



10 years of Data: Lessons Learned and Use Cases of the CO APCD

August 25, 2022



CENTER FOR IMPROVING
VALUE IN HEALTH CARE



Agenda

- What's in the CO APCD – Then and Now
- Lessons Learned
- Use Cases
- Questions/Feedback from Participants
- **Housekeeping:** Session is being recorded, questions via the chat box



Presenters



Cari Frank, MBA
Vice President of Communication
and Marketing, CIVHC



Kristin Paulson, MPH, JD
CIVHC Chief Operating Officer and
General Counsel, CIVHC



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.



All Payer Claims Database (APCD) Overview

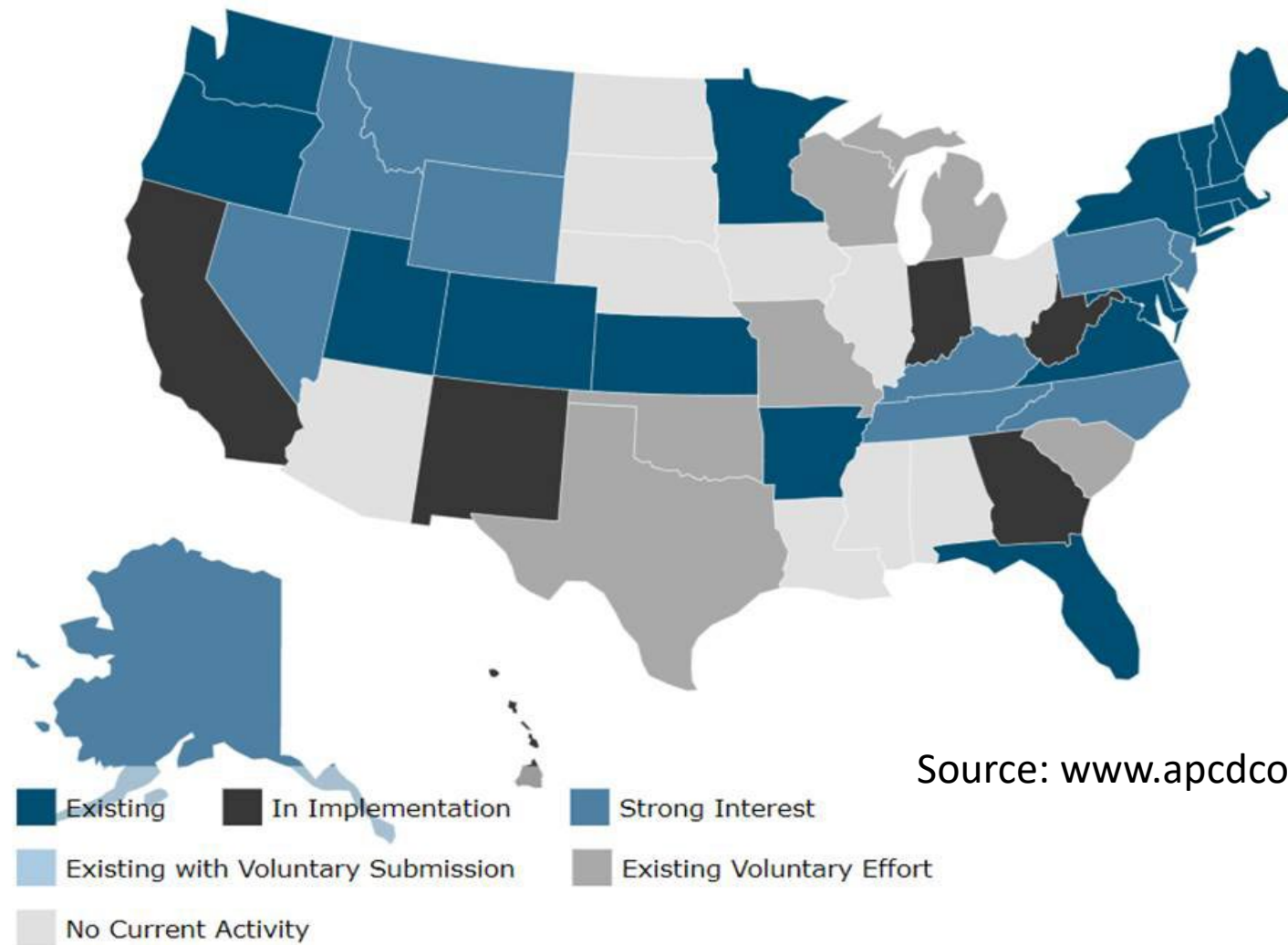
APCDs are large databases that typically include medical, dental, pharmacy claims collected from private and public payers. Advantages over single-payer or population-based databases include:

