Healthcare Payments Data Program Advisory Committee

January 28, 2021

OSHPD
Office of Statewide Health Planning and Development

Welcome
and
Meeting Minutes

Agenda Review

- Director's Report
- HPD Program Update
- Introduction to Possible HPD Use Cases
- Lessons Learned from Working with APCD Data on Cost and Utilization

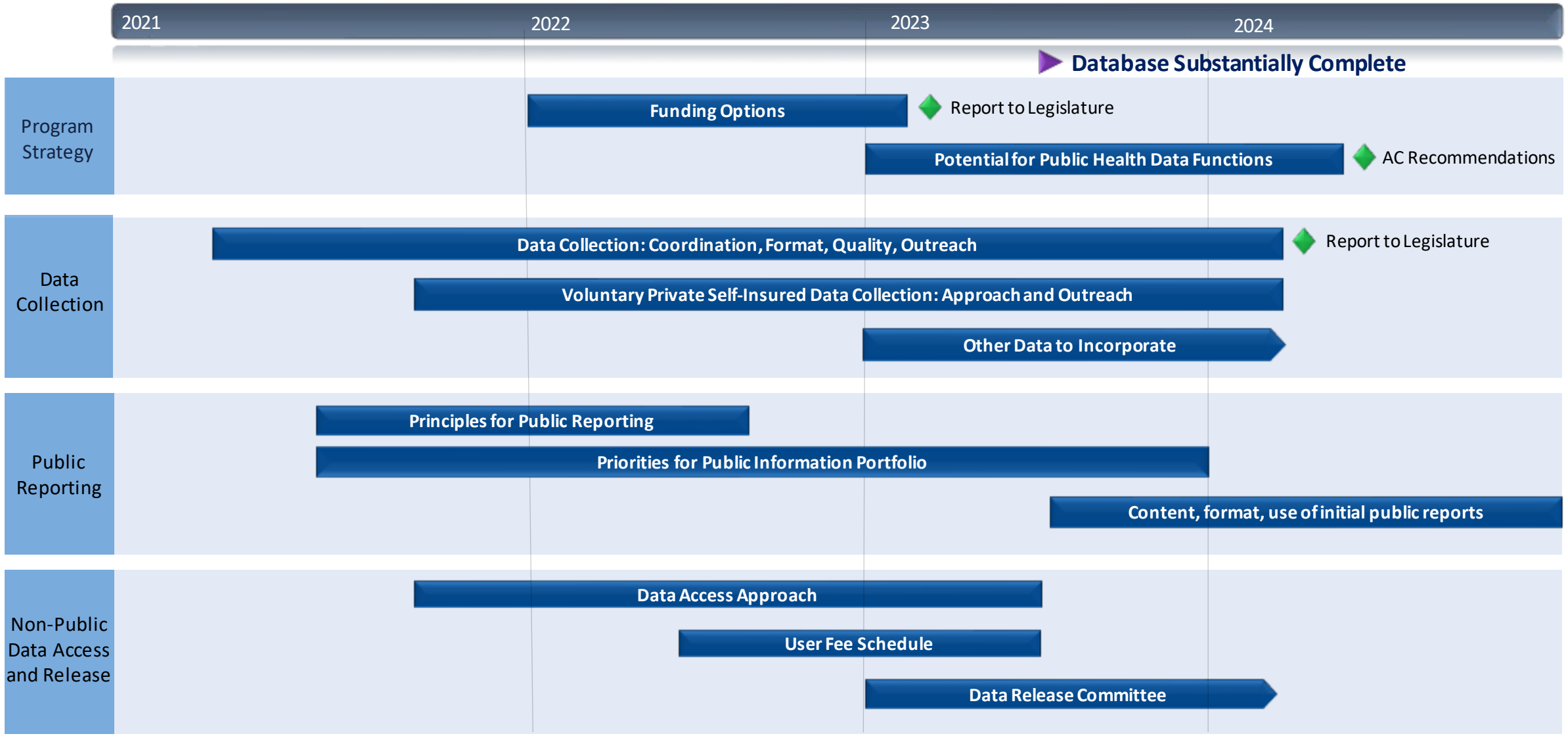
Ground Rules

- Bagley Keene Open Meeting Act will be followed
- Public Comment on each item and at end of meeting
  - All members of the public will be kept on mute throughout the meeting
  - Members of the public will not have access to the video function
  - To comment, use “hand-raise” function during the public comment period and you will be called on and unmuted
  - If you are joining the meeting via phone, you may raise your hand or lower your hand by selecting * 3. When you hear a double beep, you are unmuted by the host. When you hear a single beep, the host has muted you.
- No delegates, substitutes, or proxies for Advisory Committee members
- Meeting minutes prepared after each meeting
- Materials posted on website
- Standard voting process: motion/second/discussion (including public comment)/vote
- Virtual Meeting Hints
  - Stay ON MUTE when not speaking
  - Turn ON your video
  - Use the hand-raising function to make comments – you will be called on
  - Use chat for technical questions only (all chat messages go only to meeting host)

Director’s Report

HPD Program Update

Long-Term Anticipated Advisory Committee Discussion "Roadmap"



Anticipated topics for Advisory Committee discussion and input. Other topics may arise over time and as program implementation progresses.

2021 Advisory Committee Meetings - Anticipated Agenda Topics

January 28

- *Progress updates*
- Use cases overview
- Lessons learned from working with APCD data

April 22

- *Progress updates*
- Planning for data collection: format & submitter outreach

July 22

- *Progress updates*
- Principles for public reporting
- Priorities for public information portfolio

October 28

- *Progress updates*
- Access to non-public data
- Voluntary private self-insured: approach and outreach

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HPD Implementation Update

- Expanding OSHPD IT environment
- Hiring HPD Program staff
- Active Procurements (Master Index, APCD Platform)
- APCD-CDL version 2
- Medi-Cal data extract project underway
- 2018 Medicare FFS Data collected
- CMS approved $7.5 million in federal funding

Public Comment

Introduction to Possible HPD Use Cases

Realizing the Potential, Acknowledging the Limitations

Today's Topics

- HPD use cases identified to date
- California's distinctive market
- Enormous potential and notable limitations
- Early opportunity – benchmarking cost and utilization

HPD Use Cases Identified To Date

- Stakeholder input on use cases
  - Summary shared at the April 2019 Review Committee meeting
  - Recent submissions from plan sponsors (Fall 2020)
  - Advisory Committee perspectives (October 2020)
- Review Committee panel, November 2019
  - Covered California – evaluation of network value, coverage transitions; full set of use cases submitted in April 2019
  - Public Policy Institute of CA – researcher use cases, full report published February 2020 (Improving Health Care Data in California)
  - California Academy of Family Practitioners – measuring primary care spending
- Health Care Payments Data Program Report to the Legislature Ch. 1, submitted by OSHPD March 2020

Review Committee Use Case Submissions

- 79 separate use cases submitted March-April 2019
  - 45 from Review Committee members
  - 34 from other stakeholders
- Themes
  - Cost variations based on geography
  - Appropriateness of care
  - Site of care variations in cost and quality (e.g., ambulatory surgery centers or hospital outpatient departments)
  - Population health outcomes by geography, socioeconomics, and demographics
  - Assess value of care based on payment types (FFS versus non-FFS)

Source: April 2019 Review Committee

How an HPD Can Inform Policy in California

Health care market consolidation

? How does provider consolidation affect costs, quality, and patient outcomes?

database Existing research suggests consolidation increases prices, but there is limited information on quality or outcomes. Patient and provider IDs across all payers would facilitate more robust analysis.

Research examining implications of consolidation on quality and outcomes can inform state and federal regulatory actions.

Coverage changes and children's well-being

? How often do children transition between Medi-Cal, Covered California, and other sources of insurance coverage?

database Research suggests changes in coverage are prevalent, but little is known about how churn affects use of preventive services.

Improving access to care and use of preventive services among children in Medi-Cal is a policy priority.

Patient out-of-pocket costs

? How often do Californians overpay for prescription drugs, mental health, and hospital services?

database Limited evidence indicates high prevalence. An HPD could provide California-specific comparisons across payers and regions of the state.

A better understanding of patient costs across the state can inform the implementation and monitoring of state legislation.

See report for detail on these use case examples and two additional examples:

- What types of housing strategies are most effective for low-income, chronically ill Californians?
- How can California improve outcomes for children at risk of adverse childhood experiences?

