



Illuminating Opportunities for Action

2023 COLORADO ALL PAYER CLAIMS DATABASE ANNUAL REPORT



CIVHC
CENTER FOR IMPROVING
VALUE IN HEALTH CARE

CONTENTS

- 2 A MESSAGE FROM CIVHC'S PRESIDENT AND CEO
- 3 ADVANCING DATA
- 5 CREATING KNOWLEDGE
- 10 IMPROVING LIVES
- 26 A LIGHT FOR OPPORTUNITY
- 28 APPENDIX A - FY 2022-2023 CO APCD NON-PUBLIC RELEASES
- 33 APPENDIX B - CO APCD NON-PUBLIC DATA LICENSING FEES

A Message from CIVHC's President and CEO

Welcome to the 2023 Colorado All Payer Claims Database (CO APCD) Annual Report. I'm Kristin Paulson, President and CEO of the Center for Improving Value in Health Care (CIVHC), administrator of the CO APCD for the State of Colorado. This report details work completed during the fiscal year starting July 1, 2022, and ending June 30, 2023 (FY 2022-2023).

Central to CIVHC are the values we hold that make it possible to move toward our vision of universal opportunities to be healthy and have access to equitable, affordable, high-quality health care. Our four core values are CO APCD Stewardship, Integrity, Service, and Equity. We take our responsibility for the CO APCD very seriously and constantly strive to ensure the database fulfills its mission to “facilitat[e] the reporting of health care and health quality data that results in transparent and public reporting of safety, quality, cost, and efficiency information; and analysis of health care spending and utilization patterns for purposes that improve the population’s health, improve the care experience, and control costs.” [\(C.R.S. 25.5-1.204\(1\)\)](#)

Meeting the expectations of the CO APCD enabling legislation requires CIVHC to be objective, solution-oriented, credible, and a trusted partner to communities, while providing high quality data and services (**Integrity**). The success and utility of the CO APCD is dependent on our ability to build collaborative relationships, meaningful skills, and to continually meet the needs of our staff and our partners (**Service**). Ensuring the CO APCD benefits all of Colorado requires us to provide insights into the

health inequities that exist in our communities and strive to create an environment where all voices are represented, heard, and respected (**Equity**).

This is CIVHC’s 13th CO APCD Annual Report. With each one, we’ve provided updates on our progress as the database’s administrator. We’ve outlined how it has grown and is being used. And we’ve demonstrated how we’re ensuring it continues to support health care improvement efforts across the state. In our 2022 report, we also explained how the CO APCD came to be and what it means to be a **steward** of this important state resource. We believe this information is crucial for understanding this report and the impact of the CO APCD.

The analyses being created using CO APCD data are some of the most cutting-edge in health care. CIVHC’s publications are consistently used as models by other organizations and states. This ingenuity is due, in large part, to how the CO APCD was legislated and built. That is why, in the 2023 Report, we are highlighting the ways the CO APCD is special and has vast potential to inform change.

At its core, the most defining feature of the CO APCD is *possibility* and with it, CIVHC illuminates opportunities to make everyone healthier. We are honored to light the paths of those working to create a healthier Colorado for us all.



A handwritten signature in black ink, appearing to read 'K. Paulson'.

Kristin Paulson, JD, MPH
President and CEO
Center for Improving Value in Health Care

Advancing Data



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In 2010, Colorado lawmakers believed that everyone should be able to get the care they needed when they needed it. They also knew that they needed information to make that vision reality. So they wrote the Colorado All Payer Claims Database (CO APCD) into law.

Understanding a complex health care system requires complex information and data.

Colorado became one of the first states with a law requiring the creation of an All Payer Claims Database (APCD). This new resource had a clear purpose: to increase health care transparency through data access, research, and public reporting of health care utilization, quality, and cost. It would collect processed claims for services from health insurers across the state which contain a lot of data about how the system operates.

While they were defining the rules for building the CO APCD, the lawmakers made decisions that set it apart from the few existing APCDs at the time. Today, Colorado remains unique among the 22 other APCDs that now operate across the nation and the choices made over a decade ago have proven forward-thinking and innovative.

Six Critical Functions of an APCD

- 1 Reporting on health care spending, utilization, and performance
- 2 Enhancing state policy and regulatory analysis
- 3 Informing the public about health care prices and policy
- 4 Enabling value-based purchasing and health care improvement
- 5 Supporting public health monitoring and improvement
- 6 Providing reliable data for health care research and evaluation

The Commonwealth Fund



UNIQUE TO COLORADO

- Colorado's APCD is administered by the Center for Improving Value in Health Care (CIVHC), an independent, non-partisan, objective non-profit.
- The governance of the CO APCD is designed to allow flexibility in how the data is released and used, though it must always benefit the residents of Colorado.

Creating Knowledge



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Contents of the CO APCD

Health insurance payers submit millions of claims to the CO APCD each month. This adds one terabyte (TB) a year to the size of the database. In June 2023, the CO APCD contained 15 TB of data and over one billion claims.