- Capturing longitudinal care information on individuals
- Patient data that spans care settings
- Data from most or all insurance companies in state
- Demographic, diagnostic, procedural & reimbursement information (total charges, plan paid, and patient responsibility)
 - Useful for policy, research, clinical and health system performance, evaluation, population health management, system redesign, payment reform, and more

Currently, 18 states have some form of an APCD




National APCDs



Source: www.apcdouncil.org



Six Critical Functions of an APCD



Reporting on health care spending, utilization, and performance

Enhancing state policy and regulatory analysis

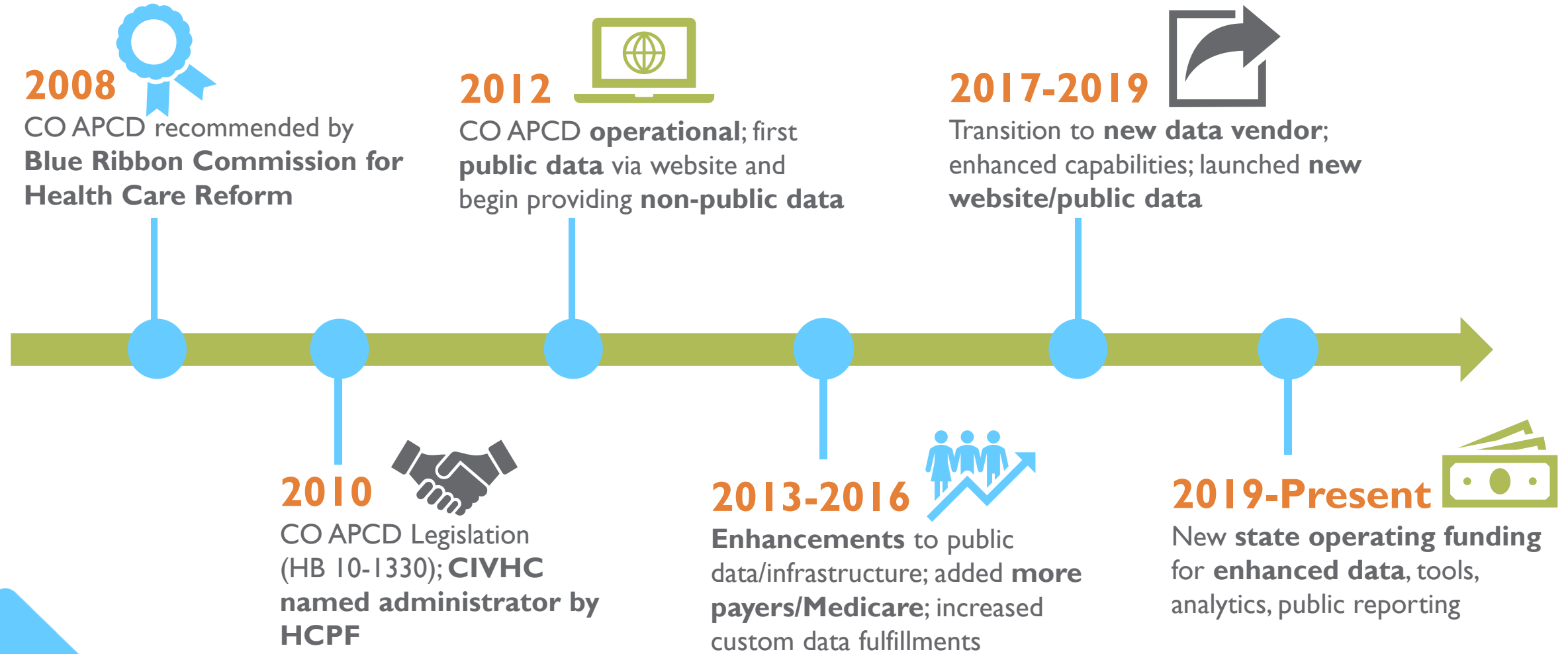
Informing the public about health care prices and policy

Enabling value-based purchasing and health care improvement

Supporting public health monitoring and improvement

Providing reliable data for health care research and evaluation

History of the CO APCD



What's IN the CO APCD?



870+ Million Claims (2013-2021)



36 Commercial Payers, + Medicaid & Medicare*



5+ Million Lives*, Including 1M (50%) of self-insured



Nearly 70% of Covered Lives (medical only)*



Trend information 2013-Present

*Reflects 2021 calendar year only

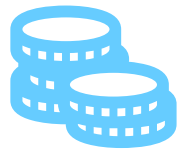
What's **NOT** In the CO APCD



Federal Programs – VA, Tricare, Indian Health Services



Majority of **ERISA-based self-insured employers**



Uninsured and self-pay claims



Supplemental Info (incomplete)



What Gets Submitted to the CO APCD?