Source: Improving Health Care Data in California, PPIC, February 2020

Covered California Use Case Submissions

1. Market Structure, Stability, and Opportunity for Improvement
2. Market Competition: Premium Trends
3. Program and Carrier Value Performance Dashboard
4. Market Competition: Provider Pricing
5. Benefit Design Modeling
6. Marketplace Medical/Drug Cost Drivers
7. Complex, High-Cost and Variation Services: Savings and Quality Opportunity
8. Document Wasteful, Inefficient Care
9. Alternative Payment Model Evaluation
10. Select Network Performance and Network Access
11. Advanced Primary Care
12. Accountable Care Organizations
13. Integrated Behavioral Health
14. Value Benchmarks Construction
15. Health Disparities Evaluation
16. Enrollee Decision Support: Out of Pocket Costs
17. Balance Billing Impact

Source: Covered California submission to OSHPD, 4/17/2019

Use Case Categories and Examples

USE CASE CATEGORY		EXAMPLE 1	EXAMPLE 2
1	Cost and Utilization	Utilization, Spending, and Total Cost of Care	Identify and Reduce Low-Value Care
2	Quality	Quality Comparisons	Quality and Continuity of Care Through Coverage Transitions
3	Coverage and Access	Coverage Trends by Region and Payer	Regulatory Oversight of Insurance
4	Population and Public Health	Prevalence, Management, and Cost of Chronic Conditions	Understanding the Opioid Epidemic
5	California Health System Performance	Report on Statewide System Performance	Effect of Consolidation on Quality and Cost

Source: Health Care Payments Data Program Report to the Legislature Ch. 1, March 2020

Managed Care and Capitation in California

- Managed care has a large footprint in California
  - 10.5M commercial HMO
  - 10M Medi-Cal managed care
  - 2.5M Medicare Advantage
- Encounter data is essential to the HPD's usefulness in California

Source : 2020 Edition-California Health Insurance Enrollment, Katy Wilson, CHCF, July 2020 (2019 data)

Encounter Data and HPD

- Encounters are a record of services rendered under capitation or other alternative payment models
  - Encounters are not a request for payment
- Encounter data can support utilization and quality analysis – even without assignment of value
- FFS equivalents can be assigned to support cost and spending analysis
  - Plan fee schedule amount may be included in encounter data, e.g. Kaiser
  - Data management vendor or data enclave manager enhancements may include encounter data pricing
  - Researchers may assign values to encounter data for specific analyses

Service	Estimated fees
X-ray of knee	$75
Ultrasound of pelvis	$268
Stress test	$159

Source: Kaiser Permanente Northern California Fee Schedule, 20120. See also KP Southern California Fee Schedule, 2020.

Enormous Potential to Answer Important Questions . .

Questions policymakers might ask:

- What is the year-over-year trend in health spending in California?
- Which service categories (e.g. inpatient, outpatient, professional, pharmacy) are highest (and lowest) in cost growth?
- What are the drivers of "churn" (movement between coverage sources, e.g., commercial to Medi-Cal, Medi-Cal to Covered California)?
- What is the range of prices paid by different payers (e.g., Medi-Cal, health plans) for similar prescription drugs?
- How has out of pocket cost for insulin changed over the last five years? How does that vary by coverage source?
- What effect are policy interventions, such as restrictions on out of network billing, having on cost, including consumer out of pocket?

Questions purchasers might ask:

- What is the range of cost (allowed amount, including insurance payment and consumer cost-sharing) for a Cesarean section?
- What is the cost of preventable hospitalization for asthma? How does the cost vary by coverage type (commercial, Medi-Cal, Medicare)? By geography?
- What proportion of prescription drug spending is attributed to specialty drugs? To biologics?
- What delivery and financing models for the dual eligible population have the best outcomes?
- How much could be saved by steering patients toward high-quality, low-cost providers?
- What is the cost for a hip replacement on an episode basis (including pre- and post-operative care)? How does cost vary with outcomes?
- What is the cost of low-value services?

Questions providers (e.g. health systems or physician groups) might ask:

- How do telehealth services influence costs and outcomes for depression?
- What are the leading causes of preventable emergency department visits?
- What are benchmarks for utilization and quality for similar providers?
- What are rates of emergency room admissions, hospital readmissions, and inpatient length of stay across the state by type of provider?
- What are the top diagnoses at initial prescription for opioids?
- How often are low-value cardiac stress tests (or other low-value services) performed?
- Where are the geographic "hot spots" of opioid prescribing? What regions have low utilization of addiction treatment (e.g., naloxone)?

. . and Notable Limitations and Challenges

Exclusions from the data

- Self-insured private plans
  - HPD can accept data but not mandate submission
- Uninsured
- Federal employees
- Prison system
- Active military, Veterans Affairs, TRICARE
- Indian Health Service

Challenges

- Lag in reporting / timeliness
- Encounter data quality
- Data completeness
- Maximizing use of existing administrative data (not collected for APCD use)
- Not easy! Especially for California – enormous population, massive amount of data

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Stakeholder Priorities – Input from October

Features of Data

- Standardization of data
- High-quality data to inform policy, system improvement efforts
- Timeliness
- Privacy and security of data
- Inclusion of capitation and alternative payment models
- Represents California's diversity
- Integrate data from multiple sources to create a more complete picture

Topics for Inquiry

- Benchmarking cost and utilization
- Ability to compare across care delivery models and payer type
  - Cost, quality, appropriateness, outcomes
- Primary care spending
- Market consolidation
- Health disparities

"Holding the public's trust is essential – one bad moment can lose everything."

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Benchmarking Cost and Utilization: Early (but not easy) “Win”

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Reporting and Use Cases – Anticipated Examples

Sooner

Reporting examples

- Summary cost and utilization statistics, statewide and:
  - By geography
  - By payer (Medi-Cal, Medicare, commercial)
- Component cost and utilization (e.g., inpatient, outpatient, prescription drug)

Use Case examples

- Benchmark utilization and spending
- Identify sources and cost of low-value care

Next

Reporting examples

- Cost associated with episodes of care for common procedures
  - By care setting
- Chronic conditions
  - By geography
  - By payer

Use Case examples

- Prevalence of chronic conditions
- Cost (and variation in cost) of chronic conditions

Longer-Term

Reporting examples

- Prevalence of capitation and alternative payment models
- Statewide health system performance
- Trends in health spending

Use Case examples

- Assess degree of "churn" among coverage sources and impact on access to care
- Understand primary care spending

	USE CASE EXAMPLE: UTILIZATION AND SPENDING
Key Question	How much does cost and utilization vary, and what are the trends over time?
Overview	Key metrics on utilization and spending. Includes total and component parts (facility inpatient, outpatient, emergency department; professional clinician and ancillary services; pharmacy); overall and for specific procedures; across payers, geography, age group, and gender; and consumer share of cost.
Primary Audience	Policymakers, Purchasers
Secondary Audience	Payers and Providers, Researchers, Public
Policy Value	• Document variation in spending (e.g., facility-paid amounts for uncomplicated knee and hip replacements) • Document variation in utilization and spending by region, age, gender • Populate Let's Get Healthy dashboard • Generate statewide report card • Identify variation in spending, utilization • Support policy changes in regulation or payment to address identified issues
Business Value	• Compare own utilization and spending to benchmarks • Reward top performers

Source: Health Care Payments Data Program Report to the Legislature Ch. 1, Exhibit 6, submitted by OSHPD March 2020

“Wasteful Spending in California”

Signals

- Price disparities by county and region in California
- Price disparities for the same procedure

Contributors

- Overtreatment
- Failures of care delivery and inadequate prevention
- Failures of care coordination
- Administrative complexity
- Pricing and market inefficiencies
- Fraud and abuse

“Assuming that the proportion of wasteful and unnecessary spending is similar in California [as the U.S.], the state could save between $58 and $73 billion per year by eliminating waste and improving efficiency.”

Source: Christine Eibner et al., RAND Corporation, “Getting to Affordability,” CHCF, January 2020

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Recent Input from Purchasers/Plan Sponsors

How might your organization use HPD data? What use cases are compelling?

- Data to identify price variation could be helpful in selecting lower-priced services
- Data on excess provision of low-value care
- Benchmarking information for comparative evaluation
- Information on high-cost medical procedures
- Ability to compare against Medicare prices for inpatient claims
- Assigning a cost to capitated encounters
- Identify (unnecessary) screening services for asymptomatic patients
- Information on ever-increasing costs for prescription drugs, high cost of ambulatory services

