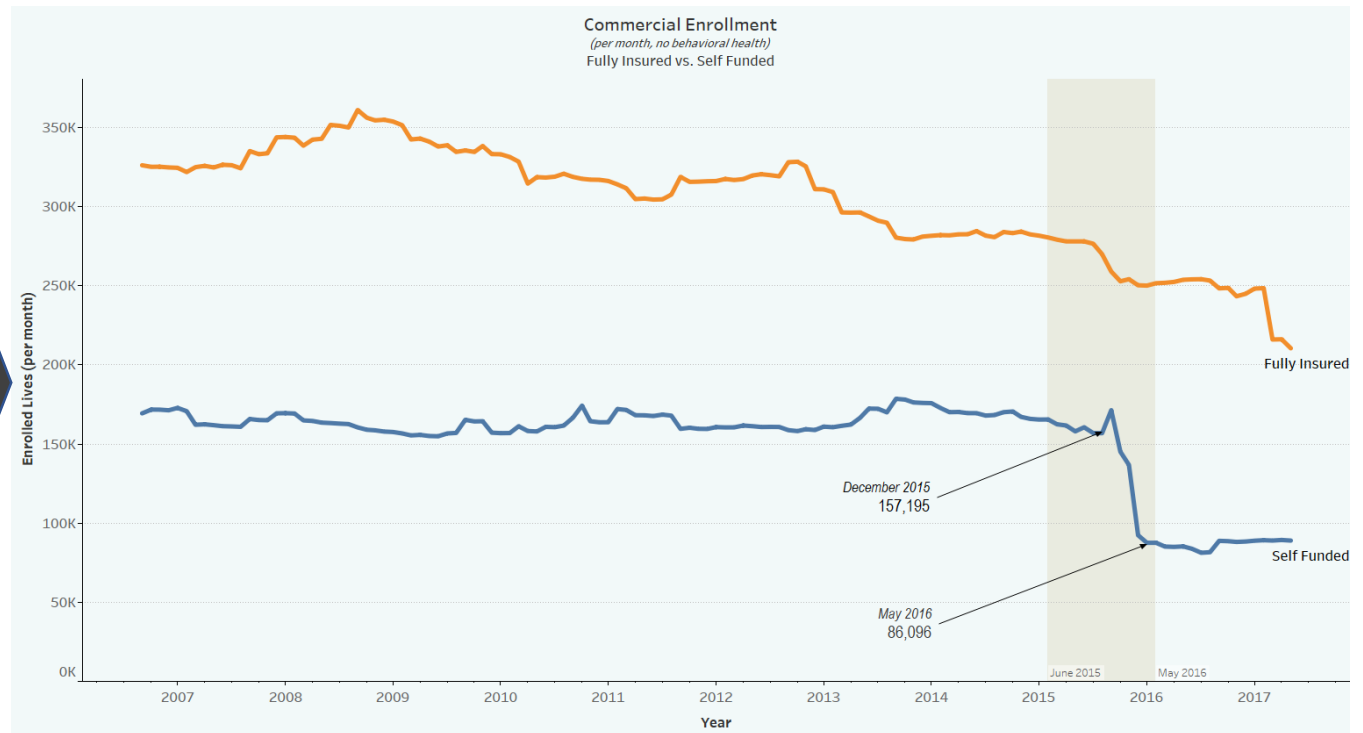
Impact of Gobeille vs. Liberty Mutual

Total
Enrolled
Lives by
Payer



Impact of Gobeille vs. Liberty Mutual

Total enrolled lives: Self-Funded vs. Fully-Insured



Total enrolled lives by AGE GROUP Self-Funded

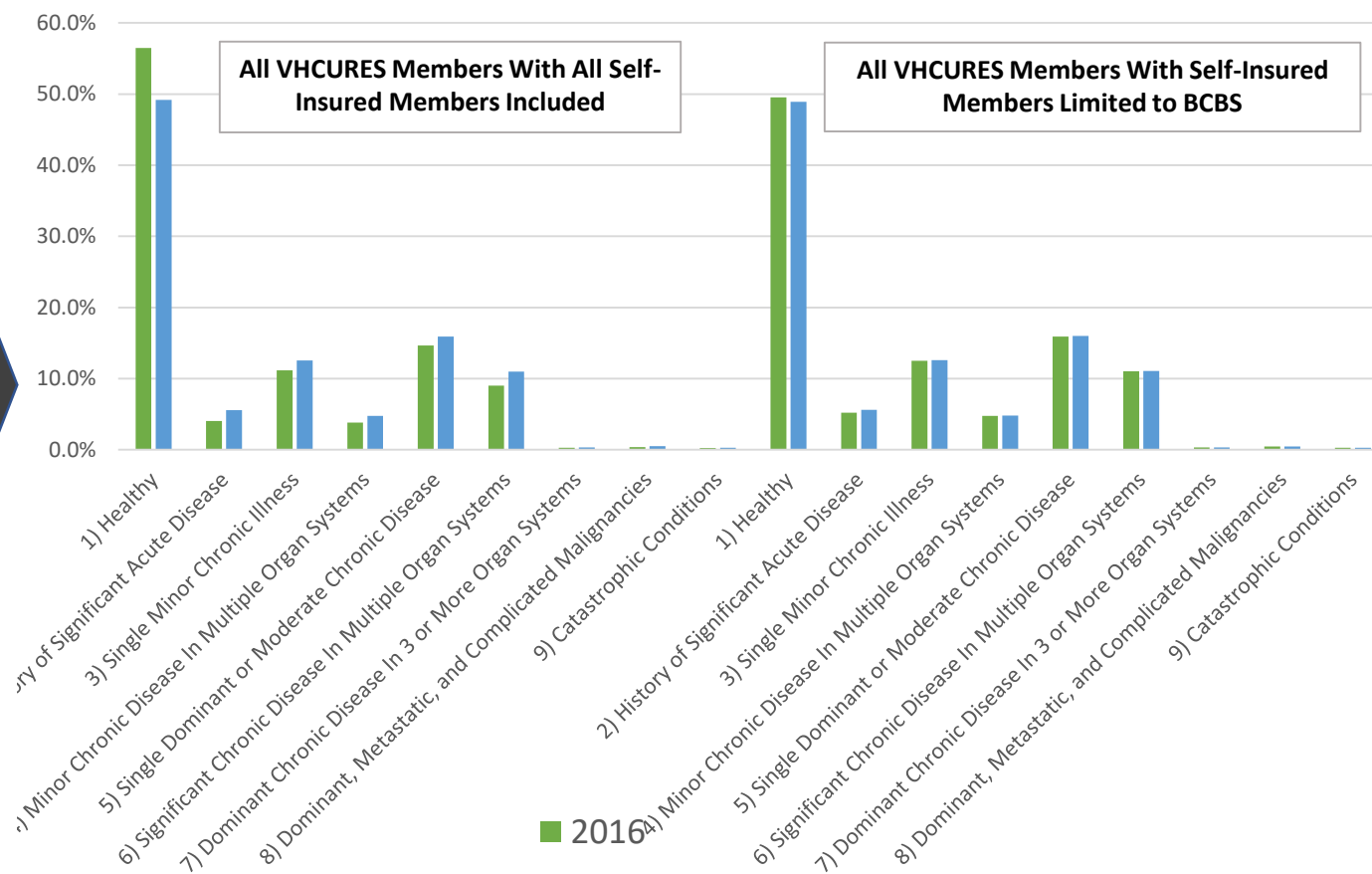


All-Payer Expenditures VHCURES Data for 2017

- Remaining population in VHCURES appears older and sicker
- Increase in:
 - Average PMPY total cost of care
 - Average inpatient rates
- **How to run analyses over time when populations for which data is available changes?**

Looking ahead: To include or not to include self-insured...