Medical Claims



Professional Claims



Dental Claims



Pharmacy Claims



Eligibility Files



Non-Claims Data (annual files)

- Alternative Payment Models
- Drug Rebates
- Value-Based Pharmaceutical Contracts (2022)
- Prescription Drug Affordability Bill fields (2022)

What Does It Tell Us?



- **Who Received Care & Why?**

- Member composite ID to track across years and payers
- Basic demographic information: age, gender, 3-digit zip
- Diagnostic and procedure codes at the claim line level



- **Who Provided Care & Where?**

- Provider composite ID to track across facilities
- Provider NPI
- Provider 5-digit zip
- Provider specialty and sub specialty

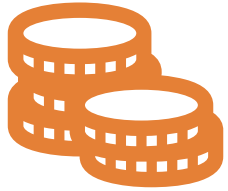


- **Which Insurer Paid for the Care?**

- Payer code and line of business



What Does It Tell Us?



- **How Much Was Paid?**

- Charged amount
- Allowed amount
- Paid amount
- Patient costs (co-pay, co-ins, deductible, premiums - 2022)
- Coordination of Benefits (amt and COB flag)



- **Which Medications Were Filled?**

- Pharmacy ID
- Drug name, dosage, and days prescribed
- Date filled



Key Values of the CO APCD

- **Rigorous data intake and QC processes** to ensure data uniformity and completeness across submitting payers
- Patient data that **spans care settings (IP, OP, ASC, SNF, etc.)**
- Captures **longitudinal care information on individuals** – including across plan types, product types, lines of business & geography
- **Demographic, diagnostic, procedural, and reimbursement** information for approximately 8.6 million unique lives
- Capabilities that **enable evaluation of impact of socio-economic** and racial factors on health equity



Unique Aspects of the CO APCD

- Value-add data processing
 - Master patient index – unique person ID, track people across plans and time
 - Master provider index – roll-up reporting at the provider level
- Value-add data analytics
 - Low Value Care
 - Medicare Price Comparisons (Reference Based Prices)
 - Geocoding to enable social determinants of health and race/ethnicity analytics
- Timely claims data
 - Monthly submissions
 - Bi-monthly processing of entire data warehouse
 - Data typically reflects care paid for 3 months prior.



Value CIVHC Brings to the CO APCD

- Non-partisan, serves all Change Agents
- Non-profit, ability to seek grants
- Number and breadth of annual public and non-public report releases
- Expansive data quality program
- Collaboration & partnership with Change Agents, payer submitters, state, and national entities
- Connection with Colorado community groups, providing data and insights to advance health our state.
- Lead programs in aging and end of life care to promote better care.



Learn More about the CO APCD: Insights Dashboard

CO APCD INSIGHTS DASHBOARD

TABLE OF CONTENTS

Hover over a page title to see a description of page content

SECTION: OVERVIEW

Overview



SECTION: POPULATION INFORMATION

Percent Insured People by County (medical only)



