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More information can be found at: <https://doi.colorado.gov/colorado-option>



Colorado Consumer Health Initiative

A large, semi-circular graphic on the right side of the page features a blue-tinted photograph. It shows the silhouettes of a man and two children in a field. The man is in the center, reaching up with his right hand to touch a ball. To his left, a child stands looking up at him. To his right, another child stands looking towards the man. The background is a soft, hazy sky over a field of tall grass.

**STATE OF THE STANDARDIZED
COLORADO OPTION PLAN - 2024**

INTRODUCTION

This report was prepared for the Colorado Consumer Health Initiative (CCHI) to reflect on the standardized Colorado Option plan (the Colorado Option), and to inform Coloradans about the benefits and outcomes of this policy.

The policy that ultimately created the Colorado Option began with feedback from new ACA enrollees over 10 years ago. To tell their story honestly and comprehensively, consumers, policymakers, and those who work in health care in Colorado have contributed artifacts, data, and their personal stories to this report. Those contributions answer which of the policy objectives have been achieved, how the Colorado Option serves consumers, which concerns remain to be solved, and what are their lessons learned along the way. These new data show how this uniquely inclusive policy improves market participation.

This report seeks to inform the next steps that will build on this policy and its innovative impact on Colorado's market. As we look to 2024 and beyond, CCHI will continue to review the data and engage stakeholders as the Colorado Option continues to go into effect.



**Colorado Consumer
Health Initiative**

**“Our whole is greater
than the sum of our
individual parts.”**

EXECUTIVE SUMMARY

This year's more than doubling of enrollment in the Colorado Option (93k in 2024 compared to 39k in 2023) is the result of Colorado's inclusive policy process and underscores the early successes of the state's innovative approach.

The 2013 implementation of the Affordable Care Act (ACA) marked the beginning of Colorado's journey towards a standardized Colorado Option plan. The creation of a new individual health insurance market meant new market dynamics to accompany it.

Consumer demand quickly included calls for standardization across the insurance plans offered, however over several more years of experience, a comprehensive set of goals emerged: understanding the best plans for their families' needs, more affordable health care, realistic preventive care coverage, and culturally responsive care from providers.

House Bill 21-1232, passed in 2021, was a significant step forward in this journey. The bill tasked Colorado's Division of Insurance to create the standardized Colorado Option plan, with year-over-year premium reductions, using a radically inclusive policy design process.

By January 2022, the design, premium reduction methods, and regulations were written, and in fall of 2022, insurance companies offered these new plans in Colorado's individual and small group markets across the state.

The Colorado Option plans have made the market significantly more efficient with plans that responded to consumers. Plan Year 2024 saw more than a doubling of last year's demand with 93,140 Coloradans enrolled in Colorado Option plans (34% of all enrollments on the market). Supply of Colorado Option also expanded with new providers accepting plans, a new issuer in Colorado, and new competition in 12 counties from existing issuers.

This report uses data, and audio of consumer voices, to demonstrate how the \$0 copays for preventive services, that are not subject to deductibles, copay-only prescriptions, and easy-to-understand plan design lead to better care.

Upcoming public hearings in 2024, and the Division's evaluation of affordability and racial health equity in 2026 offer opportunities for Colorado to maximize savings and ensure consumers' health priorities are heard. Increased innovation and a more efficient market will come from Colorado Option's inclusive governance that combines quantified data and Colorado's consumer voices in policy development.

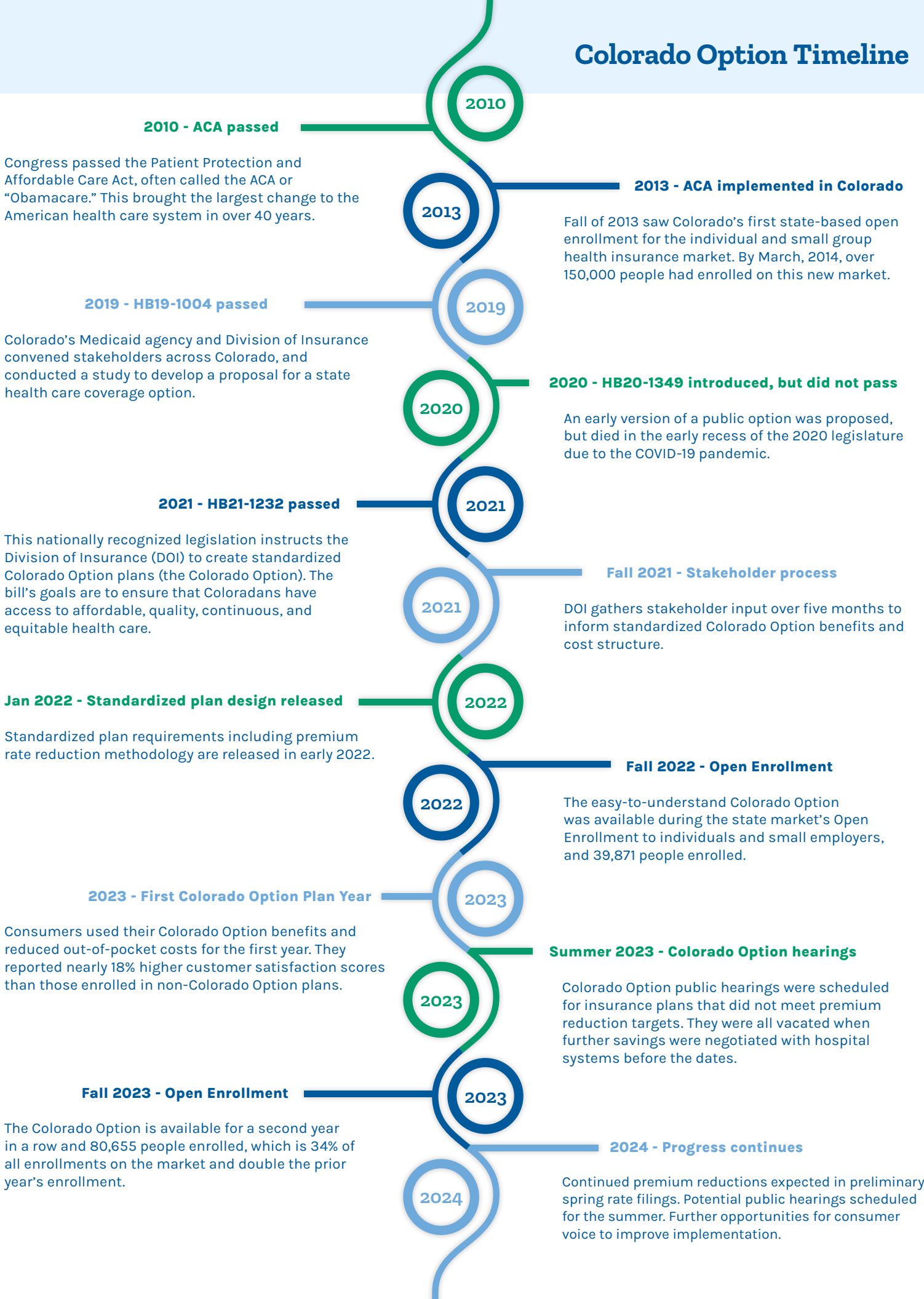
While disagreements among health care industry stakeholders will likely continue, the values-grounded approach that created the Colorado Option can continue to remind everyone involved in this policy about why it exists to begin with, to make health coverage and accessing care more affordable and equitable for Colorado families. Overall, because the Colorado Option creation and implementation includes consumer voices, Colorado's health insurance market has become more dynamic.



Audio clips are embedded throughout this report.

To listen to consumers' voices while you are reading about them, please download the pdf and click when you see this icon:

Colorado Option Timeline






OPTION ORIGINS

The journey towards a standardized Colorado Option plan began almost as soon as the Affordable Care Act (ACA) was implemented in 2013.

The creation of the market was a seismic shift in how individual health insurance is bought and sold. Colorado's ACA implementation meant that insurance companies, hospitals, and consumers alike all had to create and learn the individual market dynamics.

After the State Based Marketplace was launched and consumers enrolled in coverage, advocates began to hear from peers and constituents about barriers to enrolling in affordable health insurance plans. Many consumers did not understand deductibles, out-of-pocket maximums, and coinsurance, and how the plans differ from one another.

The mechanics of buying health insurance through employer benefits and human resources were familiar to issuers, hospitals, and most consumers. However, on the new individual and small group market there was a significantly higher volume of products to choose between, and navigating those options presented hurdles.

 It became clear that this market's demands and needs were quite different.

Rather than a small number of highly personalized plans seen in the group markets, starting in 2013, advocates called for standardization across the insurance plans offered on the State Based Marketplace.

Thus began the long journey towards removing barriers for consumers when shopping for affordable health insurance in Colorado. Many of the people interviewed for this report worked on these issues for the last three to eight years. Even when they did not agree on the policies, and had to bend from their original approach, they acknowledged the expertise and efforts of other policy experts along the way.

“It really was impossible”

said one early advocate.



Early on, four clear goals emerged from consumers' discussions.

1st was understanding.

Consumers were struggling to understand the best plans to purchase for their families' needs and called for standardized plans. [Research shows](#) that when cost-sharing in plans is the same across insurance companies, choosing a plan based on network and quality is easier.

2nd was affordability.

Consumers had issues with access, but affordability was, and is, the biggest concern in conversations, surveys, and focus groups year after year.

3rd was preventive and primary care.

One primary care provider spoke about how frustrated she and her peers were in the early days of the ACA because preventive services were not covered as expected. This includes mental health care. Despite mental health parity laws, access to behavioral health was not the reality for many consumers due to a lack of insurance coverage.

4th was equitable care.

It became increasingly important to consumer advocates that provider networks have [culturally responsive](#) care for patients and that insurance plan design contributes to [equity](#). Belief in a solution that directly addressed health inequities and improves the health of historically disadvantaged communities became a consistent agreement.

Throughout the development of the standardized Colorado Option, the goals of the policy continuously centered on listening to consumers' experiences and removing the barriers they described.

After years of making small steps towards progress, including a bill to study the public option in 2019, a bill to create a public option in Colorado died in the early recess of the 2020 legislature due to the pandemic. The bill reemerged in the Colorado House of Representatives in 2021 and was a major move forward. House Bill 21-1232 ultimately did pass.

As with all significant legislation, everyone involved in House Bill 21-1232 had to compromise.

The original version of this bill included the creation of a new state-run nonprofit entity that would conduct business separate from the state government and design a health plan that could be easily compared to other plans while improving perinatal health and racial health equity. The original goal for savings included an overall 20% reduction in premiums.

The final bill looked quite different from what was introduced. In the bill that was signed, Colorado's Division of Insurance was tasked with gathering public feedback and designing the standardized Colorado Option plan. That plan must be offered by insurance companies across Colorado in the individual and small group markets, and the premium reductions are a gradual decrease of 5% every year, adjusted for inflation, for three years.

This bill, combined with another piece of legislation to create and improve state subsidies for customers historically excluded from the market as well as improve affordability for accessing care for marketplace-eligible enrollees. Overall, the final bill favored significant, though more moderate change than the initial version.

The unprecedented commitment to inclusiveness, and keeping the Colorado consumers' needs in the forefront, resulted in a policy that makes significant progress across the four goals. Advocates credit setting early principles and goals as key to weathering abrasive negotiations. It also set a precedent for efficient participation as the Colorado Option moved into implementation.



IMPLEMENTING THE COLORADO OPTION

After HB1232 passed, Colorado's Division of Insurance conducted an unprecedented and "extensive stakeholder process to develop the standardized Colorado Option plan, with the bill's goals of improving racial health equity and perinatal coverage and to have a provider network that is culturally responsive." This included an opportunity for hospitals, health insurance companies, brokers, the disability community, physicians, rural communities, and consumers to inform what should be included as part of the market's novel Colorado Option plan benefits, provider networks, and cost-sharing.



Throughout the stakeholder process, participants regularly acknowledged the tradeoffs inherent in creating a health insurance plan, especially between including low-cost medical services and controlling deductibles, while achieving a premium reduction. Consumer advocates built on the increased health literacy of consumers since the ACA was passed, and knew that a successful plan is one where patients see a clear value proposition when they purchase a plan.