Health Status Distribution



Questions? Answers?

Contact information:

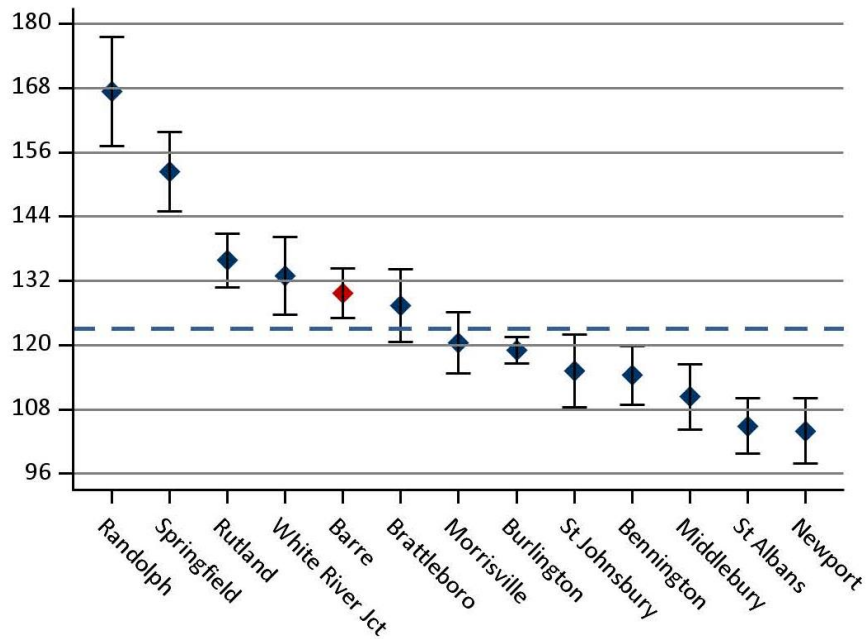
Mary Kate Mohlman

marykate.mohlman@vermont.gov

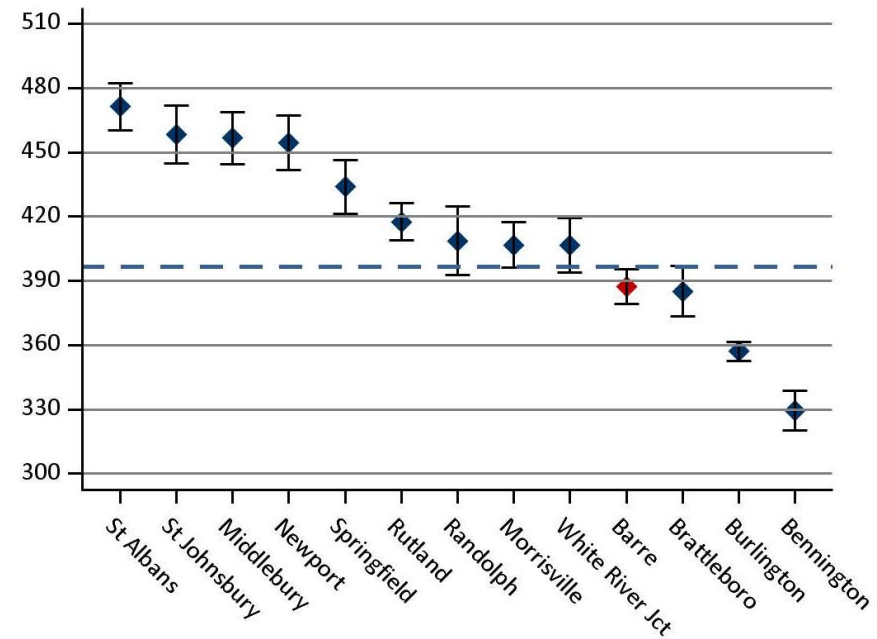
Additional Slides

Community Health Profiles