Total People by Year



Population Over Time



SECTION: PAYER INFORMATION

Insured People by Named Payer



Insured People by Payer by Year



Employers and Individuals by Group Size



Payer Volume by Year



SECTION: CLAIM VOLUME & TYPE

Claim Volume by Year



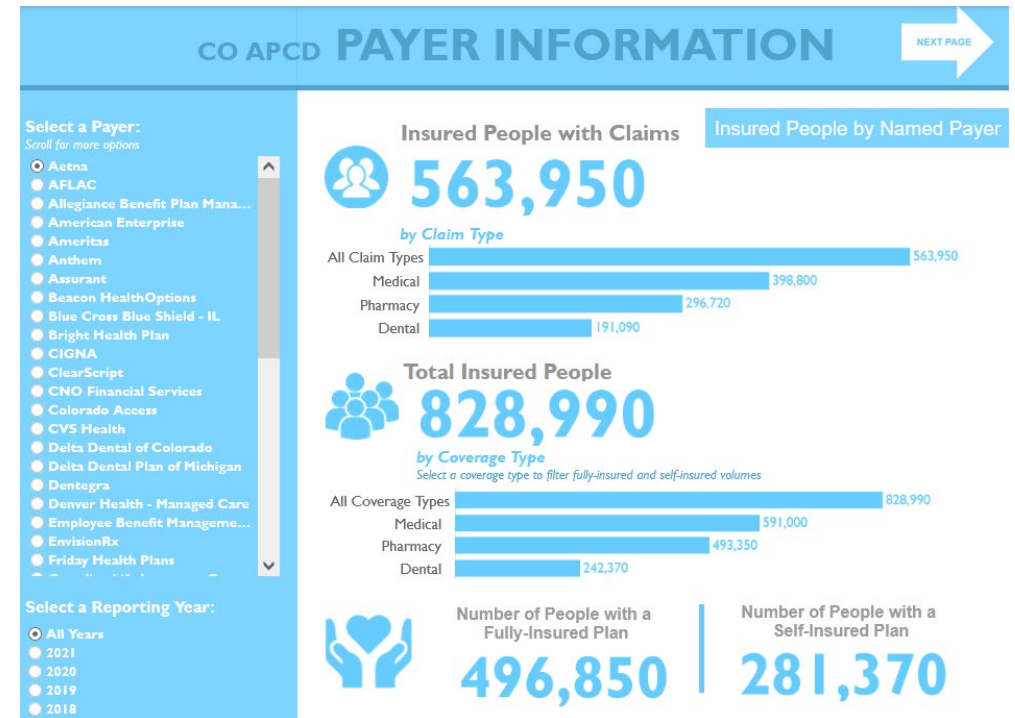
Behavioral Health Services



Dental Services



civhc.org > Get Data >
CO APCD Info >
What's In the CO APCD





The CO APCD Then & Now



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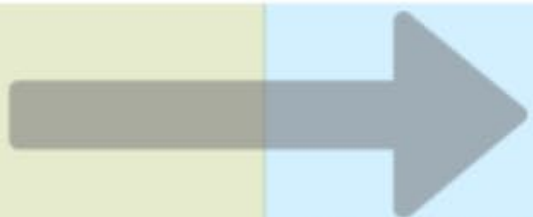


The CO APCD Then & Now

Number of Payers*



2012



2022



9

8 commercial
+
Medicaid



37 commercial
+
Medicaid
Medicare Fee For Service

39

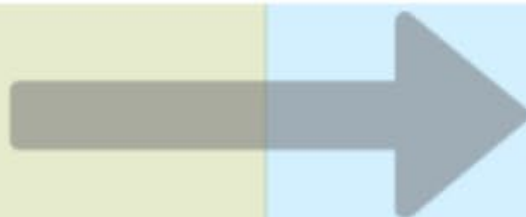
*Commercial payers submit Medicare Advantage claims

The CO APCD Then & Now

Types of Claims



2012



2022

 Medical
 Pharmacy

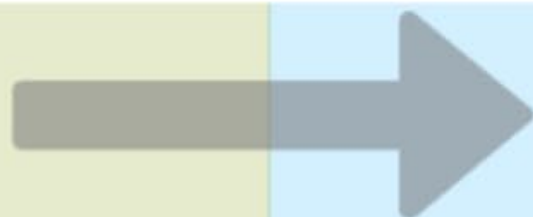
Medical 
Pharmacy 
Dental 
Drug Rebates 
Alternative Payment Models 

The CO APCD Then & Now

Memory Capacity Required to Store the CO APCD



2012



2022

1 terabyte



13 terabytes



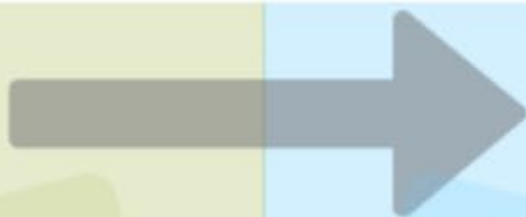
 = 5 64GB smartphones

The CO APCD Then & Now

Public Releases of CO APCD Data



2012



2022

35+

including

Data Bytes

Data Dives

Downloadable Data Sets

Infographics

Interactive Reports

Issue Briefs

Interactive report

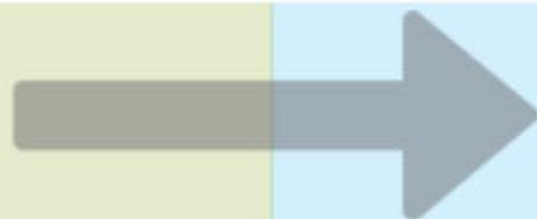
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The CO APCD Then & Now

Number of Services Available in the Shop for Care Tool



2014



2022



4



Procedures

22



Procedures

30



Imaging

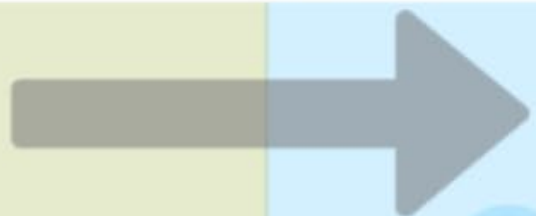
 = 2 services

The CO APCD Then & Now

Non-Public Releases




2012



2022

9

117

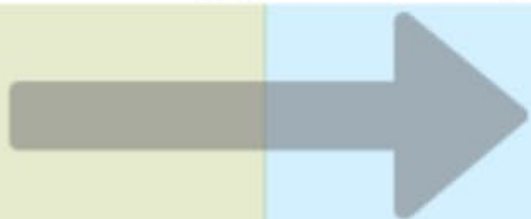
Each  = 3 releases

The CO APCD Then & Now



Pieces of legislation supported by CO APCD data

2012



2022

- HB 19-1233 - Investments in Primary Care to Reduce Health Costs
- HB 19-1174 - Out-of-Network Health Care Services
- SB 21-175 - Colorado Prescription Drug Affordability Board
- HB 21-1232 - Standardized Health Benefit Plan Colorado Option
- HB 22-1370 - Coverage Requirements for Health Care Products
- SB 22-068 Provider Tool To View All-payer Claims Database
- HB 22-1325 - Primary Care Alternative Payment Models
- SB 22-040 - Actuarial Reviews Health Insurance Mandate Legislation
- HB 22-1278 Behavioral Health Administration