Source: California Health Care Coalition members, October-December 2020

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PAYMENT

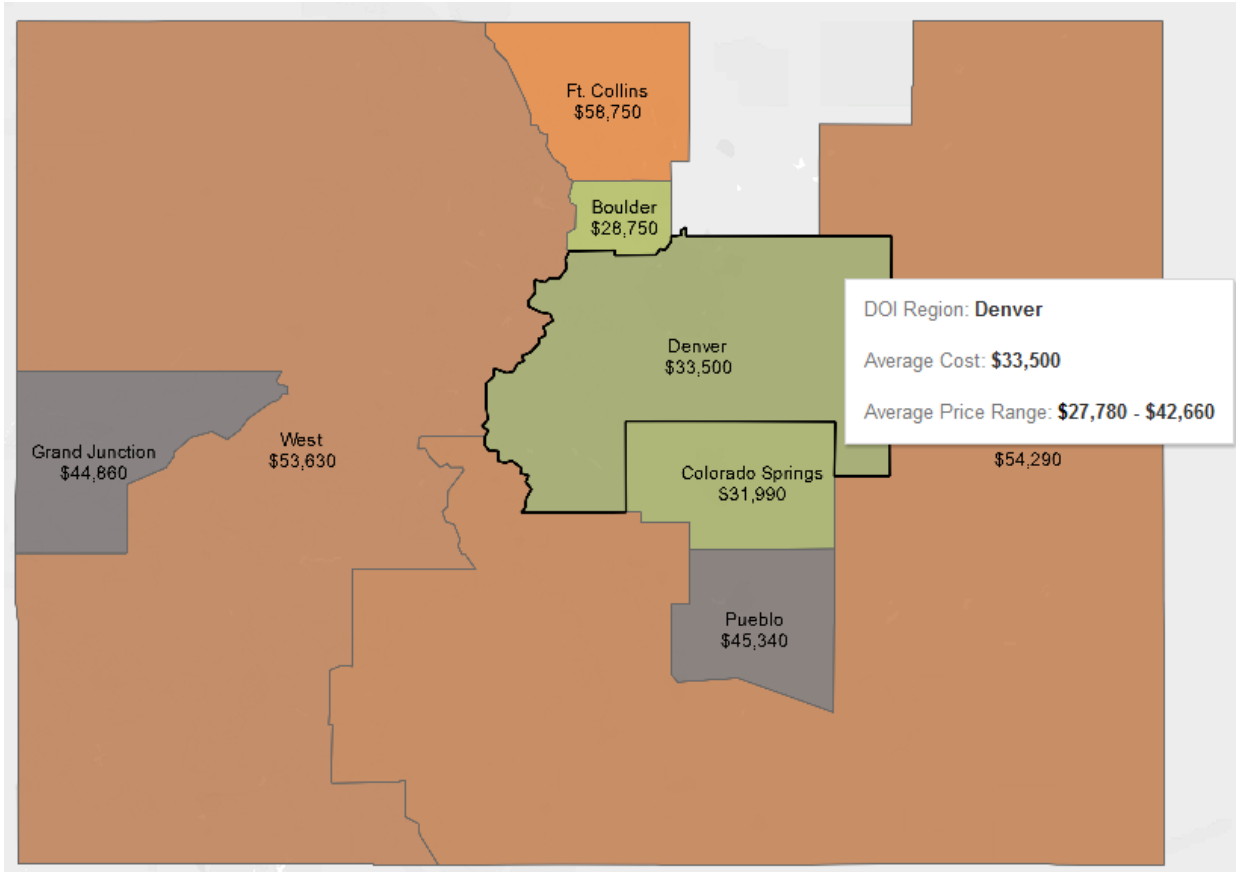
By Anna D. Sinaiko, Pragya Kakani, and Meredith B. Rosenthal

Marketwide Price Transparency Suggests Significant Opportunities For Value-Based Purchasing

ABSTRACT The extent of price variation across a local market has important implications for value-based purchasing. Using a new data set containing health care prices for nearly every insurer-provider-service triad across a large local market, we comprehensively examined variation in fee-for-service paid commercial prices in Massachusetts for 291 predominantly outpatient medical services. Prices varied considerably across hospital service areas. Prices for medical services at acute hospitals were, on average, 76 percent higher than at all other providers. The service categories with the widest price variation were ambulance/transportation services, physical/occupational therapy, and laboratory/pathology testing. In this market, simulations suggested that steering patients toward lower-price providers or setting price ceilings could generate potential savings of 9.0–12.8 percent. Marketwide price information at the insurer-provider-service level could help target policy interventions to reduce health care spending.

Source: *Health Affairs,* 2019)

Procedure-Specific Cost Variation in Colorado



Data is based on 2017 claims submitted by commercial health insurance payers to the Colorado All Payer Claims Database. Dollar amounts reflect median "episodes of care" payments which is how much typically gets paid, in total, between patients and their commercial health insurance plans, for all bills associated with this service, pre, during, and post care.

CIVHC
CENTER FOR IMPROVING VALUE IN HEALTH CARE

Source: CIVHC

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Discussion Questions

- Are we on the right track?
- Additional considerations, including related to:
  - California's distinctive market?
  - Early use cases to prioritize?

Public Comment

BREAK

Lessons Learned from Working with APCD Data on Cost and Utilization

California HPD Advisory Committee

January 28, 2021

Ana English, MBA

CIVHC

CENTER FOR IMPROVING VALUE IN HEALTH CARE

Our Mission

We strive to empower individuals, communities, and organizations through collaborative support services and health care information to advance the Triple Aim: Better Health, Better Care, Lower Cost

We are:

- Non-profit
- Independent
- Objective

Who We Serve

Change Agents

Individuals, communities, or organizations working to lower costs, improve care, and make Colorado healthier.

History of the CO APCD

2008
CO APCD recommended by Blue Ribbon Commission for Health Care Reform

2010
CO APCD Legislation (HB 10-1330); CIVHC named administrator by HCPF

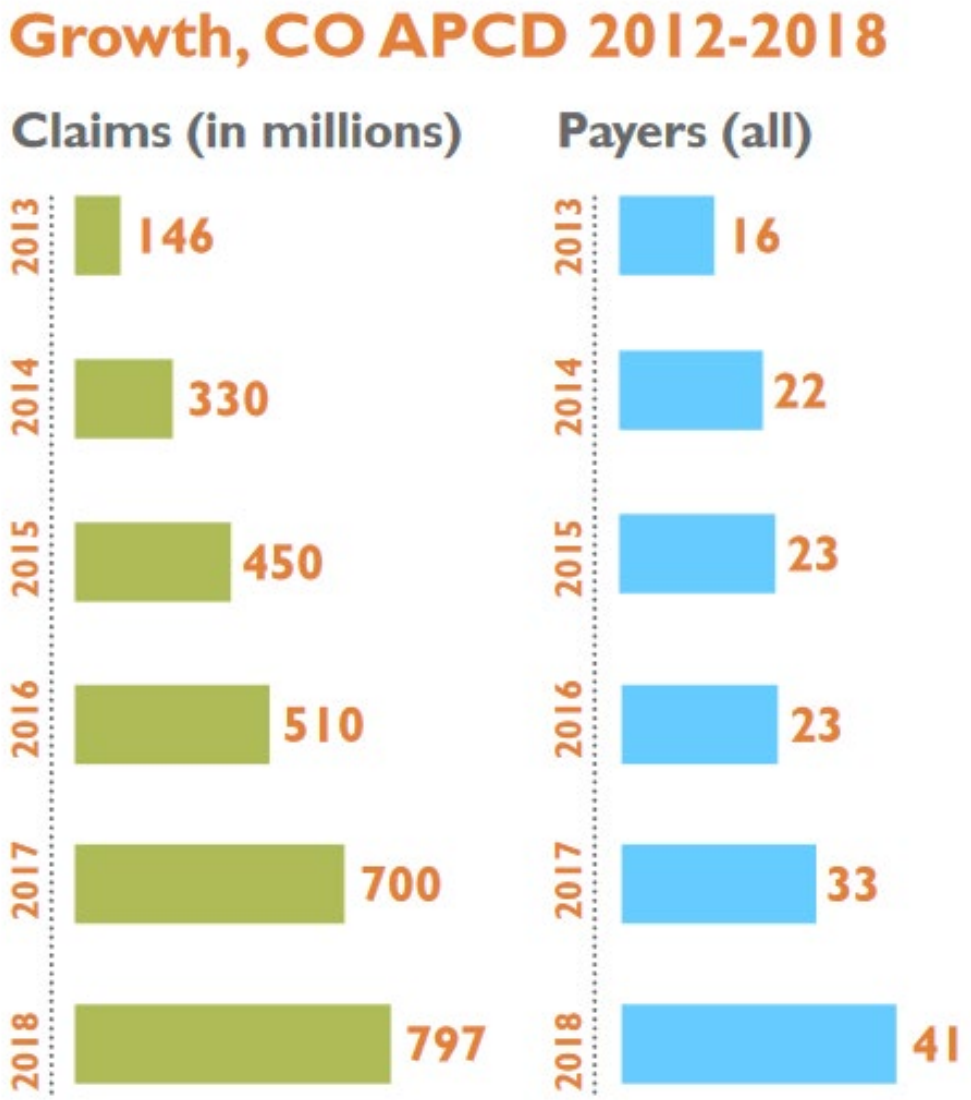
2012
CO APCD operational; website goes live; begin providing custom data requests

2013-2016
Enhancements to public data/infrastructure; added more payers/Medicare; increased custom data fulfillments