1,046,367,740
Claims



5.5M
Lives

unique lives in 2022 – including 1M (50%)
lives covered by self-insured employers



48
Payers

including Commercial payers, Medicare Fee for Service (FFS), Medicare Advantage, Medicaid, Non-ERISA-covered self-insured employer plans, and voluntarily submitted ERISA-covered self-insured employer plans*



UNIQUE TO COLORADO

- Payers submit data monthly.
- Every two months CIVHC incorporates that data and re-processes the entire CO APCD.



CO APCD LEARN MORE

- [Why an APCD?](#)

** In 2016 the United States Supreme Court ruled that states cannot require self-insured Employee Retirement Income Security Act (ERISA) plans to submit data to APCDs. Half of the total commercially insured lives in Colorado are thought to be self-insured. CIVHC estimates that the CO APCD currently contains approximately 25% of ERISA-covered self-insured plans, and 50% of all self-insured plans.*



Approximately 70%
of Covered Lives
with medical insurance



Payers
Not Included

Federal health insurance programs such as:

Veterans Administration | TRICARE
Federal Employees Health Benefits
Indian Health Services | Uninsured Coloradans

Infinite Possibilities with the CO APCD

Health care providers and facilities send health care claims to insurance companies in order to receive payment for the care they provide to patients. Given this, only certain types of information are included in a claim.

Claims will show when tests were ordered and conducted but lack specifics about test results (e.g. claims will show that an HbA1c and CBC were ordered, but will not show A1c levels or white blood cell counts).

Claims data can help anyone looking to understand the health care system. The CO APCD contains six types of claims available for use. It also has additional annual files which can only be used for public reporting by CIVHC. Each claim type has multiple elements, some of which are available for public and non-public release.



UNIQUE TO COLORADO

- On an annual basis, payers submit files for value-based pharmacy contract arrangements, prescription drug rebates, and alternative payment models.










CO APCD LEARN MORE

- [Understanding How the CO APCD Works](#)
- [How CIVHC Collects and Releases CO APCD Data](#)
- [Limitations on Self-Insured Employer Submissions](#)

Claims contain data about:

- ✓ What health care services were provided and why,
- ✓ Who received the services and who provided them,
- ✓ When they were received,
- ✓ Where the services were provided (hospital, primary care office, etc.), and
- ✓ How much was charged and how much was paid.

Information Available in the CO APCD

Information Type	What's in the CO APCD	What it Can Do
 Years of Data	2013-2022 (complete 2023 data will be available in May 2024)	Over a decade of data allows for analyses of health care trends.
 Claim Types	Medical Professional (Provider info) Pharmacy Dental Eligibility (Indicates who has insurance and what type)	Having many types of claims allows analysis across the full range of health care services.
 Health Plans	Medicare Fee-for-Service Medicare Advantage Medicaid Commercial Payers: Connect for Health Colorado plans and levels: Gold, Silver, and Bronze Commercial product (PPO, HMO) Colorado Option indicator	Details on insurance plans can show how coverage type affects cost, use, and access to care.
 Payments	How much money was charged How much insurance and patient paid	Payment data on a claim helps with understanding how much gets billed and paid for services and by whom.
 Providers	Provider, organization, or facility name Provider specialty National Provider Identifier Provider office address Billing and/or servicing provider information	Who provided a service and where they did it can show how the health system is used. It can also show where there may be gaps in access.
 Patients	Demographic information – Gender, Age Race/Ethnicity, Language Preference	Details about patients make it possible to analyze health equity by identifying groups with similar characteristics like age, gender, and location.
 Service/Treatments	Date(s) of service/treatment Type of visit (emergency, office, etc.) Diagnosis or Reasons/cause for visit Procedures/treatments	Information on services and treatments can help inform condition rates, prevention, quality of care, and effective treatments.

Understanding How Data is Extracted from the CO APCD

This illustration shows the process CIVHC uses to fulfill data requests. The requests must meet the specific needs of partners and communities.



1. What's in the Silo

Inside a silo are different types of grains that can be milled to create flours of varying textures or components. They can also be combined to generate custom flour. Claims in the CO APCD are similar, elements of the six types can be used separately or combined for different analyses.



2. Time to Bake

A crucial first step for a baker is determining what they're making. Certain baked goods need a certain flour. CO APCD data users also have to be specific about the purpose of their analysis. With all of the options, it is important to request the data that will answer their question.



3. Custom, Credible Flour

The flour is then milled according to the baker's needs. Before it is given to the baker, the flour is inspected to confirm it will work for the baker. It is the same for CO APCD data requests. Analysts extract the data the user needs and then check to ensure it is what was requested.



4. Improve Lives

The baker then uses the flour to bake something that improves the lives of those around them. This is also true for data users. To use the CO APCD, analyses must support lower costs, improved care, and/or healthier Coloradans.

A photograph of a smiling man with a white beard and a green backpack hiking on a forest trail. He is holding a trekking pole. In the background, two other hikers are visible on the trail.