CONSUMER IMPACT

By January 2022, the patient-first design, premium reduction methods, and regulations were written. Insurance companies that offer plans in Colorado's individual and small group markets are required to also supply a standardized plan in bronze, silver, and gold metal tiers. All copays and deductibles count towards the out-of-pocket maximum. The plan design within each metal tier is the same, regardless of the insurance company.

These benefits are also identified as high-value services that make it easier to be healthy, diminish the use of higher-cost services, and encourage continuity of care. Consumers have been relieved and grateful that many preventive benefits now have \$0 copays and are covered pre-deductible. One consumer pointed out

"My psychiatrist is completely covered. Those are the most expensive appointments I have, but now it's fully covered."

- Colorado Option Consumer

In fact, consumers enrolled in Colorado Option plans stayed covered one month longer than those enrolled in non-Option plans (9.8 and 8.9 months respectively), indicating these plans result in better continuity of care for consumers.

Several benefits were prioritized to improve equity so patients won't pay extra for:

- REGULAR PRIMARY CARE VISITS
- MENTAL HEALTH VISITS
- CARE DURING AND AFTER PREGNANCY
- DIABETES SUPPLIES
- SMOKING CESSATION PROGRAMS
- PRESCRIPTIONS, NEWLY COPAY ONLY
- LANGUAGE TRANSLATION



"I cannot stress how helpful this kind of option would have been from the onset of the Affordable Care Act"

- Certified Enrollment Assister



Health insurance should be easy to understand and use.

The ability to easily compare plan differences beyond the standard design has been a significant improvement for consumers. [New customers](#) enrolled in Colorado Option 2024 plans at a higher rate (29%) than returning customers (13%). And **those that enrolled in Colorado Option 2024 plans reported nearly 18% higher relative customer satisfaction than those enrolled in non-Colorado Option plans.**

During Open Enrollment for 2023 plans, 39,871 people [enrolled in Colorado Option plans](#). As bill sponsor Representative Iman Jodeh said, “We were incredibly pleased with the number of people who enrolled in the Colorado Option; it surpassed our targets.” In the most recent open enrollment, that number [increased to 93,140](#) people enrolling in Colorado Option plans.



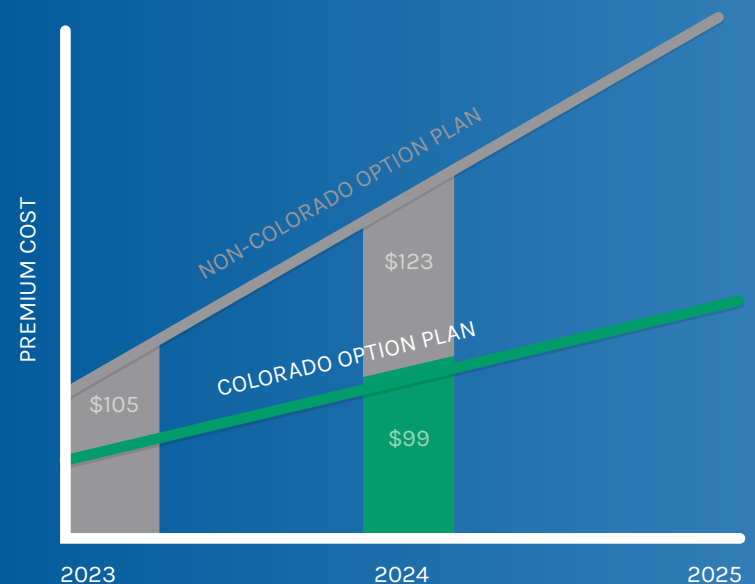
This represents 34% of all enrollments on Colorado’s individual health insurance market and over double the enrollments from the prior year.

The market demand demonstrates the value and appeal of Colorado Option plans.

The improved market dynamics have not only increased consumer experience but have increased participation for insurance companies and health systems. Insurance companies offered [8 more](#) Colorado Option plans this year, an 18% increase from 2023. Select Health, a new entrant to the market, offered Colorado Option plans in [eight of the nine health insurance rating areas](#). Rocky Mountain HMO and Denver Health expanded to a [combined 12 new counties](#). A Cortez health system [joined the Peak Health Alliance](#) network and will accept its Colorado Option plans.

When compared to non-Colorado Option plans, 2024 Colorado Option premiums increased at a 28% [slower rate](#), and some insurance companies achieved the premium reduction targets. The combined legislative effect of these savings, increased state subsidies for consumers excluded from the market by [\\$39.5M](#). In 2024, [all counties](#) have a Colorado Option silver plan at, or below the average silver premium. This creates an opportunity for subsidized non-Colorado Option consumers to [save money by choosing](#) Colorado Option plans this year. **However, affordability gains have yet to be maximized due to the perverse incentives of the status quo and processes of setting prices and premiums for healthcare.**

The status quo isn’t working for consumers, as premiums and out-of-pocket costs for accessing health care continue to rise.



[Savings example](#) for a 40 year old with a subsidized silver plan in 2023 choosing between renewing a non-Option plan, or newly enrolling in the Colorado Option.



The Colorado Option also set a requirement for insurance plans that did not hit premium reduction targets to participate in a public hearing [process with Colorado's insurance commissioner](#). In 2023, four hearings were initially set and ultimately vacated as the insurance plans and health systems were able to negotiate additional savings just before the hearing dates. The increase in [financial transparency](#) through that process meant that consumers had access to financial data demonstrating where market plans paid higher prices to health systems than employer plans. Once again, radical inclusiveness yielded new data and new savings.

The data transparency and public hearing elements of the Colorado Option continue to create opportunities for insurance companies and providers to involve consumers. The values-grounded approach that created the Colorado Option can continue to remind everyone involved in this policy about why it exists to begin with, to make health coverage and accessing care more affordable for Coloradans.

Overall, because the Colorado Option creation and implementation included consumer voices, Colorado's health insurance market has become more efficient and dynamic.

LOOKING AHEAD

Colorado is nationally recognized as on the cutting edge of health system innovation. The secret to that distinction lies in the inclusion of consumer voices, especially when learning the new market's dynamics. Those voices will inform the continued implementation of the Colorado Option and ensure it creates value for all market participants.

The Colorado Option includes unique evaluation requirements that create accountability for everyone. “Under HB21-1232, the Division is required to contract with an independent third party to conduct an evaluation of the Colorado Option on health plan enrollment, health insurance affordability (including total out-of-pocket health care spending), and health equity...The Division is in the initial stages of this work to identify a contractor and then develop evaluation metrics.”

Additionally, insurers are required to meet higher standards in Colorado Option provider networks, including provider training to promote cultural responsiveness and language assistance, and to submit data on both provider and patient demographics for Colorado Option plans. The goal of collecting this demographic information is to ensure health equity standards are being met and to demonstrate how well these systems serve all patients.

The ability in the future to evaluate and compare claims data between non-Colorado Option and Colorado Option plans enables consumers to explore ways to maximize savings and ensure consumers’ health and priorities are served by the market.

Indeed, through the course of interviewing consumers for this report, they have requested improvements:

- **when comparing and shopping for plans,**
- **understanding prescription coverage,**
- **with clarity on how premiums are set, and**
- **with provider networks.**

The Colorado Option’s inclusive governance allows for those consumer voices to inform the policy development. Increased innovation and a more efficient market will come from continuing to combine quantified data and Colorado’s consumer voices.



Acknowledgements

This report would not be possible without the care and participation from many stakeholders, including, but not limited to:

The Polis-Primavera administration, and the Office of Saving People Money in Health Care

Colorado's Department of Regulatory Agencies, Division of Insurance

Connect for Health Colorado, Colorado's state-based marketplace for individuals

The members of the Colorado Option Advisory Boards, and the Health Insurance Affordability Enterprise advisory board and their organizations

The brokers and assisters who help Coloradans enroll in, and use their health plans

The dedicated consumer advocates and coalition members that have helped to pass and implement this policy, and continue to do so. Thank you for continuing to lift up the voices of our communities and consumers in Colorado

Most especially to the consumers who took time to share their experiences for this report, and to the 93,000

consumers who use their family budgets to invest in this health coverage for themselves and their families. The consumer advocates in Colorado are dedicated to continuing to ensure that you have affordable and equitable health coverage in our state. You are at the beginning, middle, and the end of every health policy, and this system should be centered around you and your health.



2025 Hospital Workforce Trends Report
Project ID: HB21-1232

Submitted by:
DIRA Partners, LLC

Submitted to: Colorado Division of Insurance
Provided on **June 30, 2025**

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Executive Summary

The 2025 Hospital Workforce Trends Report (“Report”) is the third of three reports, required by House Bill 21-1232 (the Colorado Standardized Health Benefit Plan Act), to assess the impact, if any, of Colorado Option implementation on the wages, benefits, staffing, training, and working conditions of the hospital workforce. The conclusions in this Report are based on secondary data analyses of the American Community Survey (ACS), Current Population Survey (CPS), National Academy for State Health Policy (NASHP) Hospital Costs Tool, and the Colorado Department of Health Care Policy & Financing (HCPF) Hospital Financial Transparency Report. Data may differ from prior reports due to the availability of data sources.

Key Conclusions

- **Colorado Option has had no discernible impact on hospital workforce.**
Across three consecutive annual reports from 2023 through 2025, there is no evidence that implementation of the Colorado Option has negatively affected hospital wages, benefits, staffing, training, or working conditions. Core workforce and financial metrics have remained stable throughout the study period.
- **Hospital employment remains a stable contributor to Colorado’s workforce.**
Health care makes up 10% of the total workforce in Colorado, while hospitals remain a major employer in Colorado, representing 4% of the overall state workforce.¹ Hospital jobs also continue to offer relatively high levels of educational attainment and stability compared to the broader workforce.
- **Colorado’s hospital workforce reflects national trends, with few differences.**
Colorado’s hospital workforce is similar in composition to the national hospital workforce but shows slightly higher concentrations of physicians and advanced practice providers.²
- **Labor costs remain a dominant but stable portion of hospital operating expenses.**
Labor costs accounted for 45% of operating expenses in 2023, slightly down from 46% in 2022 and comparable to pre-pandemic levels.³ Labor’s share of net patient revenue has changed little over the past decade, highlighting a consistent but significant role in hospital financial operations.
- **Contract labor costs declined in 2023, reversing pandemic-era trends.**
After a significant increase during the COVID-19 pandemic, both the use of and spending on contract labor declined in 2023. Contract labor costs dropped by 26% from 2022, and

¹ Current Population Survey. *US Census Bureau.*

² 2023 American Community Survey. *US Census Bureau.*

³ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

hospitals shifted investment back toward directly employed staff, with wages for employed staff increasing by 10.7% in 2023.⁴

Background and Context

Hospitals are an integral part of a community’s ecosystem, providing essential services to support residents' health and well-being as well as providing jobs for residents of all educational backgrounds. This is no different in Colorado where nearly 100,000 hospital workers provide inpatient and outpatient services for the state’s 5.22 million residents and are one of the fastest-growing workforces in the state.⁵ Labor costs, including salary, wages, and benefits for directly employed and contract workers, are the largest share of hospital costs, accounting for just under half of Colorado hospital operating expenses.⁶

“Colorado Option” HB21-1232

House Bill 21-1232 (HB21-1232), or the Colorado Standardized Health Benefit Plan Act (“Colorado Option”), established an affordable standardized health benefit plan for Colorado consumers in the individual and small group markets. As required by HB21-1232, the Colorado Division of Insurance (DOI) contracted with DIRA Partners as its third-party vendor to prepare three annual Hospital Workforce Trends Reports (“Report”), the first of which was submitted in June 2023 and the second in June 2024. The purpose of these reports is to monitor the impact of the Colorado Option implementation, if any, on hospital workforce wages, benefits, staffing, training, and working conditions, to the extent information is available. This is the third and final report required by HB21-1232.