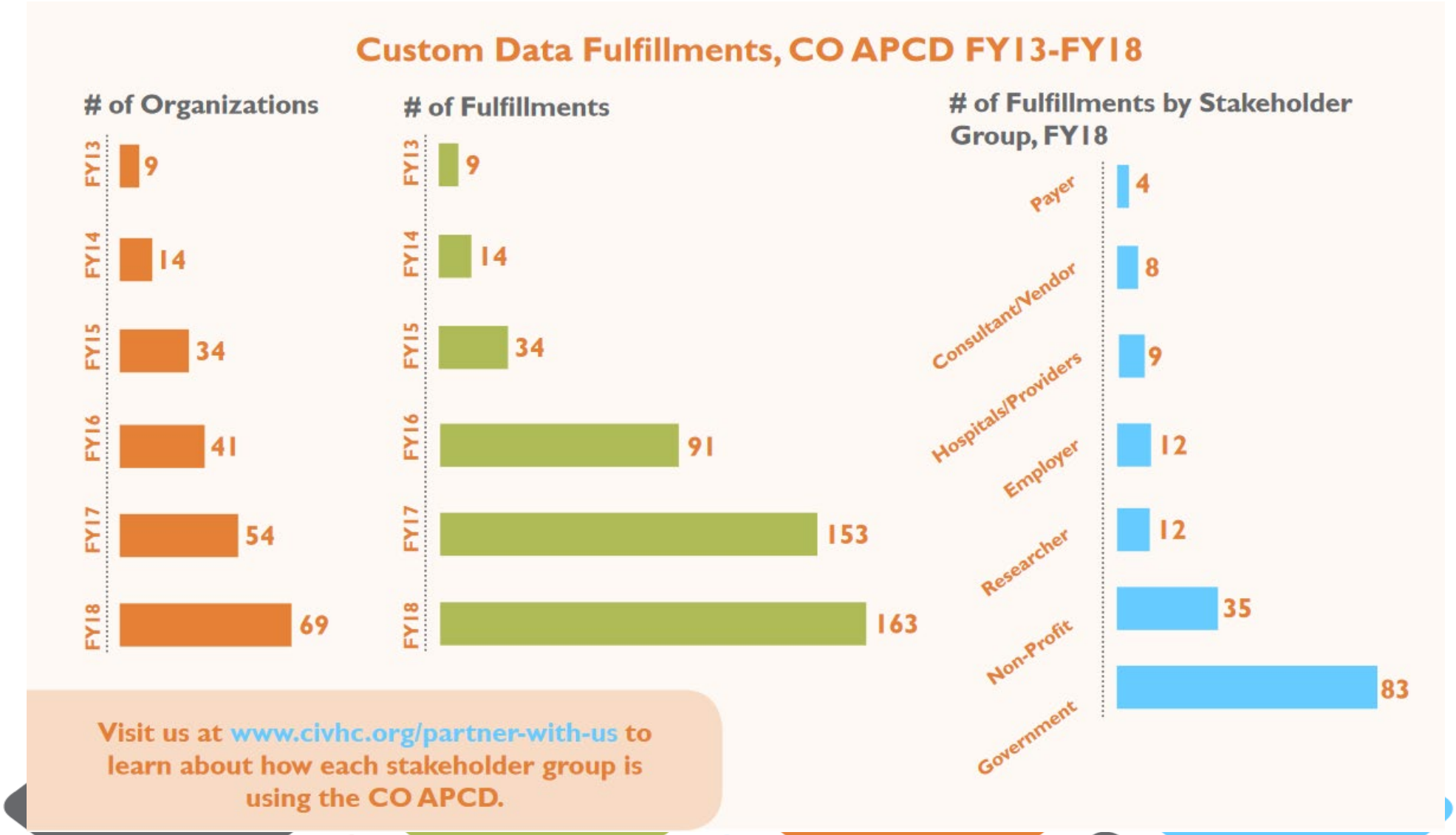
2017-2019
Transition to new data vendor; enhanced capabilities; launched new website and additional public data

2019 - Present
New state operating funding for enhanced data, tools, analytics, public reporting

Evolution of Claims and Payer Intake



Evolution of Fulfillments



Evolution of Public Use Cases

Early

Population Health Separate Reports (cost, utilization) – **launched website in 2012 with this information**

Shop for Care (facility costs only, hospitals only, limited procedures) – **took 1.5 years to complete**

Mid

Shop for Care Enhancements (expanded measures, inclusion of ASCs)

Population Health Enhancements (trends, new payer breakouts and geographies, quality measures, condition prevalence)

White Papers/ Spot Analyses

Data Bytes for legislators, etc.

Current

Shop for Care Enhancements episode prices, over 50 procedures available and updated annually

Merged multiple reports into single **Community Dashboard** view (5 new measures added annually)

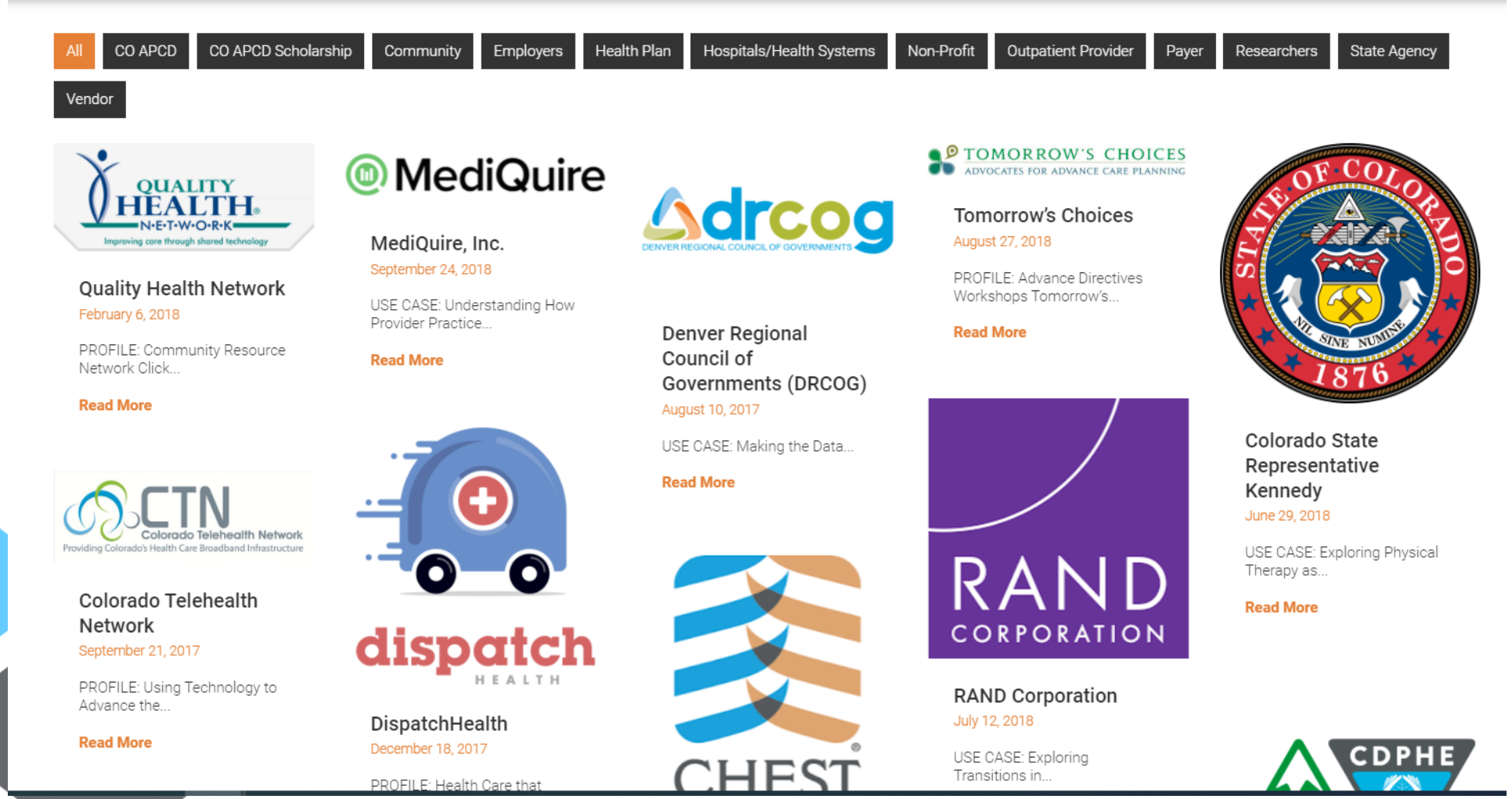
Interactive Reports (Reference-based price, Low Value Care, COVID-19 Analyses)

Numerous Data Bytes and Reports for state, legislators, consumers, etc.

Average 14 major public publications annually including updates to existing and new analyses

Use Cases – Change Agent Gallery

www.civhc.org/change-agents/



Usability: Commonwealth Fund
STATE ALL-PAYER CLAIMS DATABASES
Tools for Improving Health Care Value