Lessons Learned



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Lessons Learned – Data Management and Quality

- Take ownership of APCD data quality and don't leave it to others
- “The data is what the data is” – NO. There are always opportunities for quality improvement, though there is no such thing as “perfection”
- No black boxes – Need transparency into data processing, measures, metrics, and methods. Partner with others to learn best practices
- Submitters need to be treated as partners
- Clearly define appropriate uses of data
- Discover data issues internally – dig into the data and be transparent about data quality issues or “Data Discovery”



Lessons Learned: Analytics and Customer Service

- Understand the data and context to determine appropriate uses
- No black boxes – Need full transparency of processing, business rules, measures, metrics, and methodologies from all partners
- Compliance, Compliance, Compliance – HIPAA, HiTECH, anti-trust concerns, State statutes and regulations.
 - Treat data compliance as a framework not a crutch

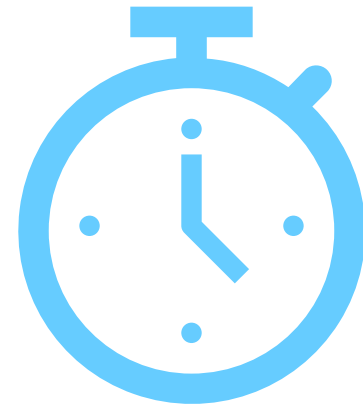


HIPAA-noia: The chronic fear that HIPAA privacy rules are coming to get you, and the resulting lockdown on ALL (even authorized) uses of health data.



Lessons Learned: Analytics and Customer Service

- No vendor can provide for all analytic or tool needs
- Set expectations with stakeholders and get analysts involved early
- Increased documentation creates better customer service
- Supplemental and enhanced data sources increase the data's value
- Standard datasets and standard reports can help get data to Change Agents quickly, but are time consuming to develop at first



Lessons Learned: Public Analyses

- Involve subject matter experts early and often
- Build in plenty of time for data QC and review against other externally available sources, especially with new analytics/methodology
- Review results with key Change Agents prior to release (Shop for Care, Affordability Dashboard, etc.)
 - Builds trust
 - Helps validate the process and functionality
 - Results in a more objective publication/release

Select Service: C-Section

Select Your ZIP Code: 80001

Sort List By: Average Price (High to Low)

Source: Colorado All Payer Claims Database (CO APCD), 2019.
* Ratings not available for Imaging Center or Ambulatory Surgery Centers, OR for hospitals not required to report to the Centers for Medicare & Medicaid Services due to low Medicare volume.

PRICE BREAKDOWN KEY: Pre During Post

Facility Name	Distance (Miles)	Price Estimate			Quality	
		Average Price	Price Range	Price Breakdown	Patient Experience	Overall Hospital Quality
Valley View Hospital	121.2	\$40,660	\$39,010-\$48,780	90%	★★★★★	★★★★★
UCHealth Yampa Valley Medical Center	102.2	\$27,630	\$24,290-\$31,790	98%	★★★★★	★★★★★
Vail Health	68.5	\$27,380	\$22,720-\$30,370	93%	★★★★★	★★★★★
HealthOne Swedish Medical Center	11.7	\$23,630	\$19,890-\$28,040	89%	★★★★★	★★★★★
SCL Health St Marys Medical Center	191.8	\$23,620	\$21,190-\$25,340	96%	★★★★★	★★★★★