Inpatient Discharges

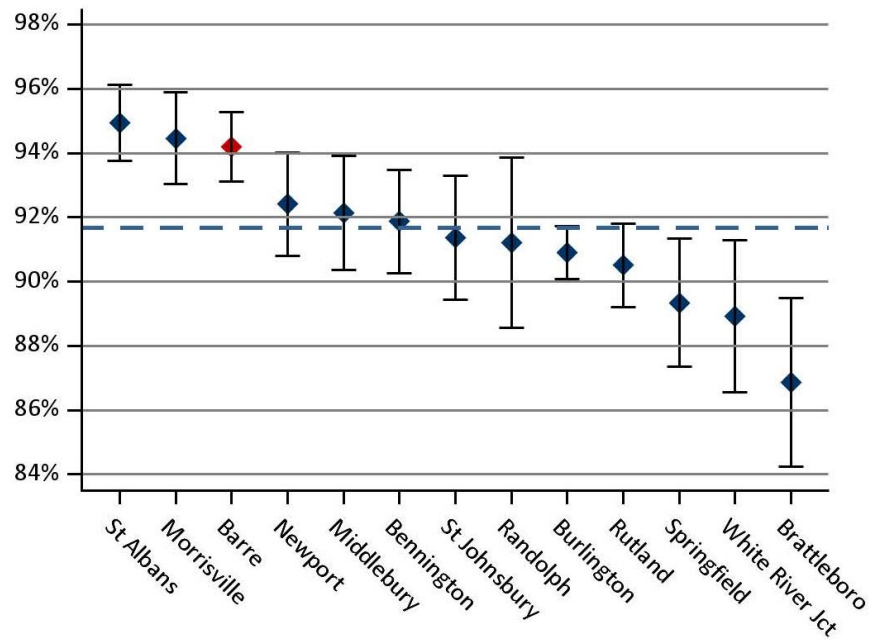


Outpatient ED Visits

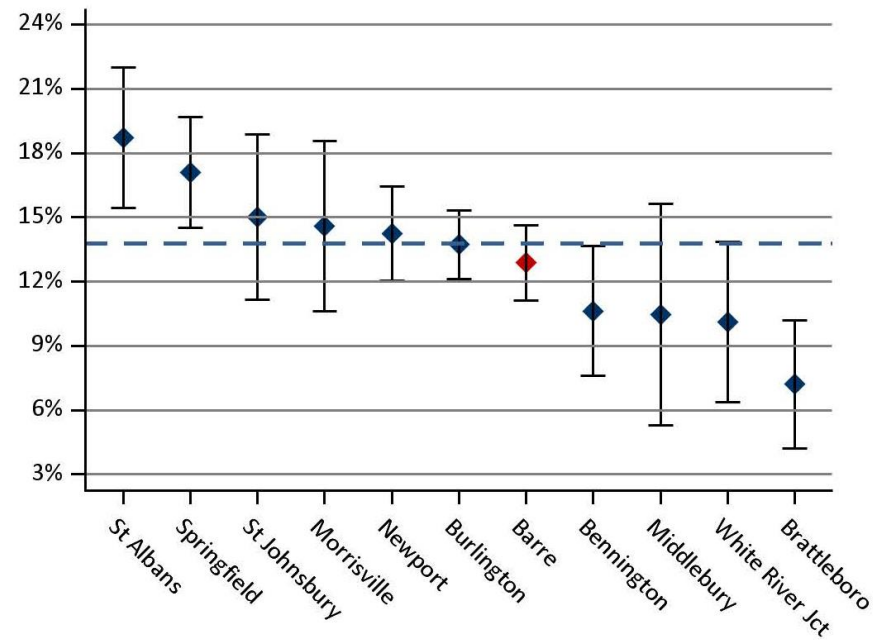


Community Health Profiles

Diabetes: HbA1c Testing



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