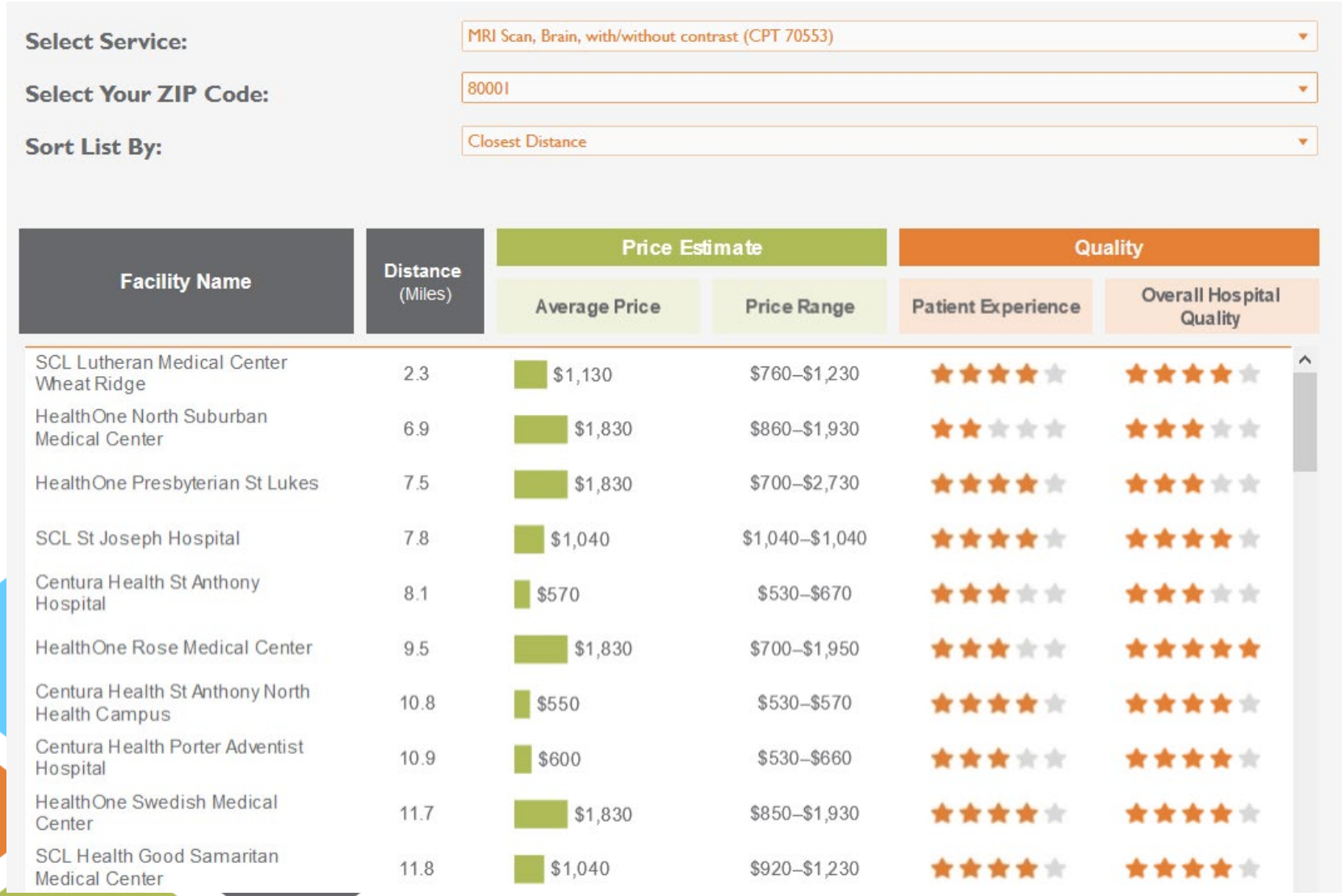
KEY FINDINGS AND CONCLUSIONS: APCDs are used to:

1) *report on health system spending, utilization, and performance;* EARLY
2) *enhance state policy and regulatory analysis;* MID
3) *inform the public about health care prices and quality;* EARLY/MID
4) *enable value-based purchasing and health care improvement;* MID
5) *support public health monitoring and improvement; and* MID
6) *provide reliable data for health care research and evaluation.* EARLY/MID

CIVHC is one of only two state APCDs that provide all six potential uses.

https://www.commonwealthfund.org/publications/fund-reports/2020/dec/state-apcds-part-1-establish-make-functional;https://www.commonwealthfund.org/sites/default/files/202012/McCarthy_State_APCDs_Part2_v2.pdf

Shop for Care



Select Service: MRI Scan, Brain, with/without contrast (CPT 70553)

Select Your ZIP Code: 80001

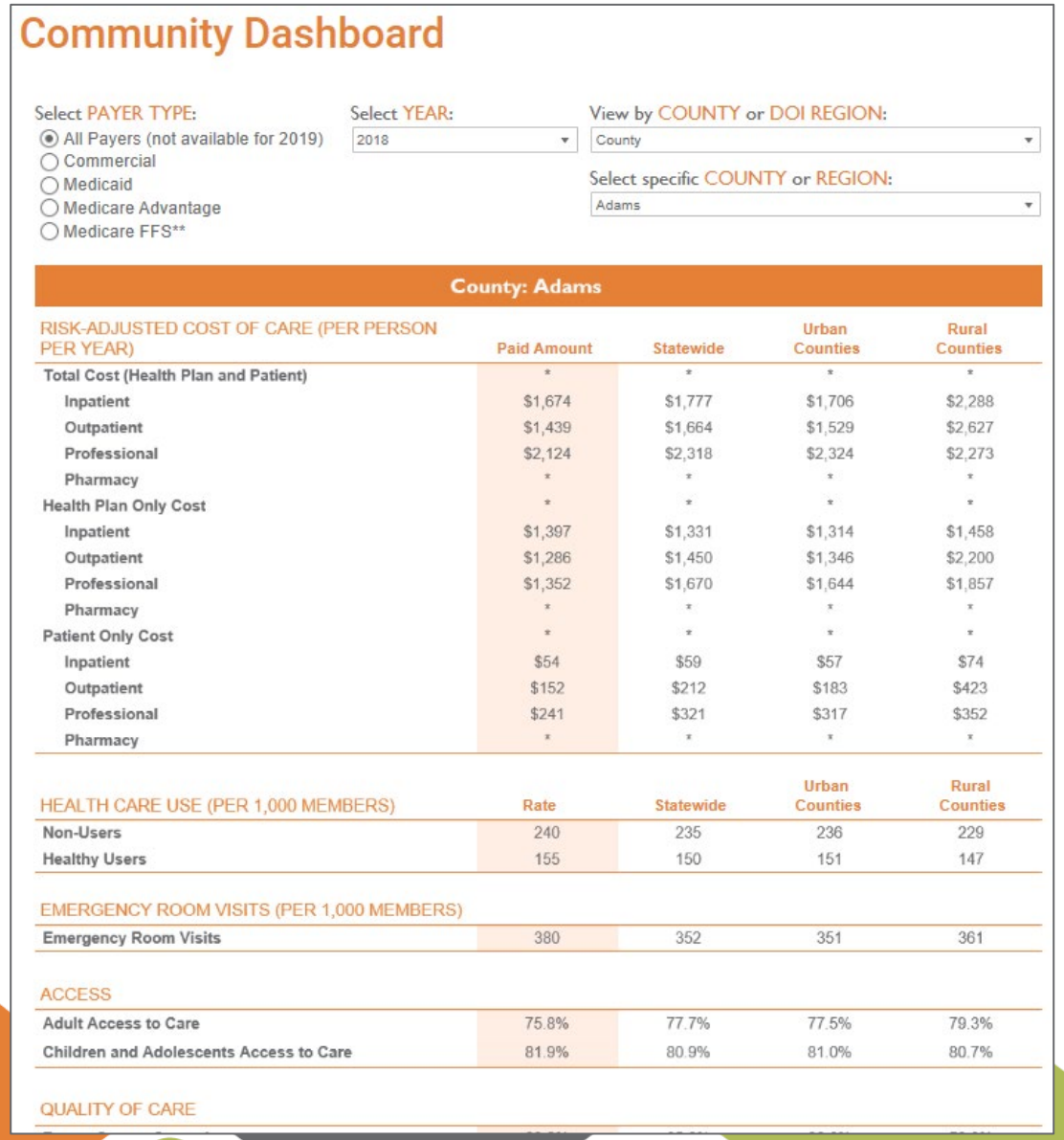
Sort List By: Closest Distance

Facility Name	Distance (Miles)	Price Estimate		Quality	
		Average Price	Price Range	Patient Experience	Overall Hospital Quality
SCL Lutheran Medical Center Wheat Ridge	2.3	$1,130	$760–$1,230	★★★★☆	★★★★☆
HealthOne North Suburban Medical Center	6.9	$1,830	$860–$1,930	★★☆☆☆	★★★☆☆
HealthOne Presbyterian St Lukes	7.5	$1,830	$700–$2,730	★★★★☆	★★★☆☆
SCL St Joseph Hospital	7.8	$1,040	$1,040–$1,040	★★★★☆	★★★★☆
Centura Health St Anthony Hospital	8.1	$570	$530–$670	★★★☆☆	★★★☆☆
HealthOne Rose Medical Center	9.5	$1,830	$700–$1,950	★★★☆☆	★★★★★
Centura Health St Anthony North Health Campus	10.8	$550	$530–$570	★★★★☆	★★★★☆
Centura Health Porter Adventist Hospital	10.9	$600	$530–$660	★★★☆☆	★★★★☆
HealthOne Swedish Medical Center	11.7	$1,830	$850–$1,930	★★★★☆	★★★★☆
SCL Health Good Samaritan Medical Center	11.8	$1,040	$920–$1,230	★★★★☆	★★★★☆

Lessons Learned

- Claims data not designed to report on facility basis, takes significant resources to clean up the data and sort by facility
- Build in sufficient time to preview with facilities to build trust and validate
- Don't assume "build it and consumers will come"; providers/payers and other audiences may be more likely to use the information immediately

Community Dashboard



Community Dashboard

Select PAYER TYPE:
- (•) All Payers (not available for 2019)
- ( ) Commercial
- ( ) Medicaid
- ( ) Medicare Advantage
- ( ) Medicare FFS**