How the CO APCD is Used by Change Agents

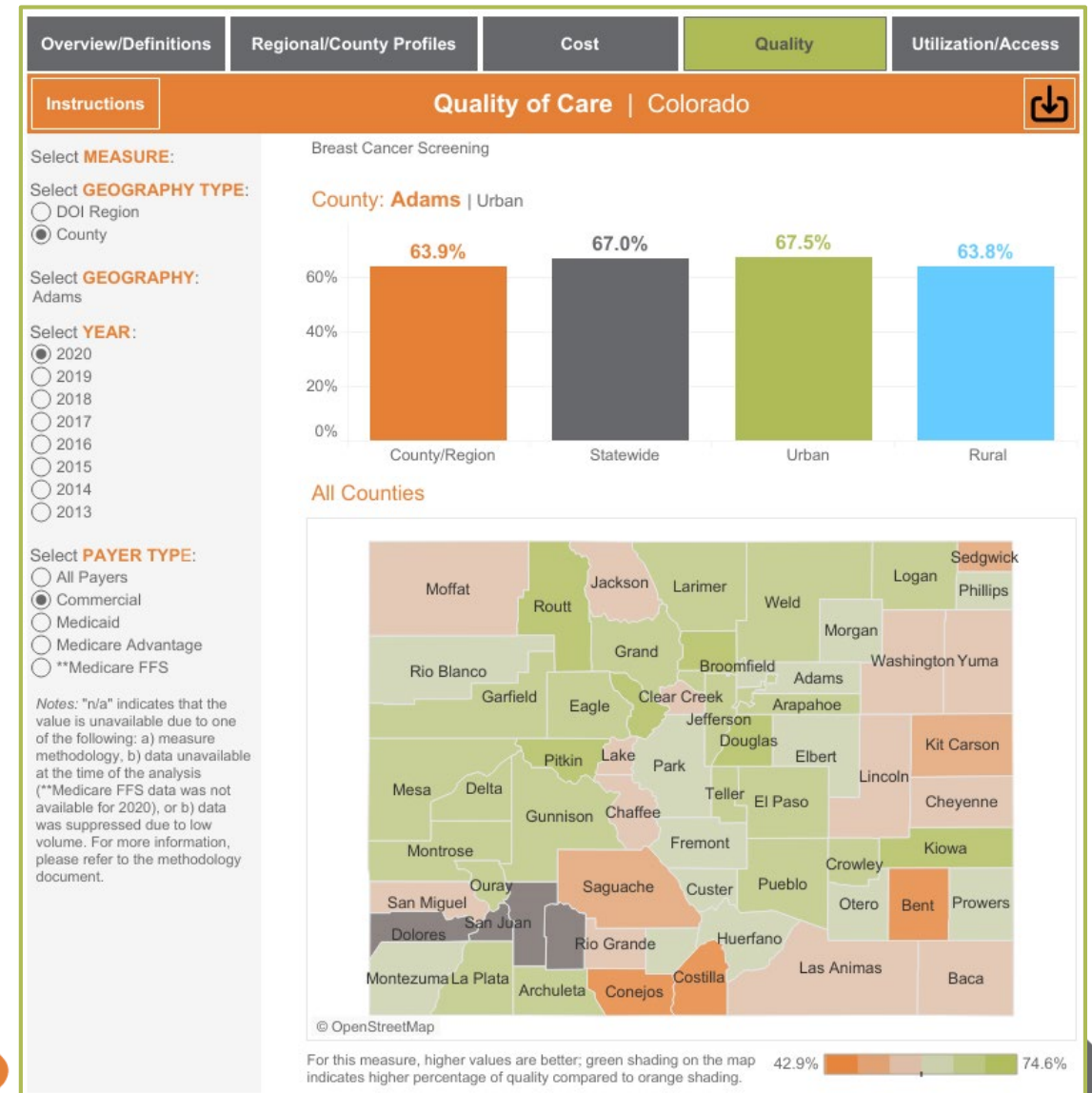


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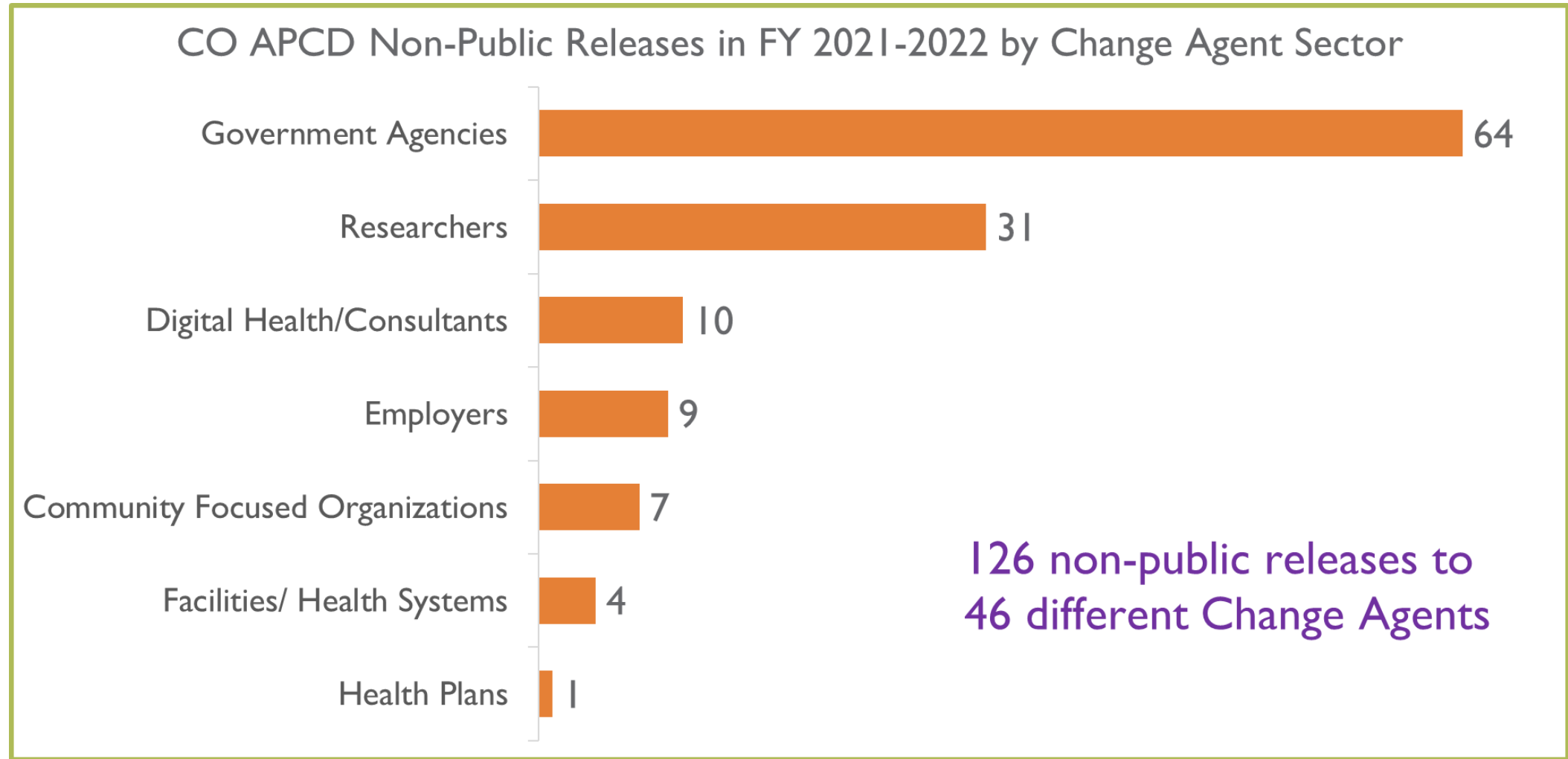


Available Public Data at CIVHC.org

- Shop for Care
- Community Dashboard
 - Cost, Quality, Utilization/Access
- Affordability Dashboard
 - Cost of Care, Drug Rebates, Low Value Care, Alternative Payment Models, Medicare Reference Pricing
- CO APCD Insights Dashboard
- Telehealth Services Analysis
- Data Bytes & More!



Distribution of Non-Public Data Requests



Common Questions the CO APCD Addresses

- Why are **health care costs increasing**?
- What **types of services** have the highest variation in payments?
- Does health care cost more in **rural areas or urban**?
- Are Coloradans **using health care services** for **preventive tests** and annual exams?
- Are people **using their health care** and care differ by payer?
- Are they **picking up prescriptions** according to chronic care management protocols?
- Is the **ED being utilized** as a source of care for non-urgent situations?
- **How do payments** for the same service **differ by setting and location**?



Questions Claims Data CANNOT Answer

- Were there prescriptions that were paid for with **cash** or using a **manufacturer coupon**?
- What are the **outcomes** of a test or procedure?
- What prescriptions were **written** but not filled?
- What are the doctors **notes and recommendations**?