Improving Lives



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Improving lives with CO APCD data requires narrowing down the infinite number of combinations to the one that will help answer the question someone is asking. At CIVHC we work with requestors to refine their requests so the data they get from the CO APCD can give them an answer to the problem they are solving. Like the potential combinations of data elements, the number of questions the CO APCD can answer are limitless.

Measuring the Impact of the CO APCD

CO APCD data is being used in increasingly innovative ways. CIVHC calls the people, communities, and organizations who use CO APCD data to make real improvements in the health care system Change Agents.

CIVHC releases CO APCD data in two ways:



Non-public

for individuals or organizations to use to improve care for Coloradans.



Public

for anyone to use to help make data-driven health decisions.

CIVHC has provided over 600 non-public releases to more than 230 Change Agents over the last five years. We've published an average of 27 public analyses each year designed to boost transparency in Colorado's health care system while also shedding light on ways to make it better and more affordable.

Sample Questions CO APCD Data Can Answer

Access

What types of services are being utilized?

Care Settings

Is the ED being utilized as a source of care for non-urgent situations?

Cost Drivers

Why are health care costs increasing?

Geographic Variation

Does health care cost more in rural or urban counties?

Health Equity

What social factors are impacting health care utilization?

Insurance Use

Are people using their insurance and does it differ by payer?

Payment Variation

Do payments for similar services differ by setting and location?

Prevention

Are Coloradans getting preventive tests and annual exams?



UNIQUE TO COLORADO

- CIVHC provides more public and non-public analyses annually than any other state.
- The process for requesting data allows CIVHC to meet the unique needs of partners, communities, and individuals.

Each year, projects address problems across the spectrum of health care, and CIVHC is continually amazed at the versatility of CO APCD data. To assess the impact of this state resource, we decided to perform a little analysis of our own. We categorized all projects completed in the last five fiscal years into five topics which align with the purpose of the CO APCD and the mission of CIVHC.

FY 2018-2019 through FY 2022-2023

Percentages will not equal 100 as some projects fall into multiple categories



280

Non-public projects



48

Public release projects

Topic Definitions

Affordability

investigating costs or pricing for health care services

Condition/Procedure

centered on a particular diagnosis, illness, injury, or procedure

Equity

including factors that impact a person's health which are beyond their control, such as geography, social, or economic factors

Quality

evaluating the health of populations as well as the quality of care provided

Utilization

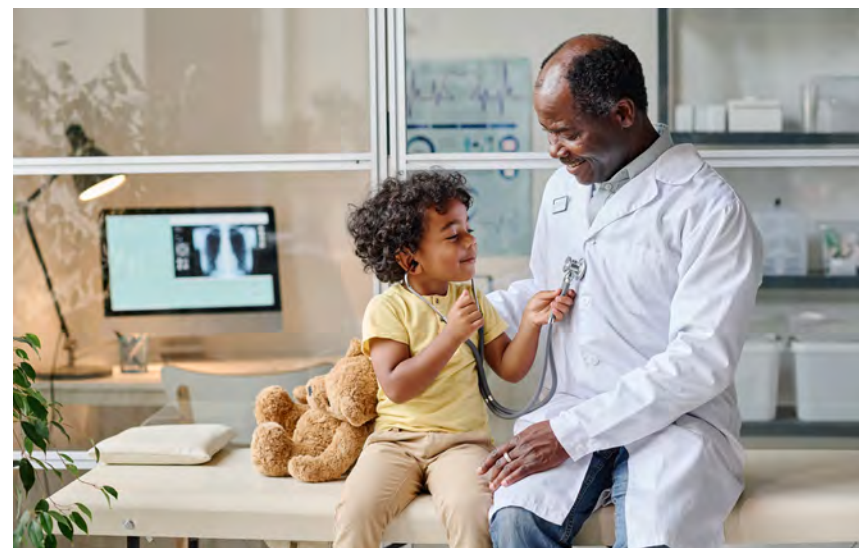
what services are being used and how frequently

CO APCD Non-Public Data Projects by Sector FY 2018-2019 through FY 2022-2023






Project Sector	% of projects analyzed	# of Projects
 Government Agencies	33%	93
 Researchers	21%	59
 Employers	17%	48
 Community Based Organizations	10%	28
 Digital Health/Consultants	8%	21
 Clinicians/Providers	7%	13
 Facilities/Health Systems	4%	11
 Health Plans	2%	6

It's hard to measure the impact of a single innovation due to the many factors that impact health and health care costs. By looking at the topics of CO APCD data release projects, we can gain some insight and explore what areas of the system may be impacted.






Most projects, public and non-public, using CO APCD data in the last five years focused on health care affordability and/or use. Investigating and addressing the cost of care was a primary goal for government agencies, employers, and many other data users, while researchers tended to focus more on specific conditions or procedures. This bird's-eye view shows where the data may have impacted Coloradans and indicates that the CO APCD is fulfilling its charge to increase data transparency and support improvement in health, quality, and costs.