Select YEAR: 2018

View by COUNTY or DOI REGION: County

Select specific COUNTY or REGION: Adams

County: Adams

RISK-ADJUSTED COST OF CARE (PER PERSON PER YEAR)	Paid Amount	Statewide	Urban Counties	Rural Counties
Total Cost (Health Plan and Patient)	*	*	*	*
Inpatient	$1,674	$1,777	$1,706	$2,288
Outpatient	$1,439	$1,664	$1,529	$2,627
Professional	$2,124	$2,318	$2,324	$2,273
Pharmacy	*	*	*	*
Health Plan Only Cost	*	*	*	*
Inpatient	$1,397	$1,331	$1,314	$1,458
Outpatient	$1,286	$1,450	$1,346	$2,200
Professional	$1,352	$1,670	$1,644	$1,857
Pharmacy	*	*	*	*
Patient Only Cost	*	*	*	*
Inpatient	$54	$59	$57	$74
Outpatient	$152	$212	$183	$423
Professional	$241	$321	$317	$352
Pharmacy	*	*	*	*

HEALTH CARE USE (PER 1,000 MEMBERS)	Rate	Statewide	Urban Counties	Rural Counties
Non-Users	240	235	236	229
Healthy Users	155	150	151	147

EMERGENCY ROOM VISITS (PER 1,000 MEMBERS)				
Emergency Room Visits	380	352	351	361

ACCESS				
Adult Access to Care	75.8%	77.7%	77.5%	79.3%
Children and Adolescents Access to Care	81.9%	80.9%	81.0%	80.7%

QUALITY OF CARE

Lessons Learned

- Most difficult and time consuming part is determining the methodology for each element. Many factors to consider.
- Build measures within the database so they are accessible with the same methodology for other analyses
- Keep it simple in terms of visual display and interaction
- Provide a data set to accompany the report that enables multiple use cases across multiple stakeholders (age group, demographic breakouts, etc.)

COVID-19 Analysis using the CO APCD

- Inform mitigation actions – **Early potential (based on historic claims)**
  - Identifying Population at High-Risk for Severe Illness*
- Describe impact on the health care system and access - **Early potential (based on historic claims/doesn't require significant runout)**
  - Potential loss of income due to temporary cessation of surgical procedures*
  - Telehealth Services Analysis*
- Understand impact on health of populations – **Takes adequate runout post-COVID and long-term outcomes analysis**
  - Mental health conditions, chronic condition management.
  - Reduction on preventive care (i.e., immunizations, screenings)

*currently publicly available

Lessons Learned – Evolution of Use Cases

- Significant time and resources must be devoted early on to data quality on the intake and processing side
  - Without good data coming in and good processing, analyses will not be trusted and actionable
  - Understand the appropriate uses of data based on the status of the data
- Treat data compliance as a framework not a crutch
- Involve internal analysts early in evaluation of requested data or analysis to insure final product will actually answer the question or goals
- Involve requestors and other stakeholders early in the process to review the data and results of analyses for a “smell check”
- EVERYTHING is QC’d throughout the delivery and analytic process and again before it goes out the door. Check and double check for accuracy!
- The more you use and dig into the data:
  - the more “data discoveries” occur – Good!
  - The more you use the data, the more valuable it becomes!

Credibility – NAHDO APCD Metric Evaluation

- NAHDO APCD Metric Evaluation: APCD Rankings
  - Multi-State Benchmarking Study
  - 1st of its kind
  - 5 States participated in study – July 2019

- NAHDO Data Quality Forum
  - 9 Measures identified to compare quality of data

Thank you!

Questions?