- What happened **today** or in the **previous 3 months**?
- Did the doctor or clinic refer a patient to **social** or **non-medical** support services?
- Were there claims or procedures that were **denied** by insurance?



Common Change Agent Use Cases

- **Benchmarking information** – cost, quality, volume
- **Market Analysis** – planning, growth, trend opportunities
- **Support for new delivery & payment models**
- **Results/Assessment of policy changes**
- **Community** - needs/assessments, trends, patterns
- **Emerging trends** – e.g. COVID, Telehealth
- **Development of Consumer-focused digital health tools**
- **Access to care** - trends for at-risk populations





Project Purpose: Evaluate the **effect of the Affordable Care Act (ACA)** on the stability of coverage among Medicaid beneficiaries and commercial payers in Colorado.

Benefit to Colorado:

- Understand the **impact of policies on coverage stability/churn**
- Determine **impact on cost, access and quality** of care for specific services such as maternity care.



University of Colorado
Denver

Project Purpose: Develop a **state-wide surveillance system** of Coloradans with **congenital heart defects (CHD)** through claims and EHR data.

Benefit to Colorado:

- Determine **prevalence of CHD** and **geographic variation**
- Understand the **relationship between socioeconomic factors and health outcomes** for individuals with CHD
- Explore the **burden of mental health conditions** among patients with CHD.