Breakdown of **Non-Public** CO APCD Data Release Project Topics FY 2018-2019 through FY 2022-2023

Topic	% of projects	# of Projects
 Affordability	73%	203
 Utilization	69%	194
 Quality	38%	106
 Condition/Procedure	36%	100
 Equity	21%	58

Breakdown of CO APCD **Public Data** Release Topics FY 2018-2019 through FY 2022-2023

Topic	% of projects	# of Projects
 Utilization	73%	35
 Affordability	65%	31
 Condition/Procedure	60%	29
 Quality	19%	9
 Equity	17%	8



How the CO APCD was Used in 2023

In FY 2022-2023, Change Agents used CO APCD data in projects focused on the impact of housing on health, gender affirming care, and creating condition-specific predictive tools.

 72

Non-Public Releases

 32

Public Releases

Non-Public Releases of CO APCD Data

In FY 2022-2023, CIVHC provided 72 releases of non-public CO APCD data to 37 different organizations. More government agencies requested non-public CO APCD data than any other Change Agent. These agencies include the Department of Health Care Policy and Financing (HCPF), the Division of Insurance (DOI), the Office of Saving People Money on Health Care, the Behavioral Health Administration, and the Office of eHealth Innovation (OeHI) among others.

After government agencies, researchers, community-based organizations, and digital health organizations requested the most non-public CO APCD data.

Things to keep in mind when looking at non-public CO APCD release counts:

- ✓ CIVHC considers projects as well as organization. For example, requests from the School of Public Health and the School of Medicine at the University of Colorado are counted as data releases to two separate Change Agents.
- ✓ One Change Agent may receive many data releases in one year depending on the work they are doing.

 **CO APCD Learn More**

● [FY 2022-2023 Non-Public Releases of CO APCD Data](#)

Number of **Non-Public** CO APCD Data Releases by Change Agent Sector in FY 2022-2023

Government Agencies	45
Researchers	12
Employers	4
Digital Health/Consultants	4
Community Based Organizations	2
Facilities/Health Systems	2
Health Plans	1

Number of Organizations That Received **Non-Public** CO APCD Data by Change Agent Sector in FY 2022-2023

Government Agencies	13
Researchers	11
Employers	4
Digital Health/Consultants	4
Community Based Organizations	2
Facilities/Health Systems	2
Health Plans	1

CO APCD Scholarship

Twenty-two projects from 18 Change Agents received funding from the CO APCD Scholarship. It was created in 2014 to help those with limited resources access CO APCD data. COVID-19 budget cuts eliminated the Scholarship in 2021 and 2022. It was reinstated in 2022 and funds became available again in FY 2022-2023.

Examples of the ways the Scholarship is used and how it improves the lives of Coloradans are available online in the [Change Agent Index](#).

CO APCD Scholarship Recipients FY 2022-2023

- CIVHC Public Reporting
- Colorado Behavioral Health Administration
- Colorado Cancer Coalition
- Colorado Chronic Kidney Disease Task Force
- Colorado Department of Public Health and the Environment
- Colorado State Legislature
- Denver Health Plans
- Division of Aging and Adult Services
- Gunnison Valley Health
- Peak Health Alliance
- Population Health Impact Institute
- Texas A&M University
- University of Wisconsin - School of Business
- University of Colorado Denver
- Urban Institute
- Vail Valley Partnership
- Weld County Department of Government Agencies & Environment

Change Agents Using the CO APCD Scholarship by Sector in FY 2022-2023









	Government Agencies	7
	Researchers	4
	Community Based Organizations	3
	Employers	2
	Digital Health/Consultants	1
	Facilities/Health Systems	1



UNIQUE TO COLORADO

- The CO APCD Scholarship is funded through the Colorado General Assembly and is able to provide data access for a variety of Change Agents in and outside of Colorado.

Change Agents Using the CO APCD Scholarship by Sector FY 2014-2015 Through FY 2022-2023

	FY 2014-2015	FY 2015-2016	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	FY 2021-2022	FY 2022-2023
 Clinicians/Providers	0	0	0	1	0	0			0
 Community Based Organizations	6	11	5	13	8	3			3
 Digital Health/Consultants	0	0	0	0	0	0			1
 Employers	0	0	0	1	0	6			5
 Facilities/Health Systems	0	0	0	0	2	0			1
 Government Agencies	2	5	3	5	2	3			8
 Researchers	5	4	12	2	6	10			4
 Total	13	20	20	22	16	22			22

Change Agent Uses of CO APCD Data in FY 2022-2023



Community Based Organizations

Scholarship: ☐ Yes ☒ No

Project Purpose: Understand what contributes to maternal health problems, identify strategies to help, create predictive tools, and address maternal health gaps.



Digital Health/ Consultant

Scholarship: ☒ Yes ☐ No

Project Purpose: Study how having an established primary care provider impacted COVID-19 outcomes in Colorado.