Ana English, MBA
President and CEO
aenglish@civhc.org

Kristin Paulson, JD, MPH
Chief Operating Officer
kpaulson@civhc.org

Cari Frank, MBA
VP Communications & Marketing
cfrank@civhc.org

Pete Sheehan
VP Client Solutions and State Initiatives
psheehan@civhc.org

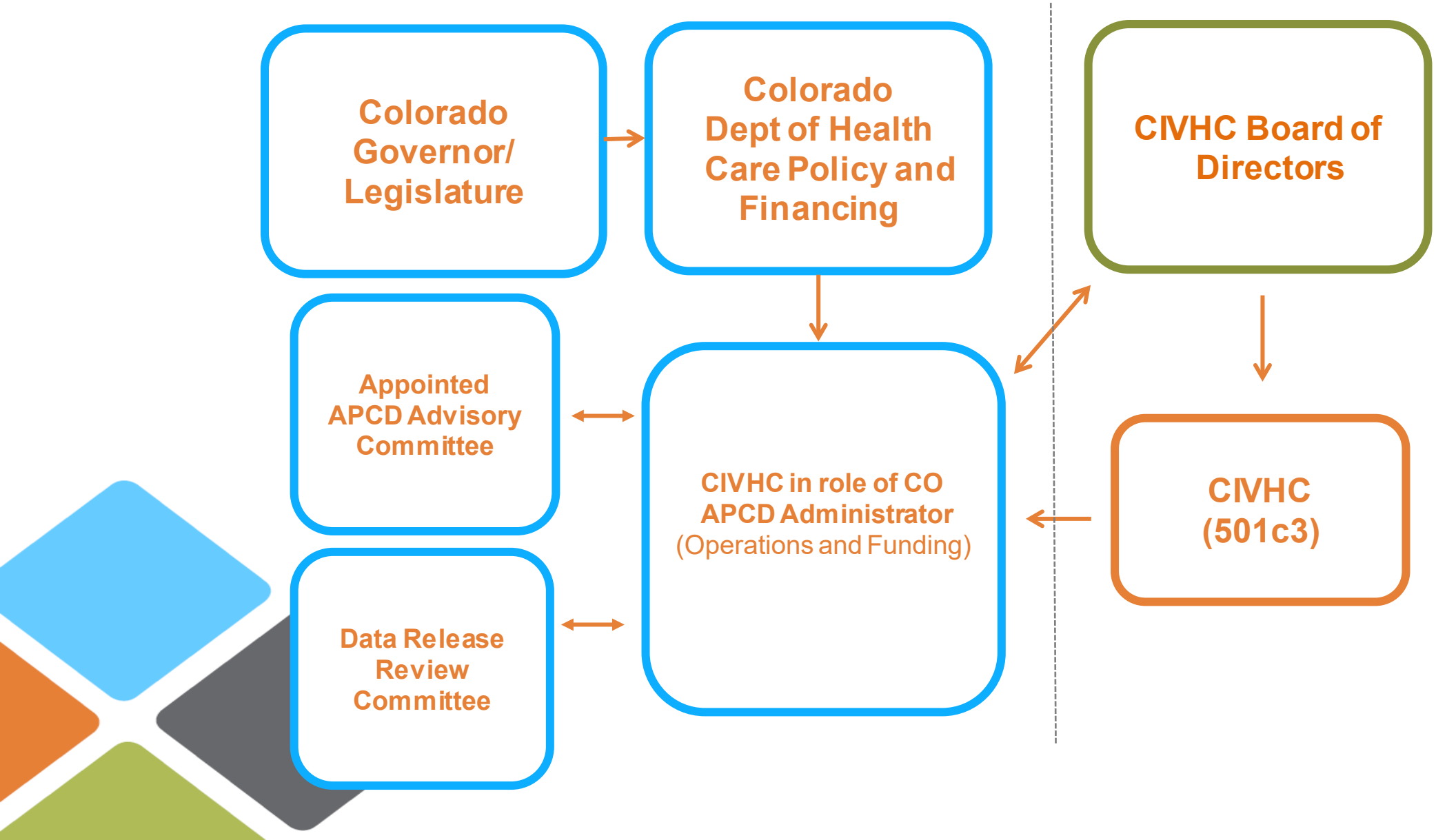
Appendix

CIVHC Strategic Plan FY16-20 Evolution

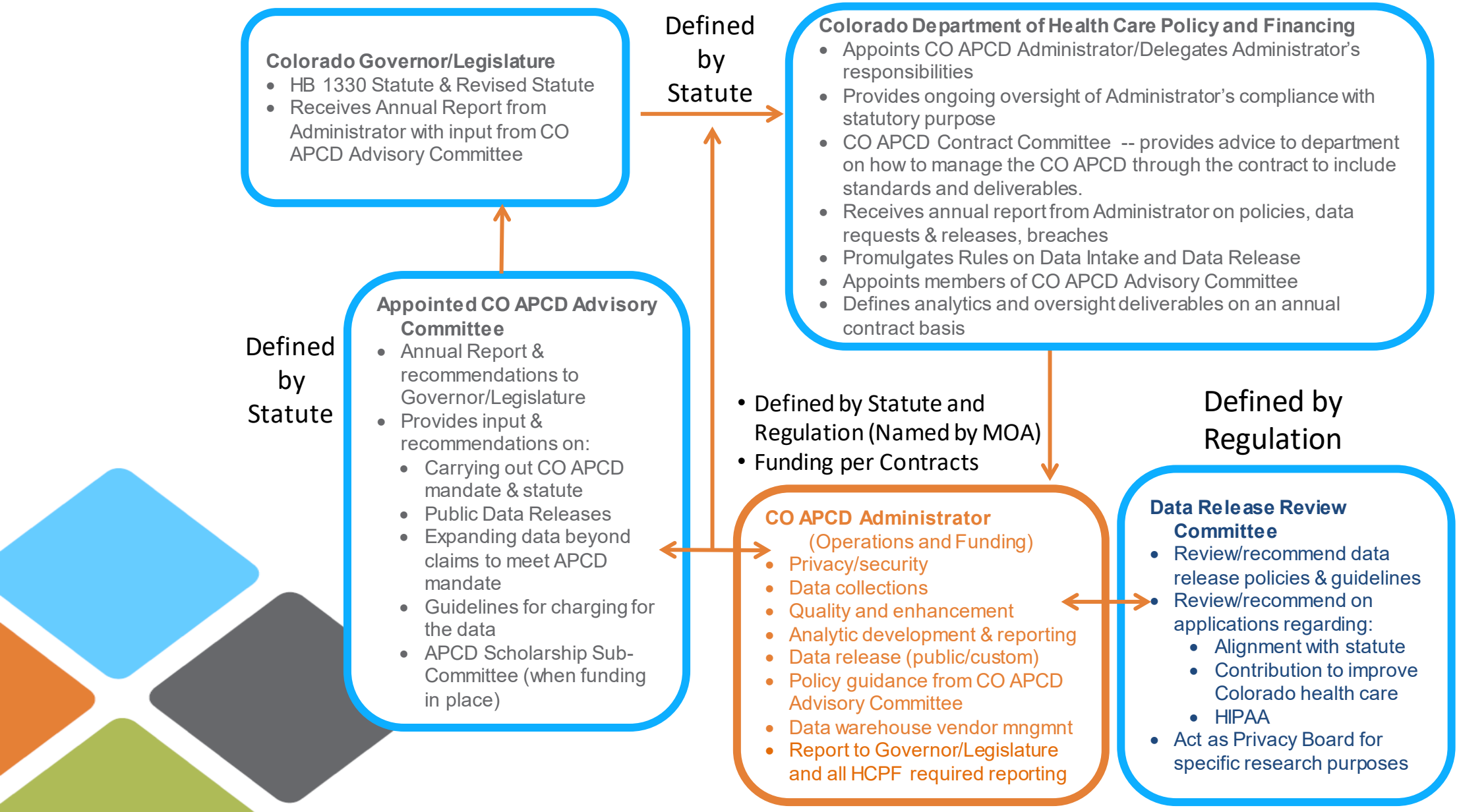
FY16/ FY17	High Performing Organization	Expand Data	**Provide Data and Analytics**	Integral to Colorado	National Impact
FY18	High Performing Organization	New Data Sets	**Actionable Data & Analytics**	Integral to Colorado	National Impact
FY19	High Performing Organization	Additional Data Sets	**Decision Support**	Integral to Colorado	National Impact
FY20	Sustainability: High Performing Organization	Access: Actionable & Enhanced Data and Analytic Tools	Credibility: Credible Data and Analytics	Service: Integral to Colorado and the Nation	

CIVHC Strategic Plan FY21-FY25

CIVHC/CO APCD Oversight and Governance



CIVHC/CO APCD Oversight and Governance



Research Using APCD data: Insights and Lessons Learned

Anna D. Sinaiko, PhD

Harvard T.H. Chan School of Public Health

January 28, 2021

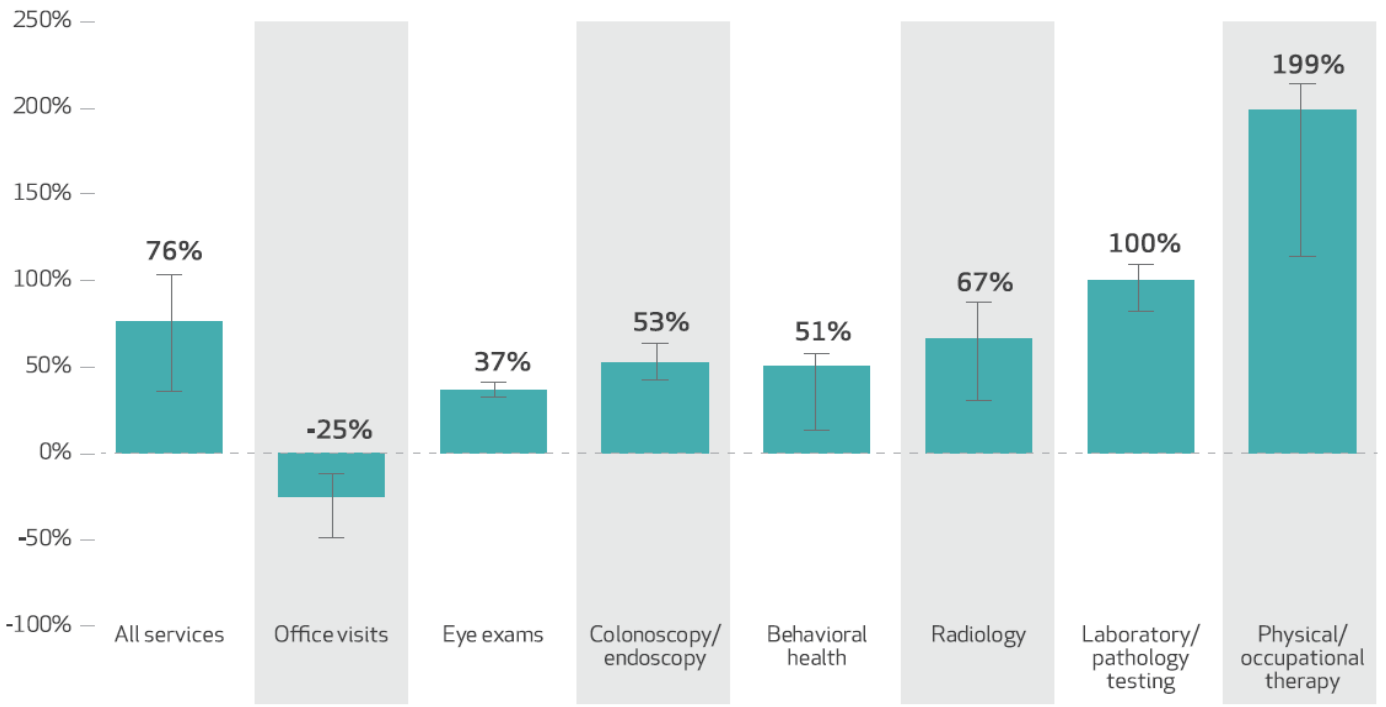
HARVARD T.H. CHAN
SCHOOL OF PUBLIC HEALTH

OSHPD
Office of Statewide Health Planning and Development

Evidence of wide variation in health care prices across outpatient settings in Massachusetts

EXHIBIT 3

Differences between acute hospitals and other providers in average negotiated prices paid by commercial health plans in Massachusetts, by service category, 2015



SOURCE Authors' analysis of data from the Center for Health Information and Analysis. **NOTES** Prices for acute hospitals include all prices for outpatient services billed with the hospital listed as the provider. Prices for other providers include claims billed by hospital outpatient departments, excluding the associated facility fee. Claims for emergency department and maternity services were excluded because these services are provided almost exclusively at acute hospitals. Claims for ambulance services were excluded because the vast majority of providers billing for these services are not hospitals. The error bars indicate interquartile ranges.

Source: Sinaiko et al. *Health Affairs* 2019

Deeper dive reveals variation both across providers and "within provider"

EXHIBIT 2

Total spending, mean service price, and price variation by service category, across providers and insurers in Massachusetts, 2015