Data Sources Across the Three Reports

Over the course of the three Reports, a variety of secondary data sources were used due to data availability. The table below provides an overview of the sources used for each Report, including the data years. Appendix A restates this table and provides methodology for each source used in this 2025 Report.

Table 1. Workforce Trends Reporting Data Sources

Data Source	2023 Report	2024 Report	2025 Report
American Community Survey (ACS)	2021 5-year sample (2017-2021)	Not used	2023 5-year sample (2019-2023)

⁴ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

⁵ Colorado Hospital Workforce. *Colorado Hospital Association | Colorado State Profile. U.S. Census Bureau.*

⁶ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

Colorado Department of Health Care Policy and Financing (HCPF) Hospital Reports	2021 data via 2023 Hospital Expenditure Report	2022 data via 2024 Hospital Financial Transparency Report	2023 data via 2025 Hospital Financial Transparency Report
Current Population Survey (CPS)	Not used	Not used	2024 data
National Academy of State Health Policy (NASHP) Hospital Cost Tool	Not used	2022 data	2023 data
Occupational Employment and Wage Statistics (OEWS)	2022 data	2023 data	Colorado OEWS data not available ⁷
RAND Hospital Data	2021 data	Per DOI recommendation, DIRA switched to the NASHP Hospital Cost Tool. Both datasets pull from public cost report data from the CMS Healthcare Cost Report Information System	

2023 Hospital Workforce Trends Report

The 2023 Report established a baseline of Colorado’s hospital workforce employment experiences as well as hospital financial trends using datasets from the U.S. Department of Labor, RAND, and the American Community Survey.⁸ The first Report began to explore the relationship between labor and hospital costs and specifically, the impact of increasing utilization of contract workers on this relationship.

The 2023 Report reached the following conclusions:

1. Colorado’s hospital workforce looked similar to the national hospital workforce.
2. More than 80,000 Coloradans were directly employed by a hospital.
3. Labor was one of the largest expenses in hospitals’ budgets, consisting of both workers employed directly by hospitals and contract workers employed through staffing agencies.⁹
4. Contracted labor had seen the largest rate of growth among hospital expenses in recent years and puts further pressure on total hospital costs.¹⁰

⁷ Notice Regarding Suspension of Publication of Colorado Occupational Employment and Wage Statistics. *Occupational Employment and Wage Statistics*.

⁸ 2023 Hospital Workforce Trends Report. *DIRA Partners, LLC for the State of Colorado Division of Insurance*.

⁹ Hospital cost structure and the implications on cost management during COVID-19. *Journal of General Internal Medicine*.

¹⁰ Fact sheet: Strengthening the health care workforce. *American Hospital Association*.

2024 Hospital Workforce Trends Report

The 2024 Report established a baseline of Colorado’s hospital workforce employment experiences as well as hospital financial trends using datasets from the U.S. Bureau of Labor Statistics, National Academy for State Health Policy (NASHP) Hospital Costs Tool, and Colorado Department of Health Care Policy & Financing (HCPF) Hospital Financial Transparency Report.¹¹ The 2024 Report examined the relationship between labor and hospital costs and specifically, the impact of increasing utilization of contract workers on this relationship. The 2024 Report also included an analysis of survey data from over 2,000 current and recently former Colorado hospital workers as well as focus group data. The survey included questions about their experiences related to working conditions, wages, benefits, and training. As a note, while survey respondents included a mix of clinical and non-clinical as well as current and former employees, non-clinical staff were underrepresented in the responses while white workers and nurses were overrepresented.

The 2024 Report reached the following conclusions:

1. Based on the survey and focus group findings of the 2024 report, the Colorado Option implementation had not had an impact on the Colorado hospital workforce.
2. Hospital jobs represented 3.6% of the overall Colorado job market and represented some of the largest job growth rates (4%) in the state in 2023.¹²
3. Labor costs comprised 46% of Colorado hospital operating costs in 2022. This percentage had only varied slightly since 2014.¹³
4. Hospital operating costs, including labor, rose 10.4% between 2021 and 2022 in Colorado compared to an average of 7.8% per year since 2014.¹⁴ Contract labor costs were growing at a faster rate than direct employee costs. Further, the cost of contract labor had grown disproportionately compared to the use of contract labor in recent years.
5. In Quarter 3 of 2023, 2,000 current and recently former Colorado hospital workers responded to a survey seeking their experience related to working conditions, wages, benefits, and training. Survey and focus group respondents generally reflected the Colorado and national hospital workforce in terms of composition and experiences. However, due to data limitations, certain groups were not proportionately represented – non-clinical workers (e.g., EVS and dietary staff) and non-white workers were underrepresented among respondents, while white workers and nurses were overrepresented.

¹¹ 2024 Hospital Workforce Trends Report. *DIRA Partners, LLC for the State of Colorado Division of Insurance.*

¹² Occupational Employment and Wage Statistics. *Bureau of Labor Statistics.*

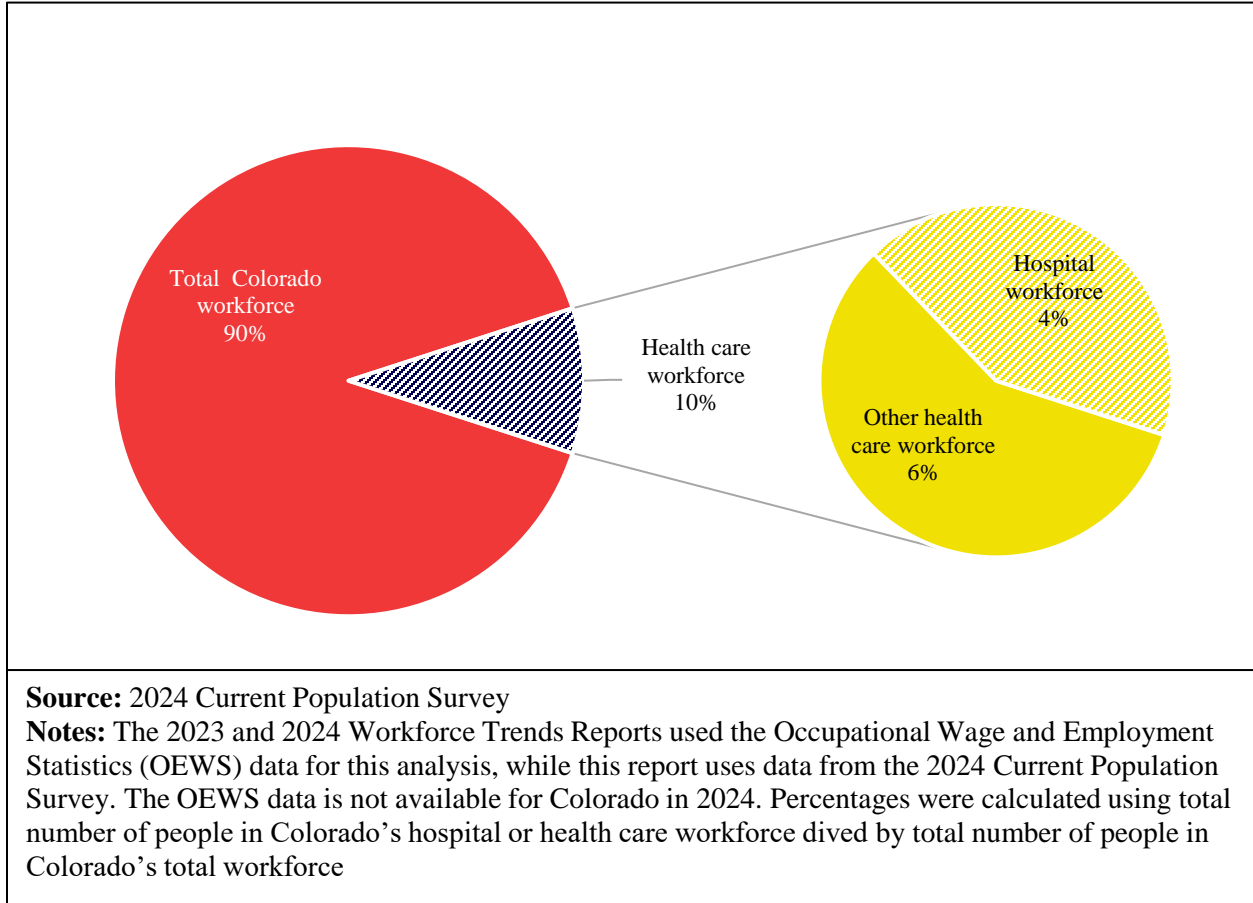
¹³ 2024 Hospital Financial Transparency Report, Table 26. *Colorado Department of Health Policy and Financing.*

¹⁴ 2024 Hospital Financial Transparency Report. *Colorado Department of Health Care Policy and Financing.*

Overview of Colorado Hospital Workforce

The findings discussed in this 2025 Report describe the Colorado hospital workforce and provide an update to information provided in the 2023 and 2024 Reports.

Figure 1. Hospital jobs represent 4% of the overall Colorado job market.



In 2024, Colorado’s health care workforce was 10% of the state’s total workforce. Those employed by hospitals represent approximately 4% of Colorado’s total workforce.¹⁵

Colorado Hospital Workforce Demographics

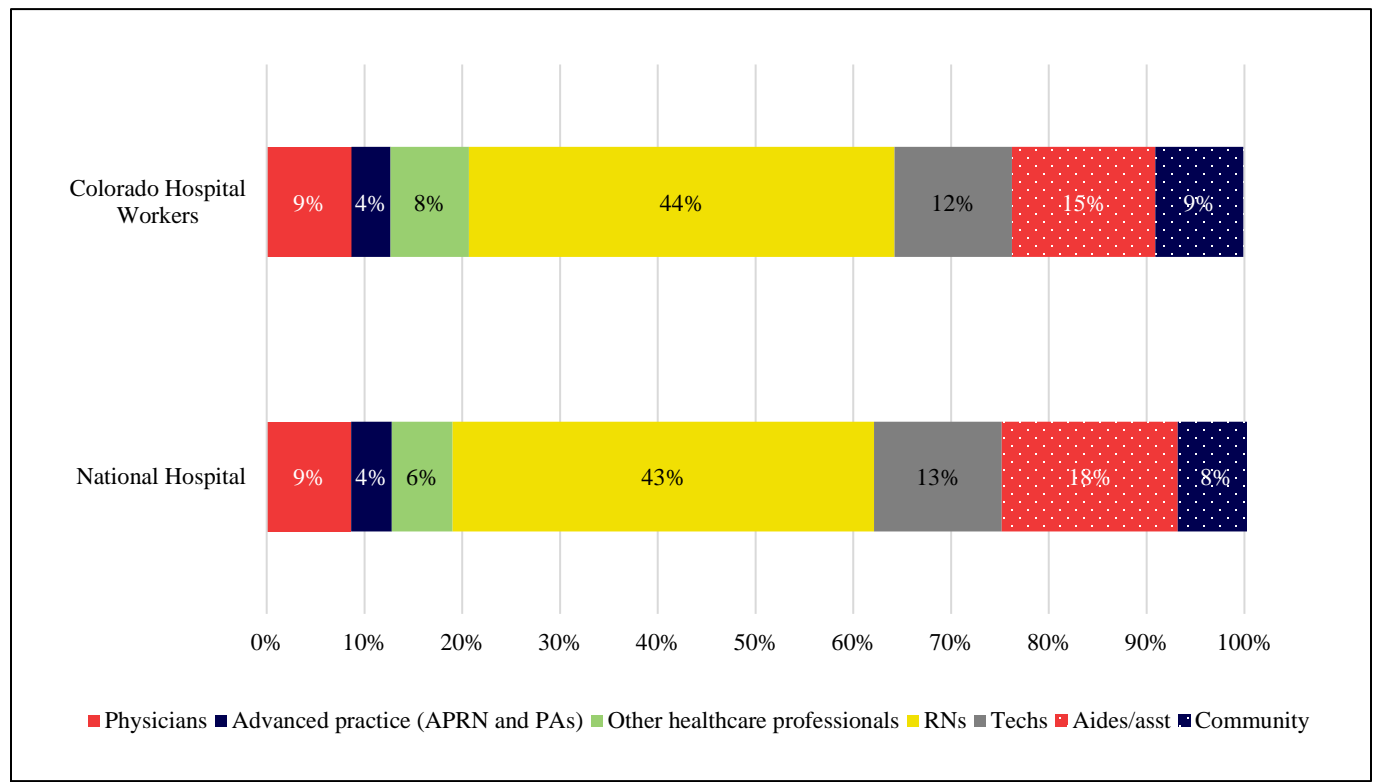
The following section updates the 2023 Report’s comparison of Colorado’s hospital workforce to the U.S. hospital workforce. The 2023 Report used the 2021 American Community Survey (ACS), which was a 5-year sample from 2017-2021. Here, we use the 2023 ACS, which is a 5-year sample from 2019-2023. The updated analysis found no material differences compared to our 2023 Report.