Employer

Scholarship: ☒ Yes ☐ No

Project Purpose: Understand how the number of self-funded lives impacts costs and compare their costs to a community on the Front Range.



Facility/ Health System

Scholarship: ☒ Yes ☐ No

Project Purpose: Improve fair access to care, particularly for multicultural residents seeking specialty services in their region.



Government Agency

Scholarship: ☐ Yes ☒ No

Project Purpose: Examine hospital pricing practices across Colorado for a range of services to find out how different market factors impact health care prices.



Health Plan

Scholarship: ☒ Yes ☐ No

Project Purpose: Help pregnant women, infants, and children at high risk for oral disease access and use more care.



Researcher

Scholarship: ☒ Yes ☐ No

Project Purpose: Learn how limiting insulin's out-of-pocket cost has affected patients' access to insulin, health care use, and patient health.

Public Releases of CO APCD Data

To support Change Agents and the entire state of Colorado, CIVHC published 32 analyses using CO APCD data in FY 2022-2023. Many of the interactive reports had companion infographics and publicly available data files. We designed these resources to help people understand and use the reports. We also updated several cornerstone analyses such as the [Community Dashboard](#) and the [Telehealth Services Analysis](#).

New reports included:



The [Provider Payment Tool](#), required by [SB 22-068](#), displays provider reimbursements for different services by specific code, region, and type of insurance.



The [Health Equity Analysis](#), shows how factors such as geography, social, or economic status may impact a person's health.



UNIQUE TO COLORADO

- The visibility into the health care system provided by CO APCD data and [civhc.org](#) helped Colorado earn a B on Catalyst for Payment Reform's [2020 State Transparency Law Report Card](#), one of only six states to receive an A or B designation.
- The National Association of Health Data Organizations (NAHDO) awarded CIVHC the 2023 [Innovation in Data Dissemination Award for the Health Equity Analysis](#).
- Other states use CIVHC's public reports as models for developing their own resources.

Public Reports in FY 2022-2023



Interactive Reports

[Alternative Payment Models](#)

[Community Dashboard](#)

[Cost of Care](#)

[CO APCD Insight Dashboard](#)

[Health Equity Analysis](#)

[Low Value Care](#)

[Medicare Reference-Based Pricing](#)

[Prescription Drug Rebates](#)

[Provider Payment Tool](#)

[Telehealth Services Analysis](#)



Data Bytes (Excel downloads in [Publications Library](#))

COVID-19 Impact on Preventive Care

Gender Affirming Care

Long COVID in Colorado

Vasectomies and Contraception



Additional Analyses and Updates

[Emergency Department Use for Mental Health and Self Harm](#)

[Shop for Care](#) – User Experience, [Spanish Translation](#), and Mobile Friendly Updates

For most public CO APCD data releases, CIVHC offers Excel files for downloading. Anyone interested can get a file by completing a survey with basic questions about their organization and planned data use. In some instances, such as Data Bytes, the release is already a spreadsheet, and no survey is required.

Public CO APCD Data Set Requests By Change Agent Sector FY 2022-2023

	Consumer / Other	58
	Researchers	50
	Digital Health/Consultants	40
	Community Based Organizations	23
	Clinicians / Providers	21
	Government Agencies	4
	Health Plans	2

Data sets for **12 interactive reports** were available in FY 2022-2023, and these were requested a combined **198** times by **147** Change Agents.

- ✓ The number of requests nearly tripled from last year. They spanned the globe, with the majority coming from outside of Colorado.
- ✓ This shows a unique value to a wide audience, not only in the state, but beyond.

Number of Change Agents Who Requested Public CO APCD Data Sets by Location FY 2022-2023

74
National

60
Colorado

13
International





Clinicians / Providers

- ✓ Understand the insured population in Denver (Insights Dashboard)
- ✓ Explore payer rate transparency (Community Dashboard)
- ✓ Examine reimbursement rates for birth centers in Colorado (Shop for Care)



Community Based Organizations

- ✓ Compare rural/urban regions and identify policy needs (Telehealth Services Analysis)
- ✓ Improve client services (Low Value Care)
- ✓ Understand drug rebates and pricing to reduce costs (Prescription Drug Rebates)



Consumer / Other

- ✓ Compare prices by hospital and insurance company (Shop for Care)
- ✓ Research US health care prices (Shop for Care)
- ✓ Research imaging prices (Shop for Care)



Digital Health / Consultants

- ✓ Investigate the role of rebates in total health care spend (Drug Rebates)
- ✓ Federal grant needs assessment (Cost of Care)
- ✓ Evaluate rebate levels by plan and payer type (Drug Rebates)



Researchers

- ✓ Study how telehealth affects provider choice (Telehealth)
- ✓ Analyze how hospital systems impact cost of care (Shop for Care)
- ✓ Assess the impact of Telehealth on minorities (Telehealth v In-Person)

Change Agents ask for public CO APCD data for many reasons.

Some are students conducting research for a project, while others are performing a needs assessment for a community. It is crucial to ensure access to transparent health care data – including ways to do it at no cost.