Project Purpose: Use internal data resources with data from the CO APCD to **understand care patterns and improve patient outcomes** by reducing variation.

Benefit to Colorado:

- **Improved care, lowered costs, and improved surgical outcomes** by evaluating utilization, length of stay and complication rates for children using certain services.
- Understand **variation in care for high risk children** across **other health systems** such as home health, mental health services, and other community providers.
- Evaluate **medically complex children** who have intense medical and **coordination of care needs that are not well met** by existing models.



Project Purpose: Improve transparency around affordability of health care services for customers by assessing medical costs within the Colorado commercial market.

Benefit to Colorado:

- Identify areas where care coordination and patterns of care can be improved, and ensure reasonable rates and discounts by understanding their market rates compared to other commercial payers.

Project Purpose: Understand health care services provided in SBHCs by volume, cost, visit reason (diagnoses), and how it varies by payer type, location, age and gender of the population served.

Benefit to Colorado:

- Identify services and/or subpopulations that might be **prioritized for future studies**
- Support **future funding opportunities** for school-based health centers
- Inform **policy work and advocacy efforts** for SBHCs.

Project Purpose: For employers in The Colorado Purchasing Alliance, understand how much could be saved by steering employees towards non-hospital based facilities for outpatient services.

Benefit to Colorado:

- Shift care to high quality, low cost providers
- Save employers money
- Reduce cost burden on employees and receive high value services



COLORADO

Department of
Regulatory Agencies

Division of Insurance

-
- **Project Purpose:** Using CO APCD to **implement legislative bills** to improve health care.
 - **Benefits to Colorado:**
 - **Reduce surprise billing:** use CO APCD to identify appropriate payments
 - **Increase Primary Care use:** use CO APCD data to determine additional investments
 - **Reduce pharmacy costs:** use CO APCD Rx data to inform the Pharmacy Drug Affordability Board of costs and opportunities
 - **Offer a statewide, low-cost health plan:** use CO APCD data to determine Medicare-reference based prices for providers

Data Offerings

Product types available for license include:

- **Standard Reports**
 - Pre-defined set of data elements that provide insight to relevant market categories – IP & OP Outmigration, Employer Suite of Reports
- **Custom Reports**
 - Static or interactive report containing data elements identified by the client and presented in an easy-to-use format
- **Data Sets (custom or standard)**
 - Extract of data elements identified by the client that can be aggregated and analyzed by the requester
 - Comprehensive Data Element Dictionary (DED)



Memories of the CO APCD

How has the CO APCD Contributed to Your Work or Your Partners?



"The APCD has allowed us to marry utilization and social determinants data with claims analysis. It widens our understanding of both health policy challenges -- and solutions."

Michele Lueck,
Colorado Health Institute,
President

"CIVHC was one of the pioneers among APCDs, and has demonstrated multiple use cases that are relevant to my current work at PCH. CIVHC showed many things are possible to enable better purchasing."

Jay Want,
Peterson Center on Healthcare,
Executive Director

"Using APCD [data] to establish the Out of Network rates is something pretty unique."

Tom Rennell,
Colorado Hospital Association,
SVP Finance and Analytics

"I believe it has been invaluable to the Colorado Dept. of Healthcare Policy and Finance. Though I have not assessed directly, I would assume it's been valuable to a broad array of healthcare providers, facilities and funders."

Ned Calonge, The Colorado
Trust, President and CEO

"It has amplified some of the problems and challenges we were experiencing as a carrier. The issues were real and until the data came to light - folks are now paying attention to real cost drivers."

Janet Stout-Pogar,
Anthem Blue Cross and Blue Shield,
Regional VP

"Ability to easily access transparent, reliable data."

Laurel Petralia,
Regis University,
Role Director

"Highlights facility and provider geographic and institutional difference in charges and increases. Data for "surprise bills" etc."

Michael E Huotari,
Stakeholder

"Insurance reimbursement transparency, statistical information about diagnoses, incidence, cost."

Karen Zink,
Southwest Women's Health,
Nurse practitioner

"Issue briefs focusing on health equity, access to care and cost comparisons."

Michael Boyson,
Telligen,
Program Specialist

"The Colorado APCD has contributed to greater transparency of healthcare costs and quality for all stakeholders in Colorado."

Tracey D. Campbell,
BRIDGE Healthcare Partners, LLC,
CEO

"We've worked with CIVHC on several studies including a pricing comparison of free-standing facilities and low-value care analysis. The contribution of APCD data to the RAND Pricing Transparency reports means that Colorado has one of the most robust and reliable comparative data bases in the country."

Robert Smith, CBGH,
Executive Director

Questions and Feedback



Reach out to info@civhc.org



Connect with CIVHC on Facebook, LinkedIn, and Twitter



Recording will be posted here:

www.civhc.org/about-civhc/news-and-events/event-resources/