The ACS is an annual nationally representative survey conducted by the U.S. Census Bureau. The analytical sample includes individuals between the ages of 18 and 65 who are part of the

¹⁵ Current Population Survey. *US Census Bureau.*

labor force and work in the hospital industry. Like much academic literature, the analysis collapses approximately 50 clinical and support occupations into nine categories based on job title and educational requirements. ACS data may include contract workers, as workers are categorized based on their place of employment rather than their actual employer (i.e., a hospital versus a staffing agency). Because the ACS does not survey individuals on their employer of record, there is no way to determine if a worker is a contract worker or directly employed. Thus, we are unable to isolate workers based on this classification. No workers are excluded based on part-time or full-time status in this section. A complete categorical list of the workforce included in this report is outlined in Appendix A Table 2 of this Report.

Figure 2. Colorado and U.S. Hospital Workforce by Occupation



Source: 2023 American Community Survey

Note: Detailed occupation category definitions in Appendix A Table 2.

Figure 2 compares the distribution of health care occupational categories between Colorado hospital workers and hospital workers nationally, using data from the 2023 ACS. Each bar represents the full hospital workforce, broken into segments by occupation: Physicians, Advanced Practice Providers (APRNs and PAs), Other health care Professionals, Registered Nurses (RNs), Technicians (Techs), Aides/Assistants, and Community Workers. Colorado hospitals have a proportion of physicians, advanced practice providers, and other health care professionals that is on par with the national average. The proportion of RNs is similar between the two groups, while technicians and aides/assistants make up a larger share of the national

hospital workforce. Community-based workers account for a small and comparable portion in both cases.

Figure 3: Colorado and U.S. Hospital Workforce by Race/Ethnicity

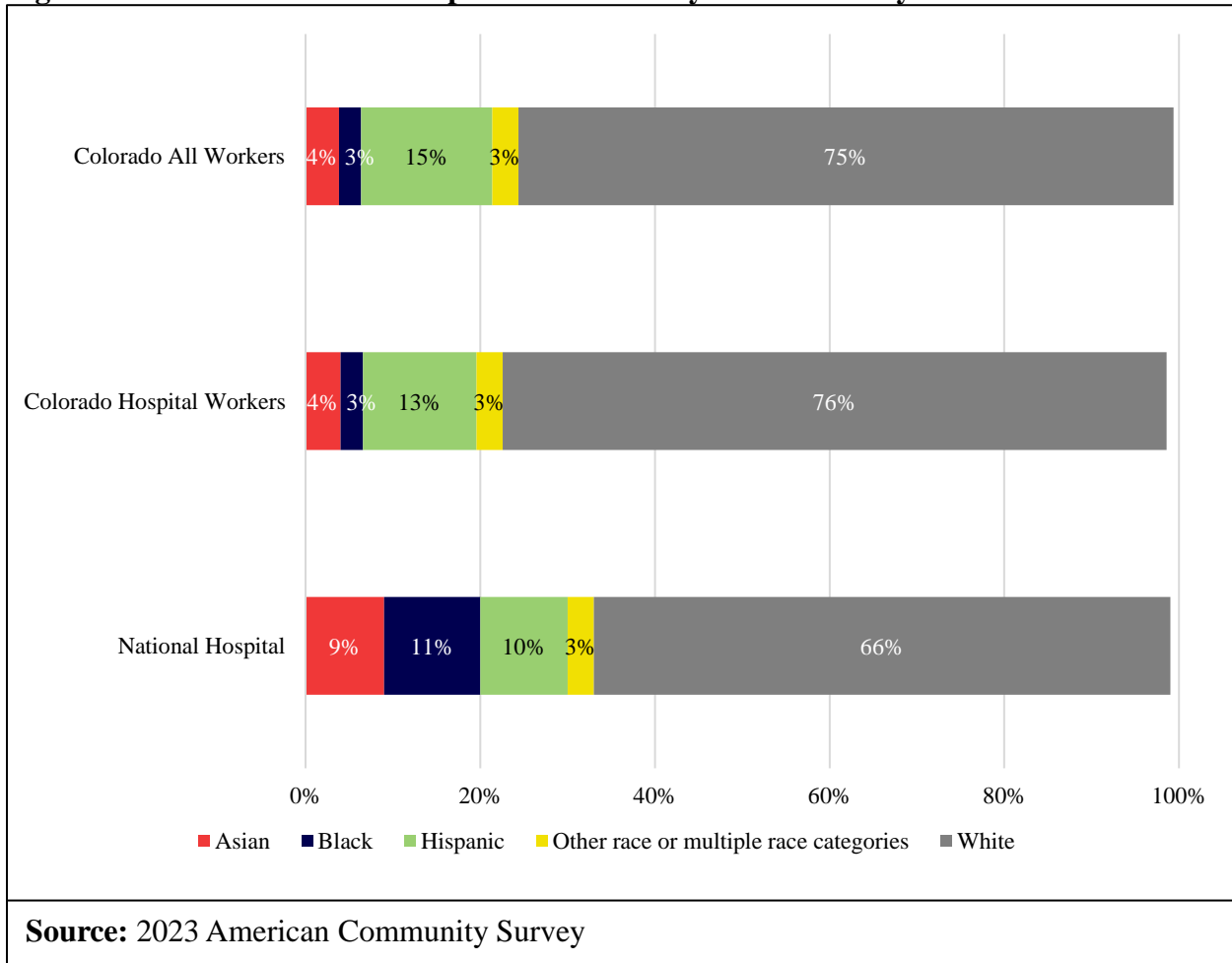
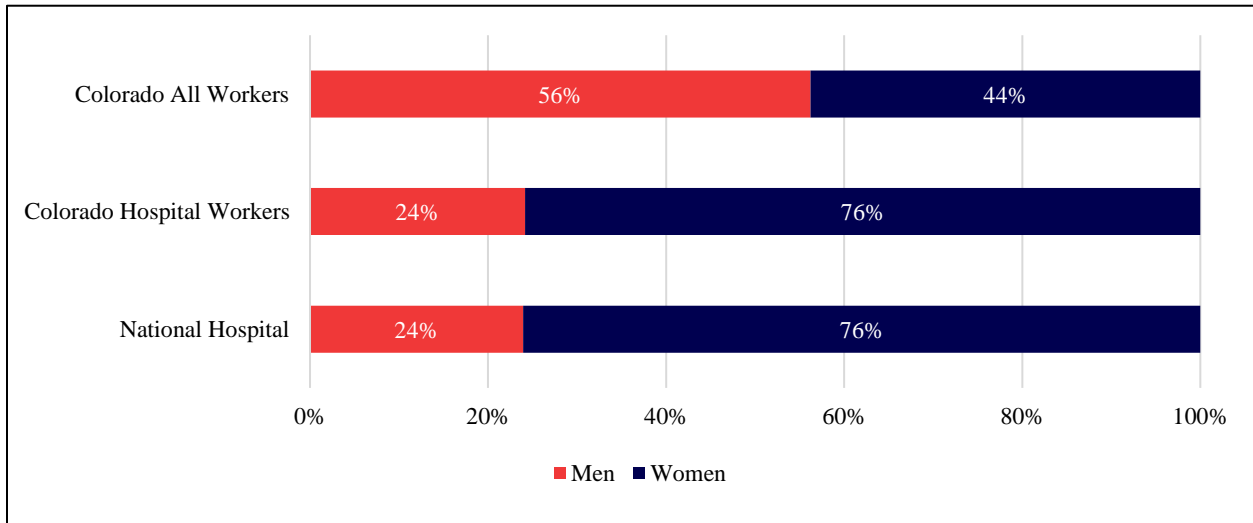


Figure 3 displays the racial and ethnic composition of three groups – all Colorado workers regardless of industry, Colorado hospital workers, and national hospital workers – using data from the 2023 ACS. Each bar represents 100% of the respective workforce, divided into categories: Asian (red), Black (dark blue), Hispanic (green), Other race or multiple race categories (yellow), and White (grey). Across all three groups, White individuals make up the majority of workers, though their share is slightly higher among Colorado workers compared to the national hospital workforce. Hispanic workers make up around 13% of the Colorado hospital workforce, while Black and Asian workers each make up around 3% and 4% respectively.

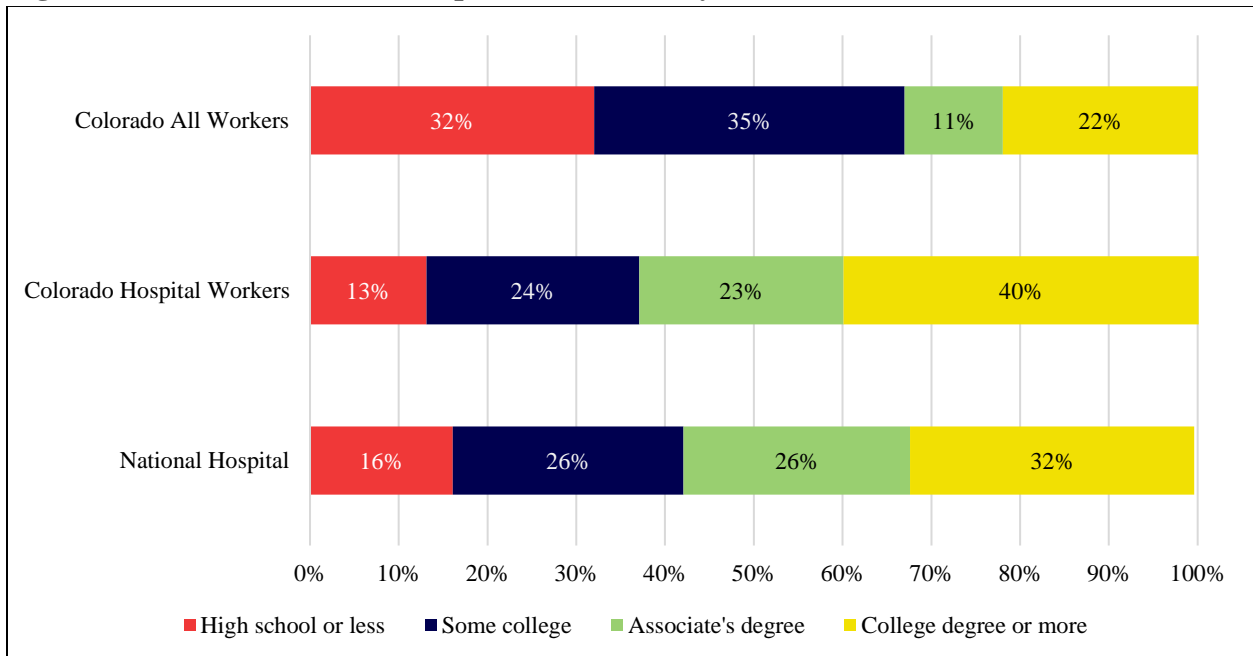
Figure 4: Colorado and U.S. Hospital Workforce by Gender



Source: 2023 American Community Survey

Figure 4 shows that both Colorado and national hospital workforces have a substantially higher proportion of women compared to men.