The use cases to the left show how public CO APCD data is a vital resource for Colorado.

Data Powered Projects and Sustainability

Every year, CIVHC strives to use the CO APCD to provide meaningful and valuable data to improve the lives of Coloradans.





Innovation

The Data Mart is a secure portal that contains custom CO APCD data sets. Once inside, assigned users from HCPF and the Division of Insurance can analyze the data and create tables or data visualizations.

In FY 2022-2023, new data sets were added to the Data Mart including:

- ✓ **Low Value Care** - These are treatments and services which may not help patients, raise health care spending, and potentially cause harm.
- ✓ **Medicare Reference-Based Pricing** - Data about what commercial health insurance companies pay hospitals for inpatient and outpatient services as a percentage of Medicare prices.
- ✓ **The Area Deprivation Index** – Census-tract level information about income, education, employment, and housing quality

CIVHC, the Maine Health Data Organization, and Virginia Health Information began developing a multi-state pilot project to combine APCD data from the three states into one data set. The project will allow Change Agents to work with APCD data in ways that are not possible with data from a single state. The combined data set will be an invaluable resource for large employers, policy-makers, rare disease researchers, and public health organizations.



UNIQUE TO COLORADO

The [Provider Payment Tool](#) was released in early 2023. The tool is the first of its kind in Colorado, requiring specialized methodology and analytics work from CIVHC Analysts and data manager HSRI.



Equity



UNIQUE TO COLORADO

CIVHC released a Data Byte on the use of gender-affirming care services in Colorado. We worked with community partners to make sure the data wasn't misunderstood or created unintentional harm.

CIVHC officially launched the [Spanish version](#) of the [Shop for Care](#) tool. We also released a mobile-friendly version of the tool and updated the language of the existing report to make it easier to understand.



UNIQUE TO COLORADO

In collaboration with CO APCD data manager, Human Services Research Institute (HSRI), CIVHC released the [Health Equity Analysis](#). The report explores how demographic and household factors impact several [Community Dashboard](#) measures. This is the first public report to use the geocoding of the CO APCD to combine social and health care data.



Policy

CIVHC submitted the first report using CO APCD data to the Behavioral Health Administration.

Working with the Governor's office, CIVHC created a Healthy Aging Data Profile. Inspired by the Massachusetts Healthy Aging Collaborative, this data will help provide insights into the 60+ population in Colorado.

CIVHC delivered the first data sets in support of [SB 21-175](#), the Prescription Drug Affordability Review Board.



UNIQUE TO COLORADO

- With geocoding, CO APCD data can be used in combination with external data sources that rely on geography or location, such as the census.
- Patient and Provider Indexes provide opportunities for in-depth analyses.



CO APCD Learn More

- [CO APCD Data Supporting Policy](#)

CO APCD Sustainability

In FY 2022-2023 CIVHC continued to build on momentum begun in 2022 after receiving pre-pandemic funding amounts from the State of Colorado to support CO APCD operations and analytics as well as the reinstatement of the CO APCD Scholarship Fund. Expenses throughout the year were significantly lower than anticipated as new and open positions were difficult to fill with qualified candidates, resulting in slower-than-budgeted hiring. Contract analytic services and project-based consultants were also utilized less than expected.

CIVHC's net income in 2022-2023 includes partial forgiveness of a program loan from the Colorado Health Foundation, with the balance reserved to help support the launch of a new department and programs in 2023-2024. CIVHC is also working to maintain cash reserves so the CO APCD can navigate future technology and database management expenses.



UNIQUE TO COLORADO

- Funding for the CO APCD comes from a variety of sources – state, grants, federal, and earned revenue.
- As a non-profit, CIVHC can be innovative in our approach to sustainability and apply for grants to help sustain the database.



CO APCD Learn More

- [History Of CO APCD Funding And Sustainability](#)
- [CO APCD Non-Public Data Licensing Fees](#)

FY 2022-2023 Income

Income		
Grants Total		\$7,650,931
State General Fund	\$2,055,149	
CO APCD Scholarship	\$427,633	
State CMS 50-50	\$1,403,609	
Federal CMS 50-50	\$1,403,609	
State 90-10	\$2,350,932	
Robert Wood Johnson Foundation: Health Data for Action Grant	\$10,000	
Earned Revenue Total		\$957,368
CO APCD Data Licensing	\$957,368	
Total		\$8,608,299

Expenses

CO APCD Program/Operations		\$7,632,340
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Net Income

FY 2022-2023 Net Income		\$975,959
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| A Light for Opportunity



CENTER FOR IMPROVING
VALUE IN HEALTH CARE



Advancing data



Creating knowledge



Improving lives

As the world embraces big data, resources like the CO APCD become more essential. CIVHC works every day to illuminate opportunities available in the database and light pathways for action in hospitals, boardrooms, and neighborhoods. Action which, in turn, improves lives.

This is CIVHC's mission.