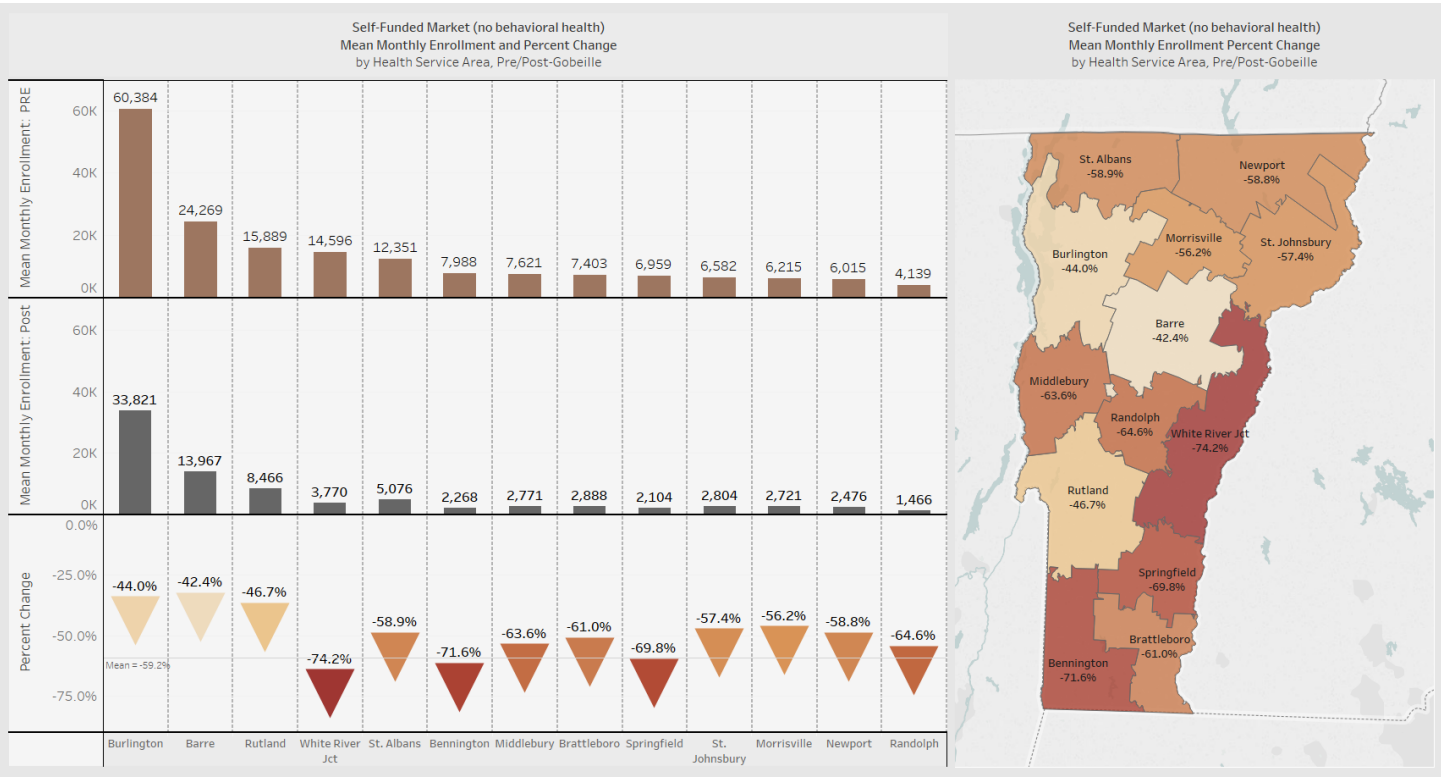


Total enrolled lives BY HSA Self-funded

Pre-

Post-

Percent
Change



Strategic Discussion

HOW CAN PROVIDERS, PAYERS AND / OR THE STATE LEVERAGE RI'S APCD TO ENHANCE THE VALUE OF HEALTH CARE?

Next Steps

Thank you!