Figure 5: Colorado and U.S. Hospital Workforce by Education Level

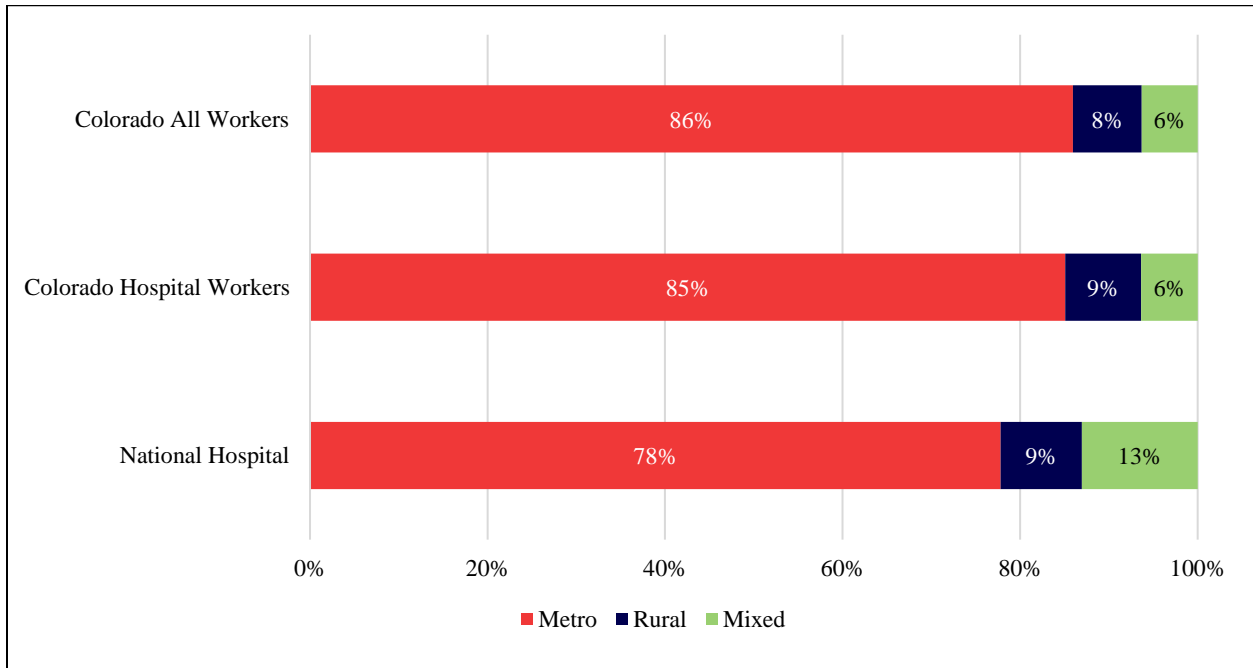


Source: 2023 American Community Survey

Figure 5 shows that both the Colorado and national hospital workforces have high levels of educational attainment, though a higher percentage of Colorado hospital workers (40%) than the national hospital workforce (32%) hold a college degree. Both Colorado and the national hospital

workforces have higher levels of educational attainment compared to the general Colorado workforce.

Figure 6: Colorado and U.S. Hospital Workforce by Geography



Source: 2023 American Community Survey

Note: ACS rural/urban data is captured at a county level. Thus, mixed indicates counties with rural and urban zip codes.

Figure 6 shows the percentage of the workforce that live in metro, rural, and mixed (both metro and rural) areas. Compared to the national hospital workforce, both the Colorado hospital workforce and the Colorado general workforce are more likely to be located in a metro area (85%). Around 9% of Colorado hospital workers live in rural areas, similar to the Colorado general workforce (8%).

Colorado Hospital Labor Costs

Labor costs are consistently hospitals' largest operating expenses.¹⁶ As hospital costs represent approximately one-third of health care spending in Colorado, workforce issues have an impact on hospital financial health and overall health care affordability.¹⁷

Figure 7. Colorado hospitals are paid through a variety of public and private payers.

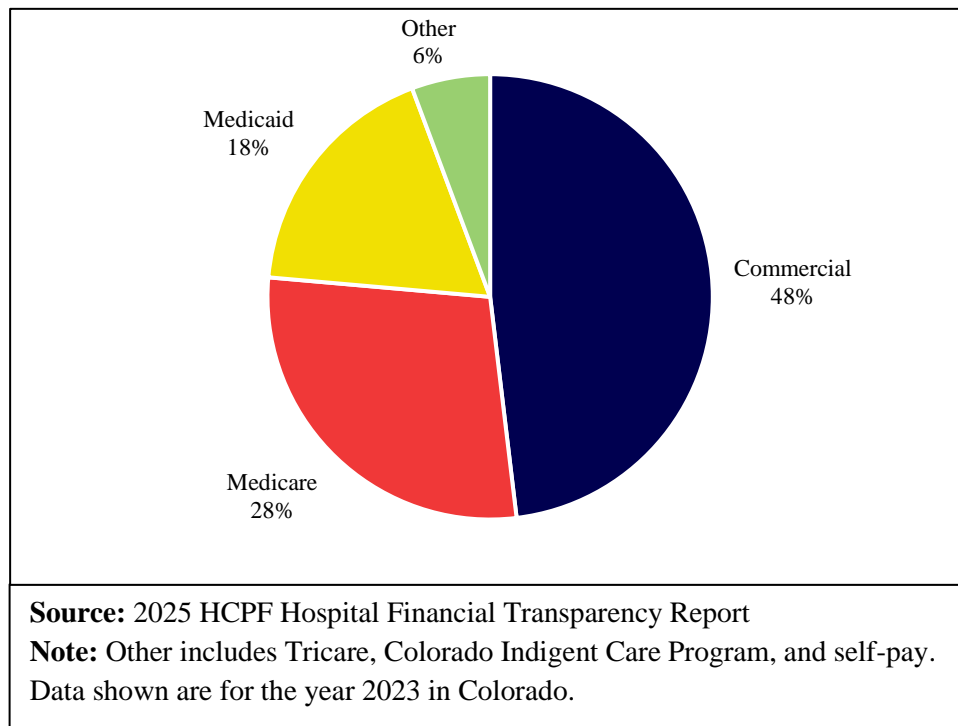


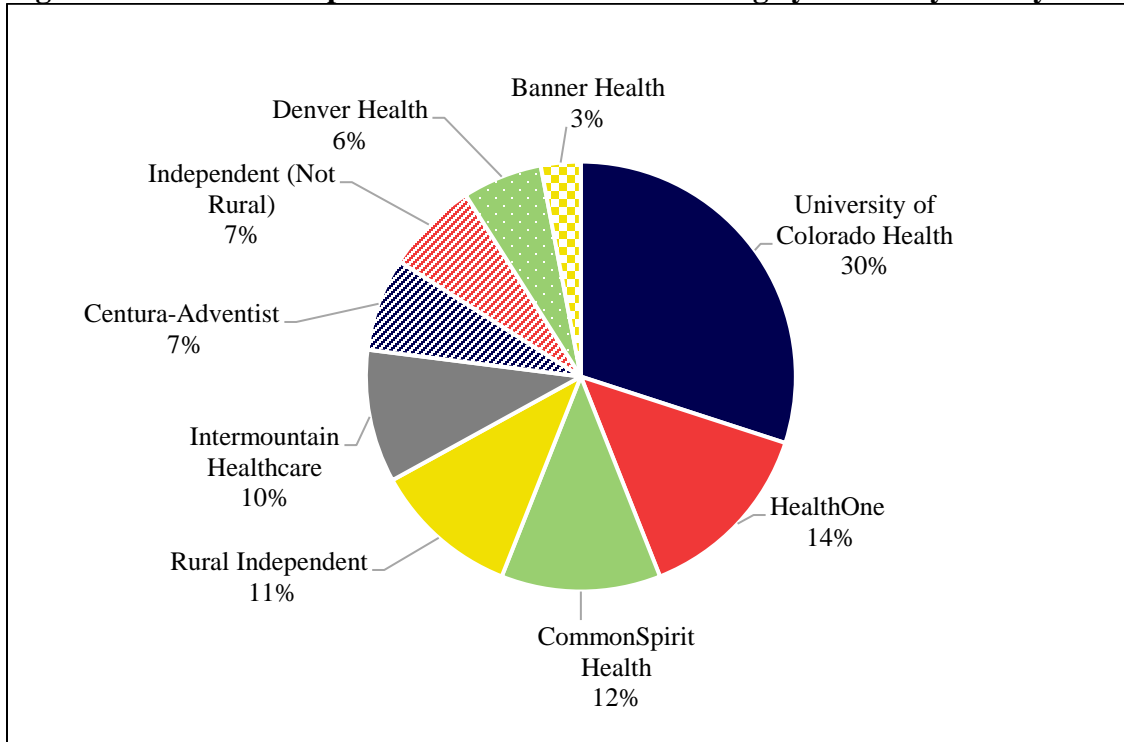
Figure 7 shows Colorado hospitals' overall payer mix based on net patient revenue (NPR), defined as revenue from patient services. NPR is the total amount of money generated from patient services collected from payers, including private insurance, Medicaid and Medicare, minus patient discounts. It can be viewed as

money paid to hospitals for its core purpose of serving patients. Compared to the 2023 Report (which used 2021 data from the 2023 HCPF), the overall payer mix largely stayed the same between 2021 and 2023. Commercial payers remain the largest payers for Colorado hospitals statewide, representing 48% of their net patient revenue as shown in Figure 7.

¹⁶ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing*. | Costs of Caring 2023 Report. *American Hospital Association*.

¹⁷ Affordability in Colorado. *Colorado Hospital Association*.

Figure 8. Colorado Hospital Net Patient Revenue is largely driven by four systems



Source: 2025 National Academy for State Health Policy (NASHP) Hospital Costs Tool

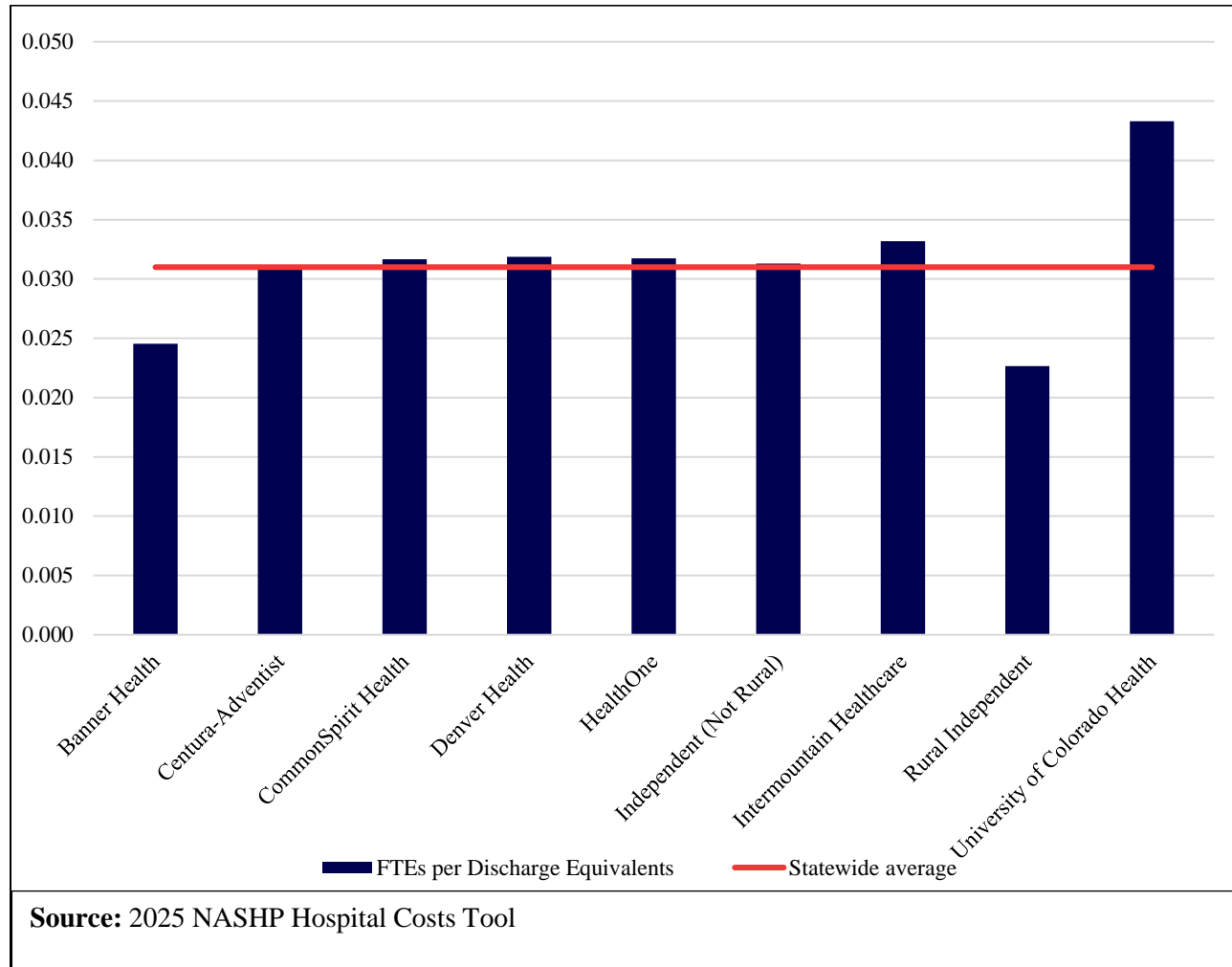
Note: Since the 2023 Workforce Trends Report, SCL Health and Intermountain Health have merged into one system. Children’s Hospital Colorado is excluded from the NASHP data and therefore is not included in this chart.