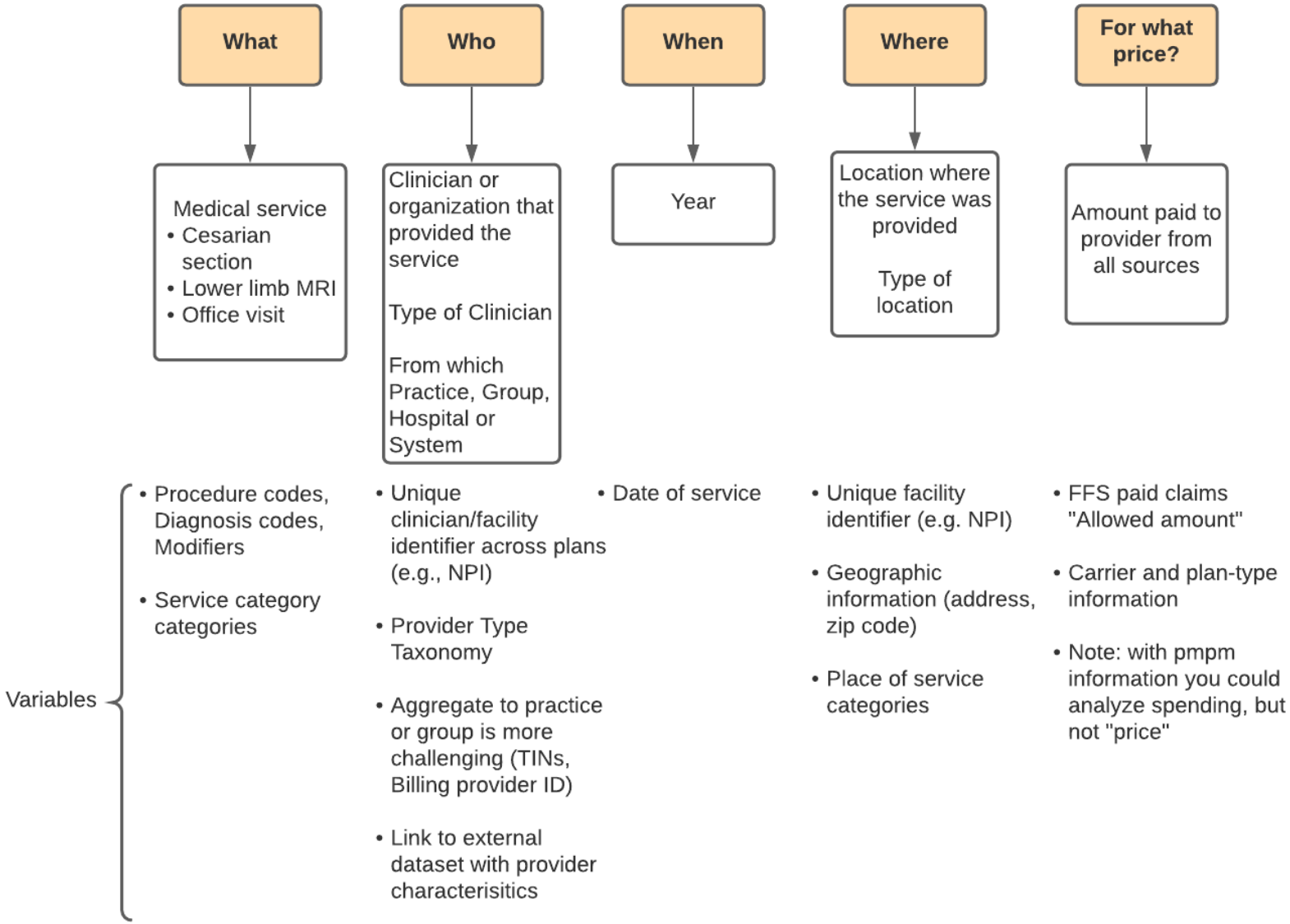
Service	No. of CPT codes	Total spending ($)	Across provider-insurer combinations		Across providers		Across insurers	
			Mean price ($)	Mean CV	No.	Mean CV	No.	Mean CV
All	291	3,061,294,213	177.68	0.50	12,549	0.42	8	0.30
Ambulance/transportation	7	91,402,809	654.15	0.79	255	0.75	8	0.34
Behavioral health	22	200,043,469	88.62	0.35	7,146	0.32	8	0.16
Colonoscopy/endoscopy	12	240,608,922	2,097.17	0.31	91	0.29	8	0.24
Emergency department visits	5	202,651,922	537.63	0.49	67	0.32	8	0.32
Eye exams	4	82,982,024	154.49	0.50	714	0.31	8	0.28
Laboratory/pathology testing	86	256,020,132	26.86	0.64	713	0.54	8	0.34
Maternity	2	42,027,721	4,132.35	0.24	99	0.20	4	0.16
Office visits	28	1,240,858,596	164.81	0.38	4,034	0.29	8	0.26
Physical/occupational therapy	17	113,832,069	42.96	0.70	1,392	0.69	8	0.96
Radiology	108	590,866,549	471.11	0.42	518	0.34	8	0.22

SOURCE Authors' analysis of data from the Center for Health Information and Analysis. **NOTES** We calculated the mean provider price per service across insurers and then calculated the coefficient of variation (CV; explained in the text) for each service. We also calculated the mean insurer price per service across providers and then calculated the CV for each service. Maternity service prices were reported for provider-insurer combinations with at least eleven observations (only four insurers in our data had sufficient volume to meet this threshold). CPT is *Current Procedural Terminology*.

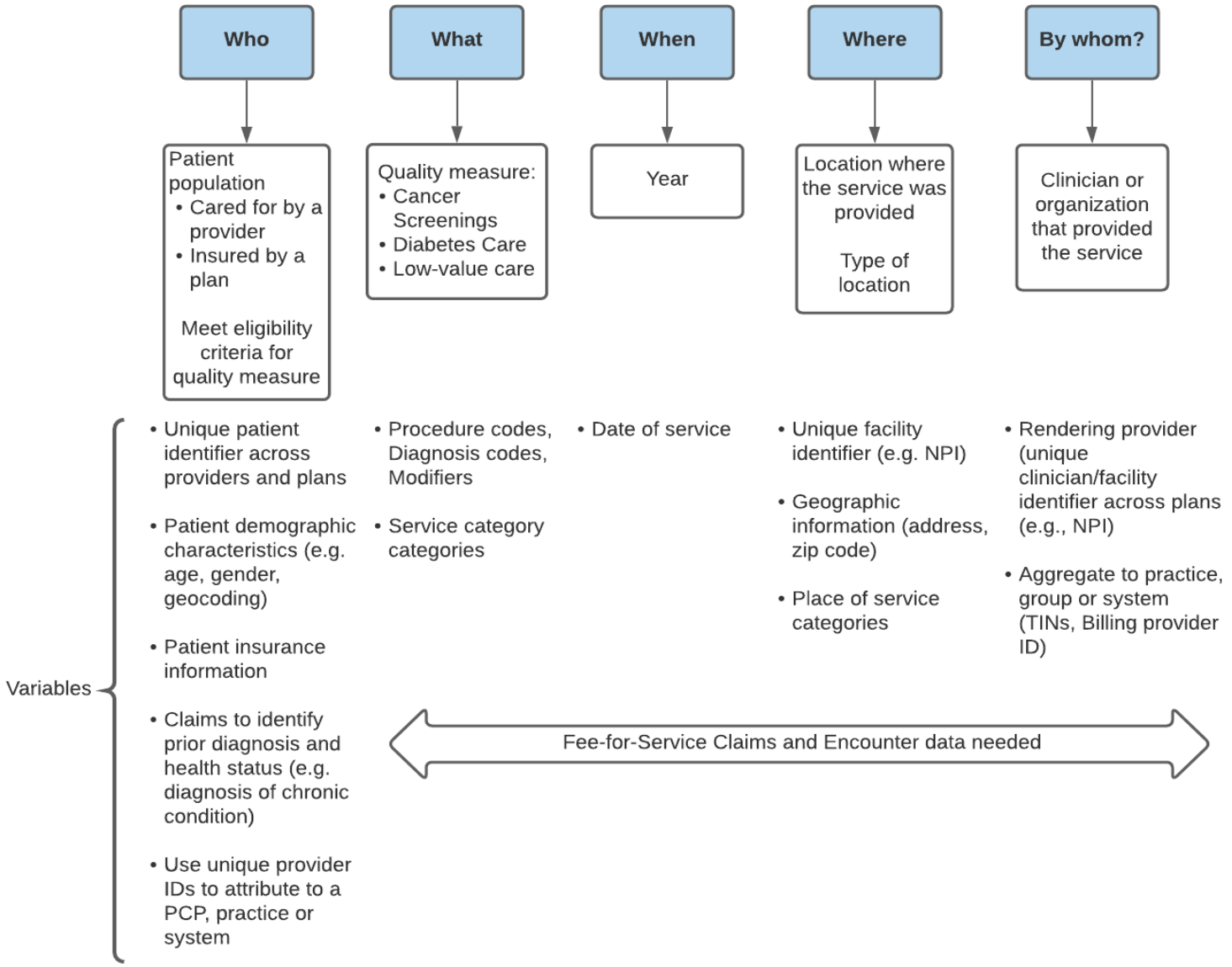
Broad interest in research findings

- Massachusetts Group Insurance Commission (large purchaser)
- Policymaker briefings
  - Department of Justice
  - Massachusetts Health Care Cost Trends hearing
- Media interest

Analyzing variation in health care prices



Analyzing variation in utilization and quality



Enormous value of standardized formats for research

- Provider Taxonomy example

Carrier submitted

Number of Taxonomy Categories: 689

Physician - Cardiology

Taxonomy_Code	Description 1
C	Cardiology
CARD	Cardiovascular Disease
CARD	Cardiology
CARD	Cardiovascular Disease
25	CARDIOLOGIST
1104	CARDIOLOGY
1053	CARDIOVASCULAR DISEASE
06	Cardiology
40	PEDIATRIC CARDIOLOGY
06	CARDIOVASCULAR DISEASE
1101	CARDIOVASCULAR DISEASE
12	CARDIOVASCULAR DISEASE

Required standardized format

Number of Taxonomy Categories: 266

Physician - Cardiology

Taxonomy_Code	Description 1	Description 2	Description 3
207RC0000X	Physician: Internal Medicine - Cardiovascular Disease	Internal Medicine	Cardiologist
207RI0011X	Physician: Internal Medicine - Interventional Cardiology	Internal Medicine	Interventional Cardiology
2080P0202X	Physician: Pediatrics - Cardiology	Pediatrician	Pediatric Cardiologist

A few last thoughts

- Understand the limitations due to missing data (e.g. self-insured employers, capitated plans)
- Importance of privacy and protection is critical
- Create a pathway to researcher access that allows longitudinal research or external linkages, but still protects privacy

Public Comment

Adjournment

2021 Advisory Committee Meetings - Anticipated Agenda Topics

January 28

- *Progress updates*
- Use cases overview
- Lessons learned from working with APCD data

April 22

- *Progress updates*
- Planning for data collection: format & submitter outreach

July 22

- *Progress updates*
- Principles for public reporting
- Priorities for public information portfolio

October 28

- *Progress updates*
- Access to non-public data
- Voluntary private self-insured: approach and outreach

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