We equip partners and communities with the resources, services, and data they need because we believe that everyone should have the opportunity to be healthy and have access to equitable, affordable, high-quality health care. We are proud to administer the CO APCD and are committed to improving the lives of Coloradans through data driven change.

Appendix A

FY 2022-2023 CO APCD Non-Public Releases

Change Agent Sector	Scholarship	Project Purpose	Product Type
Community Based Organizations	Yes	Understand the utilization of low-density CT scanning for lung cancer screening of individuals with a significant tobacco smoking history.	Custom Report
Community Based Organizations	No	Evaluate the effectiveness and cost benefits of an asynchronous telehealth program, which facilitates communication between primary care providers (PCPs) and specialists and aims to increase access to specialty care and reduce costs.	Limited Data Set
Community Based Organizations	No	Understand the factors contributing to maternal health problems, identify intervention points, create predictive tools, and address maternal health disparities.	Limited Data Set
Community Based Organizations	Yes	Analyze the impact of supportive housing on Denver's most vulnerable residents, including the effect on access to health care and health care outcomes.	Limited Data Set
Digital Health/Consultants	No	Analyze claims to set appropriate rates and develop a provider network prioritizing quality, cost, and accessibility for Colorado residents.	Standard Data Set
Digital Health/Consultants	No	Standardize Sickle Cell Disease surveillance, study incidence, demographics, and health care utilization patterns benefiting Colorado through improved care, reduced costs, and enhanced patient experiences.	Fully Identifiable Data Set
Digital Health/Consultants	No	Determine the cost savings of a wearable technology intervention.	Limited Data Set
Digital Health/Consultants	Yes	Study the impact of having an established primary care provider on COVID-19 outcomes in Colorado.	Limited Data Set
Digital Health/Consultants	No	Investigate high volume prescription drugs by payer to advance prescription drug affordability.	Custom Report

Change Agent Sector	Scholarship	Project Purpose	Product Type
Employers	Yes	Identify ways to reduce the cost of health insurance for residents and businesses and determine mechanisms to provide care nearby rather than sending patients to larger urban centers.	Limited Data Set
Employers	Yes	Understand how the number of self-funded lives impacts costs and compare their costs to a community on the Front Range.	Limited Data Set
Facilities/ Health Systems	Yes	Improve equitable access to care, particularly for multicultural residents seeking specialty services in their region.	Custom Report
Facilities/ Health Systems	No	Understand health care needs in the community, including where and why patients travel for care to enhance access to affordable health services and improve women and family services.	Limited Data Set
Government Agencies	Yes	Improve access to mental health services, reduce disparities, and enhance the overall patient experience for individuals in Colorado.	Custom Report
Government Agencies	Yes	Identify kidney disease patients, assess costs, and advocate for early intervention, while working for equitable care by removing financial barriers and providing better access for minorities and the elderly, who are most affected.	Standard Data Set
Government Agencies	Yes	Assess health care access patterns and develop a comprehensive state Rational Service Area plan for improved access, reducing recruitment costs, and supporting underserved populations while contributing to better health care access.	Fully Identifiable Data Set
Government Agencies	Yes	Support legislation designed to require health insurance carriers in Colorado to cover a second prosthetic device if it's deemed necessary for physical activity and maximizing upper limb function.	Custom Report
Government Agencies	No	Determine the effectiveness of a program designed to reduce acute health care utilization and cost.	Fully Identifiable Data Set
Government Agencies	No	Evaluate utilization of care to understand where providers are serving patients across the state and where access to care shortfalls exist.	State Development
Government Agencies	No	Evaluate health insurance payers by hospital in Colorado to understand case mix and patient access.	State Development

Change Agent Sector	Scholarship	Project Purpose	Product Type
Government Agencies	No	Examine hospital pricing practices across Colorado for a spectrum of services to determine the impact of different market factors on health care prices.	Limited Data Set
Government Agencies	No	Analyze inpatient hospital case-mix and payments across lines of business to support study of acute care hospital payment variation.	State Development
Government Agencies	No	Investigate price variation for prescription drugs between payers to advance prescription drug affordability.	State Development
Government Agencies	No	Understand important utilization metrics in Colorado including admissions, discharges, average length of stay, ED visits, and outpatient (non-ED) visits.	State Development
Government Agencies	No	Explore the impact of acquisition of physician practices by health systems on health care costs and practice patterns.	Limited Data Set
Government Agencies	No	To produce utilization, cost, and quality indicator reports to support safety-net population health improvements.	State Development
Government Agencies	No	Using the Data Mart, evaluate data quality and parity between state and CO APCD data, and conduct benchmark reports, churn analyses, and rate reviews.	State Development
Government Agencies	No	Compare Medicare prices to commercial prices to enable employers to compare the prices they are paying for certain aggregated health care services at hospitals.	Standard Report
Government Agencies	Yes	Identify evidence-based opportunities to reduce costs, improve the quality of end-of-life care, and increase access to services such as hospice and palliative care that are known to improve quality of life for patients, families, and caregivers.	State Development
Government Agencies	No	Analysis of in-network payments to support establishing maximum payment limits to implement HB 19-1174, which governs reimbursement for out-of-network services.	State Development
Government Agencies	No	Understand the implementation and impact of recent federal legislation requiring facilities to make price information public.	State Development