Figure 8 illustrates the market share of Colorado’s hospital systems by net patient revenue (NPR). In 2023, 66% percent of statewide hospital NPR was derived from four systems (an increase from 62% in 2021 per the 2023 Report): University of Colorado (UCHealth), HealthOne, CommonSpirit Health, and Intermountain Healthcare. Hospitals unaffiliated with a system represent 18% of the Colorado hospital NPR (11% rural and 7% not rural). Centura-Adventist (7%), Denver Health (6%), and Banner Health (3%) comprised the remaining 16%.

Colorado Hospital Staffing

Directly employed full-time employees (FTEs) per discharge equivalents is one of many ways to measure staffing levels. The 2023 Workforce Trends Report provides greater discussion on the use of this metric to determine if the potential for staffing variation occurs among systems.¹⁸

Figure 9. Full-time equivalent employees per discharge (indicative of staffing levels) across Colorado hospitals remain consistent with prior Reports.

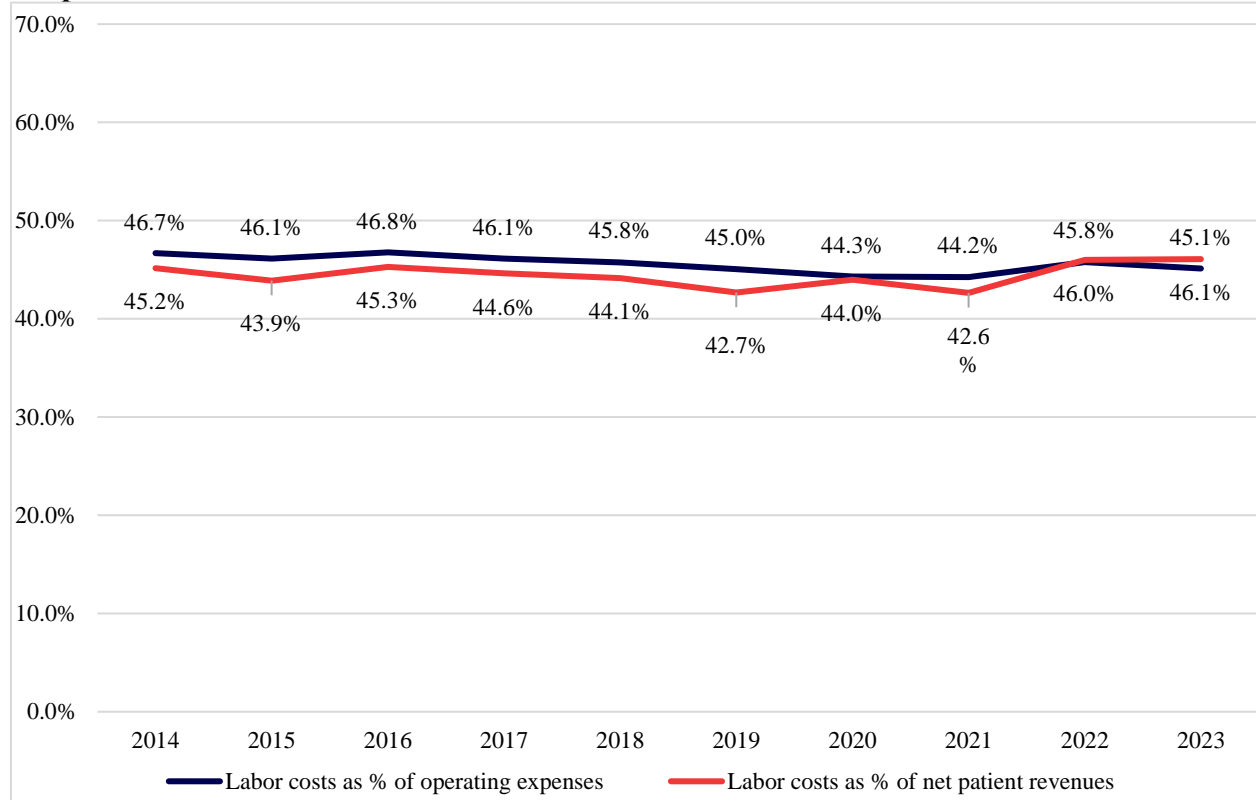


In the 2024 and 2025 Reports, UCHHealth had the most FTEs per discharge equivalents; Rural Independent hospitals and Banner Health had the least. In the 2024 Report, Banner Health and CommonSpirit had the least FTEs per discharge equivalents.¹⁹

¹⁸ 2023 Hospital Workforce Trends Report. *DIRA Partners, LLC for the State of Colorado Division of Insurance* | 2024 Hospital Workforce Trends Report. *DIRA Partners, LLC for the State of Colorado Division of Insurance*

¹⁹ Hospital Costs Tool. *The National Academy for State Health Policy.*

Figure 10. Labor costs as a share of operating expenses and NPR have changed little over the past decade.



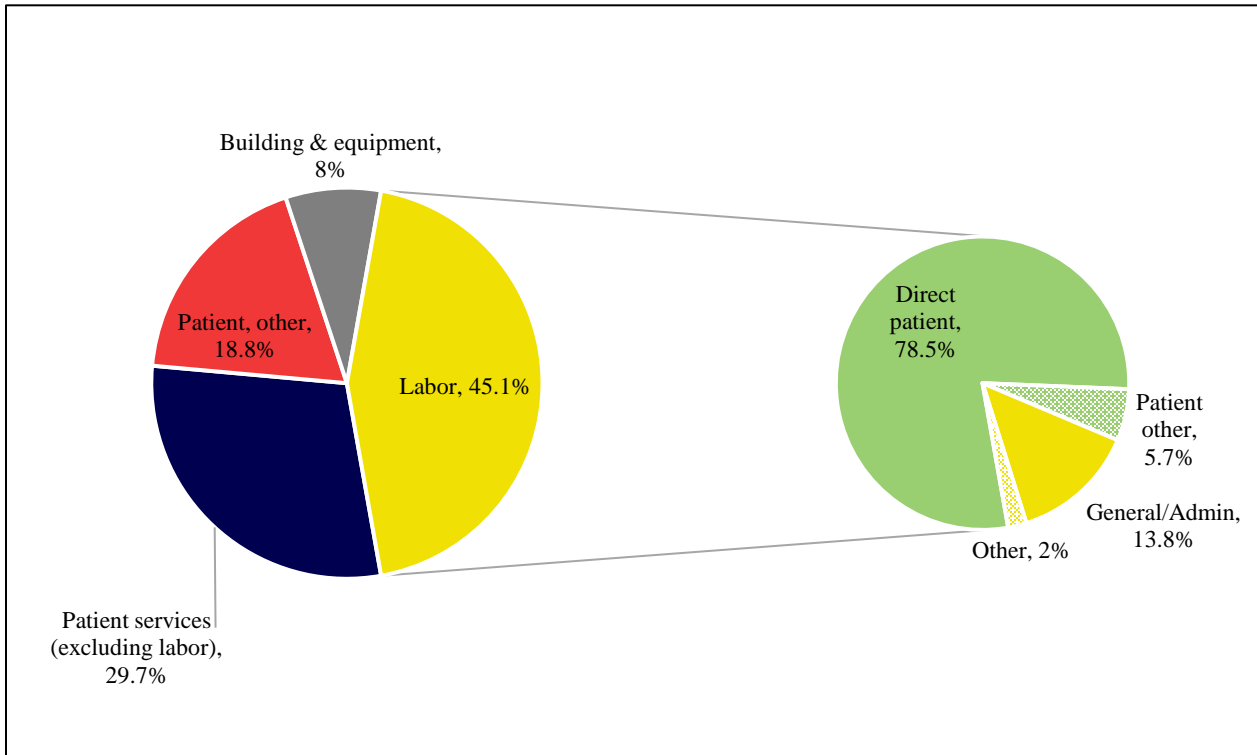
Source: 2025 Colorado Department of Health Care Policy and Financing (HCPF) Hospital Financial Transparency Report, Graphs 1-3

Note: Total labor costs inclusive of salaries, wages, and benefits for directly employed as contract labor wages and agency fees.

In addition to labor costs as a share of operating expenses, we show labor costs as a share of net patient revenue. This indicates how much of the revenue that hospitals earn from patient care is consumed by labor expenses. For example, if labor is 50% of net patient revenue, it means half of patient-related income goes to worker costs, highlighting the impact on hospitals' financial margins. Labor costs (defined as salary, wages, and benefits for directly employed workers as well as agency fees and wages for contract workers) as a share of overall operating costs have not changed in Colorado hospitals over the past decade. In fact, labor costs comprised a slightly smaller share of operating costs in 2023 (45.1%) than in 2014 (46.7%).²⁰ Between 2014 and 2023, total labor costs averaged 45.6% of all hospital operating expenses.

²⁰ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

Figure 11. Labor costs continue to be the largest share of hospital expenses in 2023.



Source: 2025 HCPF Hospital Financial Transparency Report, Table 31

Note: Examples of expenses that hospitals reported as being for patients that fall in the "patient other" category include: contracted services, general other, insurance expense, management fees, provider fees and purchased services.

As Figure 11 shows, the vast majority of Colorado labor costs (79%) were spent on providing patient care, with the remaining 20% spent on administrative and supportive work to maintain and operate the hospital. Labor costs were calculated using Table 31 of the Colorado Department of Health Care Policy and Financing’s (HCPF) 2025 Hospital Financial Transparency Report.²¹

²¹ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

Figure 12. Labor costs as a share of operating costs declined slightly from 2022 to 2023.

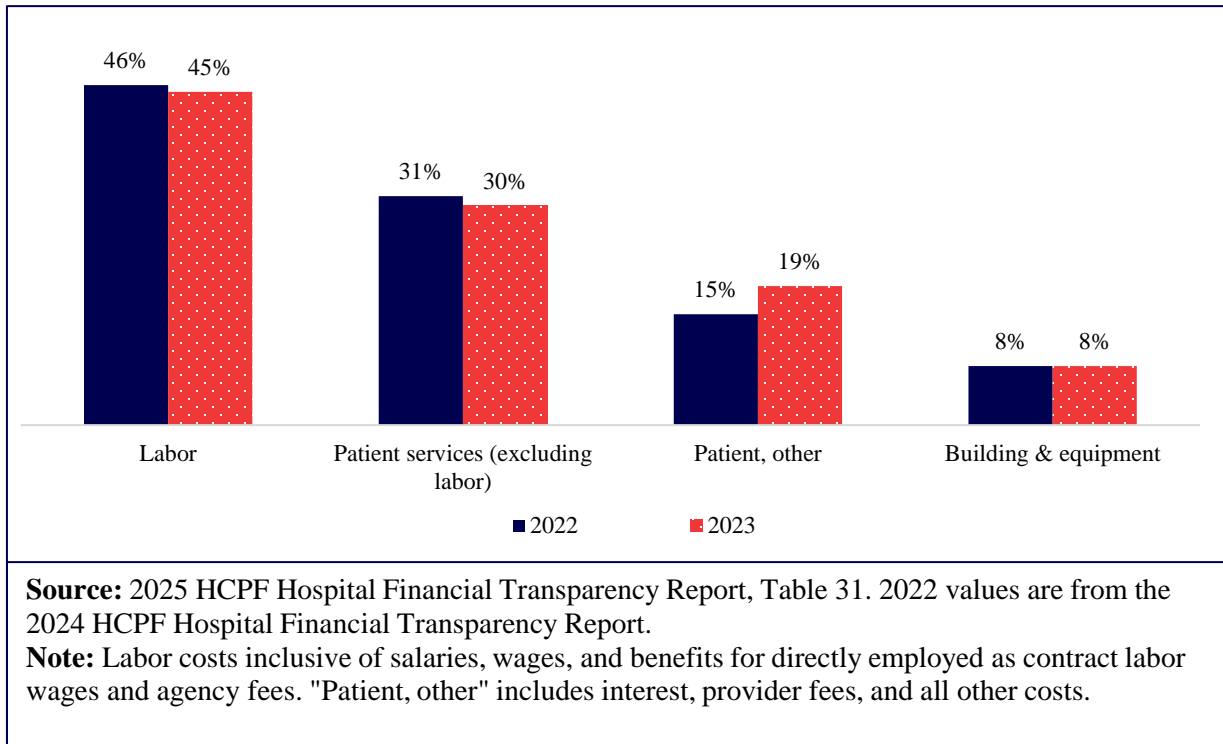
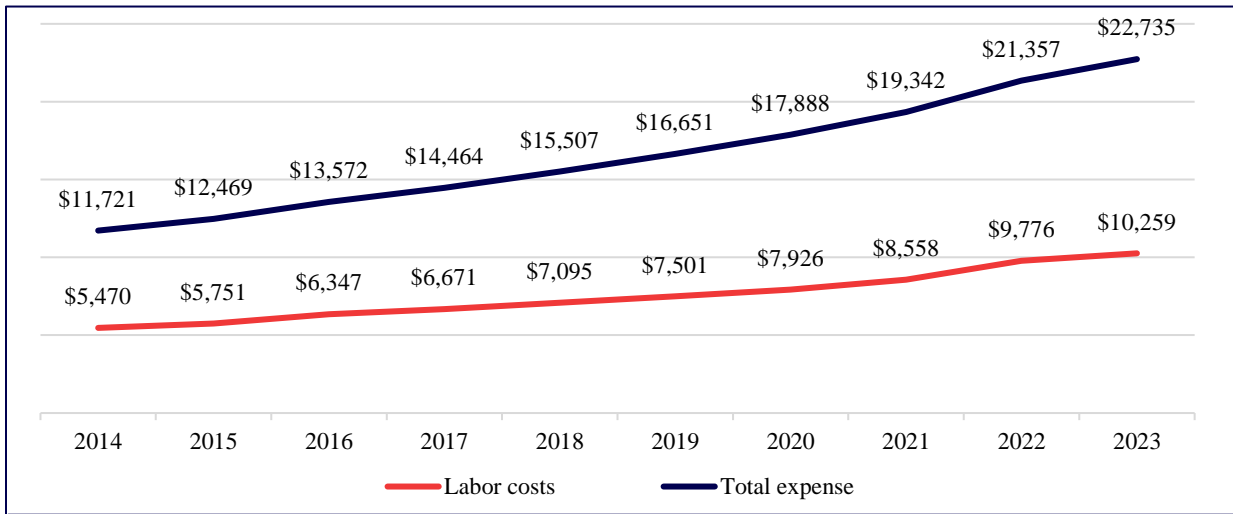


Figure 12 shows that labor costs decreased very slightly as a percent of total operating costs in 2023 (45%) relative to 2022 (46%). Patient services also decreased slightly in 2023 (30% as compared to 31% in 2022), while “Patient, other” increased from 15% to 19% in 2023.²² Building and equipment costs remained the same.

²² 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

Figure 13. Labor costs are rising at a slightly slower rate than operating expenses.



Source: 2025 HCPF Hospital Financial Transparency Report, Graph 3

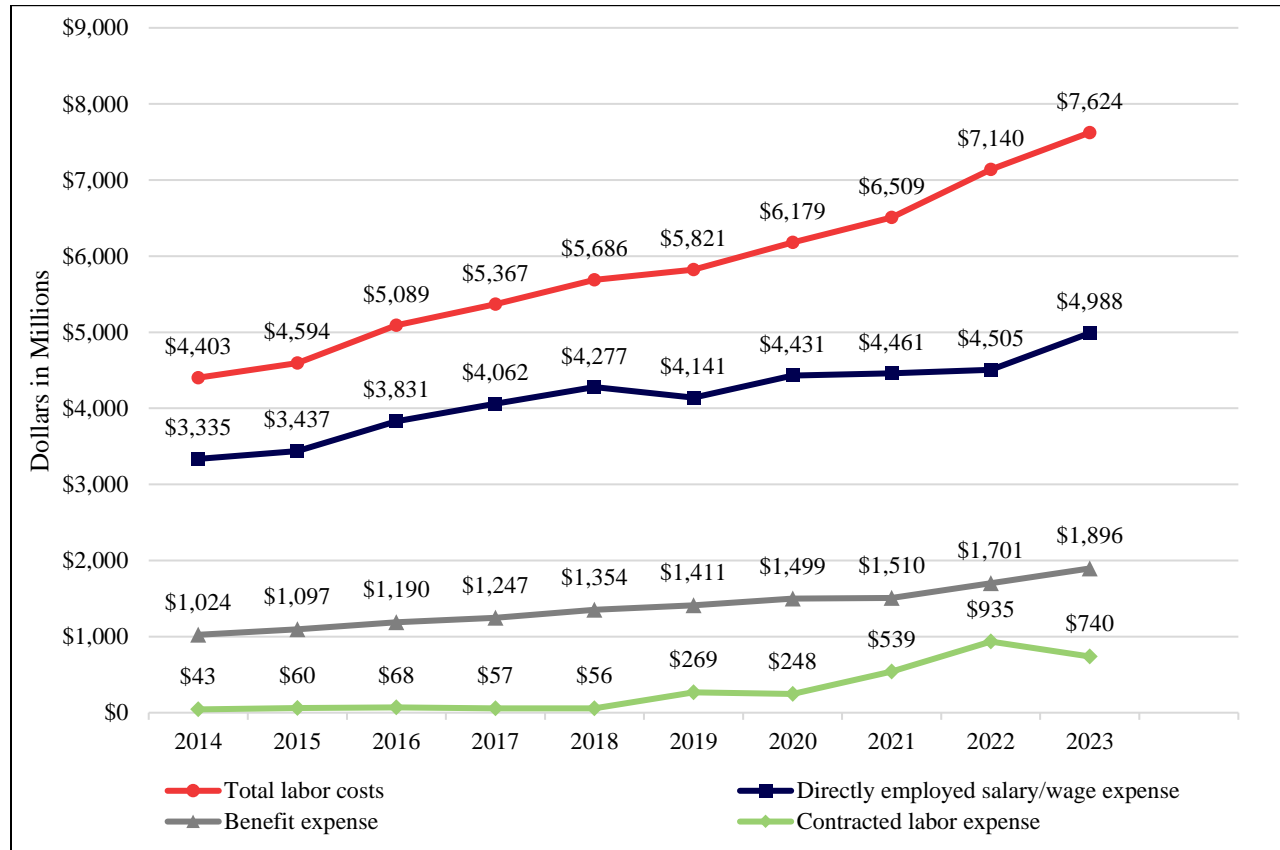
Note: Labor costs inclusive of salaries, wages, and benefits for directly employed as contract labor wages and agency fees. Operating expenses are the bulk of all expenses, but do not include interest, one-time charges, or investment losses.

Colorado hospital labor expenses increased by 5% between 2022 and 2023, which was a decrease in the rate of growth from 2021 to 2022 of 10.4%. Labor costs are calculated as salary, wages, benefits, and fees of directly employed and contract workers. However, hospital operating costs (the total expenses of hospitals not including items like debt, capital depreciation, and investment losses) continue to grow at a faster rate than labor costs.

The Use and Cost of Contract Labor

The use and cost of contract labor decreased in 2023.²³ The pandemic accelerated the use of contract labor to provide support during the surges.²⁴ The increased utilization of contract labor drives up labor costs directly through agency fees and higher wages for contract workers.²⁵

Figure 14. In 2023, contract labor costs declined for the first time since 2020 while total labor costs continue to grow.



Source: 2025 HCPF Hospital Financial Transparency Report, Graph 3

Note: Total labor costs inclusive of salaries, wages, and benefits for directly employed as contract labor wages and agency fees.

While total labor costs have consistently risen over time, contract labor costs declined in 2023 by 26% (\$191 million) from 2022. In contrast, total labor costs rose by 4.9%, benefits rose by 6.7%, and directly employed wages rose by 10.7% between 2022 and 2023, as demonstrated in Graph 3 of the 2025 HCPF Hospital Financial Transparency Report.²⁶

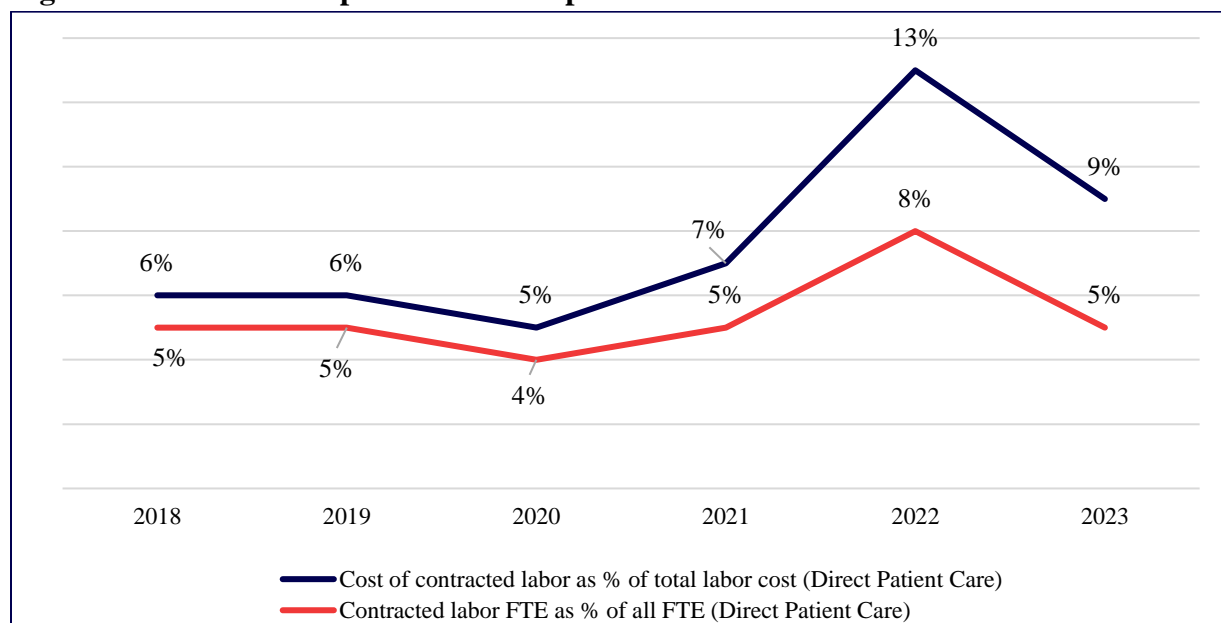
²³ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

²⁴ Costs of Caring 2023 Report. *American Hospital Association.*

²⁵ Association Between Hospital Labor Costs and the Quality of Care. *Risk Management and Healthcare Policy.* | 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

²⁶ 2025 Hospital Financial Transparency Report. *Colorado Department of Health Policy and Financing.*

Figure 15. Colorado hospitals used and spent less on contract labor in 2023.