Change Agent Sector	Scholarship	Project Purpose	Product Type
Government Agencies	Yes	Create a Healthy Aging Data Profile to help policymakers and other statewide initiatives understand the 60+ population.	Custom Report
Government Agencies	No	Support the actuarial reviews to understand the potential impact of new health care legislation as required by SB 22-040.	Limited Data Set
Government Agencies	No	Evaluate provider rates in the small and individual insurance markets.	Custom Report
Government Agencies	No	Analyze prescription drug data drug rebate data in support of the work of the Prescription Drug Affordability Review Board (SB 21-175).	Custom Report
Government Agencies	No	Analyze primary care spending as a percentage of total medical expenditures by line of business and payer including claims payments and non-claims payments made through alternative payment models (SB 19-1233).	Custom Report
Government Agencies	No	Measure changes in public health resulting from a neighborhood revitalization effort in Denver, Colorado.	Custom Report
Government Agencies	No	Assess utilization of telehealth and in-person services and understand how individual and household characteristics affect utilization.	Custom Report
Government Agencies	No	Study how health plan eligibility impacts health care utilization, cost, and outcomes.	Fully Identifiable Data Set
Government Agencies	Yes	Understand mental health and chronic condition prevalence in their region and how patients are accessing the health care system compared to neighboring regions and the state overall.	De-Identified Data Set
Health Plan	Yes	Improve access to and utilization of high-quality oral health care for pregnant women, infants, and children at high risk for oral disease.	Fully Identifiable Data Set
Researchers	No	Investigate the impact of price transparency on health care decision-making in Colorado and analyze the relationship between early service prices and the over-all cost of care for episodes for patients.	Limited Data Set

Change Agent Sector	Scholarship	Project Purpose	Product Type
Researchers	No	Determine if cost, utilization, and quality of telehealth services vary based on whether the provider has a physical location and/or a prior relationship with the patient.	Standard Data Set
Researchers	No	Explore the impact of federal policy changes on insurance coverage for end-stage kidney disease patients, demographic factors affecting Medicare enrollment, and health plan influence on dialysis choices and payments.	Fully Identifiable Data Set
Researchers	No	Understand and mitigate the economic and psychological burden of cancer, particularly the financial hardship among working-age individuals.	Fully Identifiable Data Set
Researchers	No	Understand how social and economic factors affect people's health.	Fully Identifiable Data Set
Researchers	Yes	Evaluate how the program limiting out-of-pocket cost for insulin purchases in Colorado has affected patients' access to insulin, health care use, and patient health.	Limited Data Set
Researchers	No	Evaluate the impact of COVID-19 on utilization, outcomes, and patient/provider experience in nurse-led models of care in Colorado.	Limited Data Set
Researchers	Yes	Study pandemic-related changes in drug utilization and assess missed prescriptions, individual factors influencing medication forgoing, and the impact of insurance coverage.	Limited Data Set
Researchers	Yes	Examine prescription and treatment patterns for cancer across health insurance, delivery systems and geographic location in Colorado, and understand the impact of COVID-19 lockdowns.	Limited Data Set
Researchers	No	Analyze CO APCD data and other data sources to understand patient utilization and care patterns to better serve high risk populations.	Limited Data Set
Researchers	Yes	Explore strategies to lower health care costs by focusing on narrow network plans, the Colorado Option, as well as the impact of longer enrollment periods on insurance premiums and adverse selection.	Limited Data Set

Appendix B

CO APCD Non-Public Data Licensing Fees

CIVHC works to provide access to data sets and standard/custom reports from the CO APCD to improve health, improve lives, and lower costs. In order to do that, we use a data licensing fee formula that enables us to cover costs while providing high value, competitively priced data analytics.

Estimated Pricing by Product Type FY 2022-2023

Product Type	Range of Fees*
Custom Reports	\$7,500 - \$35,000
Standard De-Identified Data Sets	\$13,000 - \$24,000
Custom De-Identified Data Sets	\$15,000 - \$28,000
Custom Limited Data Sets	\$17,500 - \$35,000
Custom Fully Identified Data Sets	\$20,000 - \$45,000

**Ranges are provided to assist with estimating costs and are based on an annual review of the most recent projects. Actual data licensing fees are determined by the scope of each data request. Final fees are calculated based on a number of factors including those listed to the right.*

Have questions about the CO APCD or looking for data resources?

Please contact us at info@civhc.org.

Factors That Go into CO APCD Data Access Fees

Inclusion of Protected Health Information

Indirect costs (including legal fees)

Number of unique and specific data elements

Output type (Tableau, Excel, etc.)

Any additional professional services/consultation requested

Labor costs/time required (analysts, health data consultants, project managers, etc.)