Source: 2025 NASHP Hospital Costs Tool

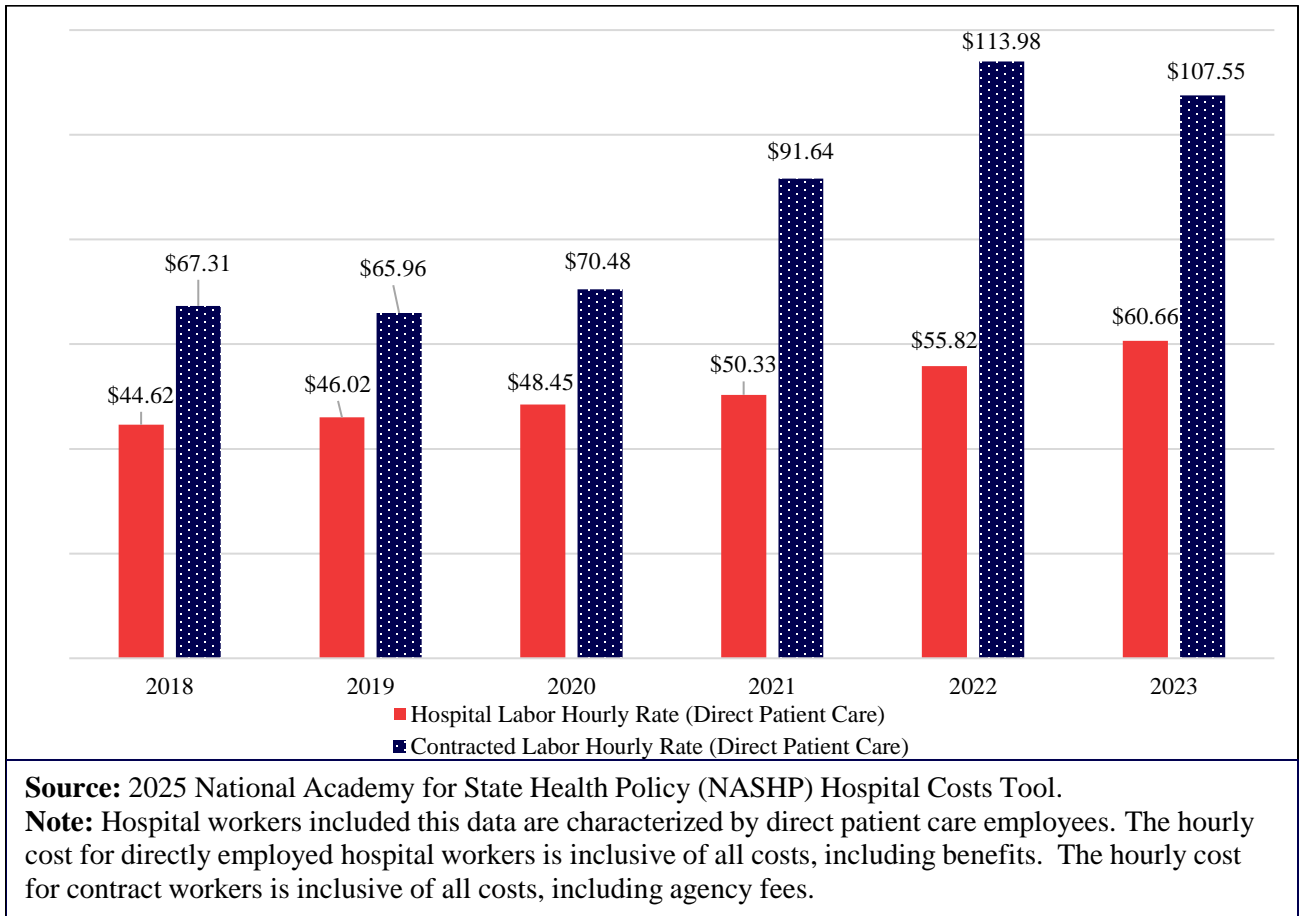
Note: Percentages provided as named by the Hospital Cost Tool Dataset. Appendix includes methodology for calculations using the NASHP Hospital Costs Tool. Labor costs inclusive of salaries, wages, and benefits for directly employed as contract labor wages and agency fees.

Colorado hospitals' use of and their expenses for contract labor have decreased since 2022 after increases in both cost and utilization during the COVID-19 pandemic. As shown in Figure 15, contract labor workers represented 5% of Colorado's full-time hospital employees in 2023, compared to 8% in 2022. The cost of contract labor (agency fees and wages) represented 9% of direct patient care costs in 2023, compared to 13% in 2022.²⁷ Contract labor has long been noted as the most expensive labor option for hospitals – typically adding 50% or more to a typical employee's hourly rate.²⁸

²⁷ Hospital Costs Tool. *The National Academy for State Health Policy*.

²⁸ Association Between Hospital Labor Costs and the Quality of Care. *Risk Management and Health Care Policy*.

Figure 16: In 2023, the average hourly wage difference between contract and directly employed hospital workers decreased for the first time since 2019.



In 2023, Colorado hospitals spent 1.77 times more on hourly rates for contract workers (\$107.55) than on directly employed workers (\$60.60). This is lower than in 2022, when hospitals spent 2.04 times more on hourly rates for contract workers (\$113.98) than on directly employed workers (\$55.82).²⁹

²⁹ Hospital Costs Tool. *The National Academy for State Health Policy.*

Conclusion

Over the three years of this study, the hospital workforce in Colorado has remained stable in most respects. The introduction of the Colorado Option has not impacted hospital wages, benefits, staffing levels, or working conditions – a finding consistent across our 2023, 2024, and 2025 Reports. Key metrics like the proportion of labor costs to expenses (~46%) and hospital share of state employment (around 4%) changed little over this period. One notable trend was the rise and fall of contract labor: it surged in 2021–2022 (as captured in the 2024 report) and then declined in 2023 (as seen in this report). Overall, the data from all three reports suggest continuity rather than any significant shifts in the hospital workforce.

Despite these overall trends, our findings suggest that while Colorado labor costs continue to grow, they are not growing at the same rate as overall operating costs. One reason for this may be due to lower hospital spending on and utilization of contract labor in 2023 compared to prior years, especially during the COVID-19 pandemic.

Finally, we did not find evidence that the Colorado Option has had an impact on the hospital workforce.

Acknowledgements

The authors gratefully acknowledge guidance and feedback throughout this project from the Colorado Division of Insurance.

The 2025 Workforce Trends Report was updated to reflect the Colorado Department of Regulatory Agencies (DORA) accessibility guidelines, which follow the standards of the Web Content Accessibility Guidelines (WCAG) 2.2.

Appendices

Appendix A: Secondary Data Methodology

Over the course of the three Reports, a variety of secondary data sources were used due to data availability. The table below provides an overview of the sources used for each Report, including the data years. Further below provides methodology for each source used in this 2025 Report.

Table 1. Workforce Trends Reporting Data Sources

Data Source	2023 Report	2024 Report	2025 Report
American Community Survey (ACS)	2021 5-year sample (2017-2021)	Not used	2023 5-year sample (2019-2023)
Colorado Department of Health Care Policy and Financing (HCPF) Hospital Reports	2021 data via 2023 Hospital Expenditure Report	2022 data via 2024 Hospital Financial Transparency Report	2023 data via 2025 Hospital Financial Transparency Report
Current Population Survey (CPS)	Not used	Not used	2024 data
National Academy of State Health Policy (NASHP) Hospital Cost Tool	Not used	2022 data	2023 data
Occupational Employment and Wage Statistics (OEWS)	2022 data	2023 data	Colorado OEWS data not available ³⁰
RAND Hospital Data	2021 data	Per DOI recommendation, DIRA switched to the NASHP Hospital Cost Tool. Both datasets pull from public cost report data from the CMS Healthcare Cost Report Information System	

American Community Study (ACS) Data Methodology

This report used the Integrated Public Use Microdata Series (IPUMS) American Community Survey (ACS) to analyze the Colorado hospital workforce. The ACS is an annual nationally representative survey conducted by the Census Bureau. IPUMS harmonizes the ACS data, allows users to customize their dataset, and manages the data cleaning. The analytical sample includes individuals between the ages of 18 and 65 who are part of the labor force and work in the hospital industry.

³⁰ Notice Regarding Suspension of Publication of Colorado Occupational Employment and Wage Statistics. *Occupational Employment and Wage Statistics*.

The American Community Survey (ACS) five-year sample is a comprehensive dataset compiled by the U.S. Census Bureau that aggregates survey responses collected over five years to produce detailed and reliable estimates across a broad range of demographic, social, and economic characteristics. This sample pools data collected over a five-year period to increase reliability and provide comprehensive estimates for all geographic areas in the U.S., including small towns, rural areas, census tracts, and block groups. Updated annually with a new rolling sample, the five-year estimates enable detailed analysis and planning, especially where one-year estimates are not available due to small population sizes. Unlike the ACS one-year estimates, which are only available for areas with 65,000 or more residents, the five-year estimates offer consistent, statistically robust data used for policymaking, grant allocation, and research across a wide range of applications.

Measurement

Health care occupation: Collapsed approximately fifty health care occupations defined by U.S. Census occupational codes into eight categories (Table 2) based on similarities in title and education requirements.

Table 2. Occupational codes and health care worker categories.

Census Code	Census Title
Advanced practice providers	
3110	Physician Assistants
3256	Nurse Anesthetists
3257	Nurse Midwives
3258	Nurse Practitioners
Aides/Assistant	
3500	Licensed Practical and Licensed Vocational Nurses
3515	Medical Records Specialists
3520	Opticians, Dispensing
3601	Home Health Aides
3603	Nursing Assistants
3605	Orderlies and Psychiatric Aides
3610	Occupational Therapy Assistants and Aides
3620	Physical Therapist Assistants and Aides
3640	Dental Assistants
3645	Medical Assistants
3646	Medical Transcriptionists
3647	Pharmacy Aides
3649	Phlebotomists
3655	Other Health care Support Workers
Community-based workers	
350	Medical and Health Services Managers
420	Social and Community Service Managers
	Substance Abuse and Behavioral Disorder Counselors

	2002	Educational, Guidance, and Career Counselors and Advisors
	2003	Marriage and Family Therapists
	2004	Mental Health Counselors
	2005	Rehabilitation Counselors
	2006	Counselors, All Other
	2011	Child, Family, and School Social Workers
	2012	Health care Social Workers
	2013	Mental Health and Substance Abuse Social Workers
	2014	Social Workers, All Other
Other health care professionals		
	1650	Medical Scientists
	3000	Chiropractors
	3010	Dentists
	3030	Dietitians and Nutritionists
	3040	Optometrists
	3050	Pharmacists
	3120	Podiatrists
	3150	Occupational Therapists
	3160	Physical Therapists
	3230	Speech-Language Pathologists
	3235	Exercise Physiologists
	3245	Therapists, All Other
	3140	Audiologists
	3270	Health care Diagnosing or Treating Practitioners, All Other
Physicians		
	3065	Emergency Medicine Physicians
	3070	Radiologists
	3090	Other Physicians
	3100	Surgeons
RNs		
	3255	Registered Nurses
Technicians		
	3200	Radiation Therapists
	3220	Respiratory Therapists
	3300	Clinical Laboratory Technologists and Technicians
	3310	Dental Hygienists
	3321	Cardiovascular Technologists and Technicians
	3322	Diagnostic Medical Sonographers
	3323	Radiologic Technologists and Technicians
	3324	Magnetic Resonance Imaging Technologists
	3330	Nuclear Medicine Technologists and Medical Dosimetrists
	3401	Emergency Medical Technicians
	3402	Paramedics
	3421	Pharmacy Technicians
	3422	Psychiatric Technicians
	3423	Surgical Technologists
	3430	Dietetic Technicians and Ophthalmic Medical Technicians
	3545	Miscellaneous Health Technologists and Technicians
	3550	Other Health care Practitioners and Technical Occupations

Race-ethnicity: Created the following mutually exclusive race-ethnicity categories within the existing race-ethnicity variable: Hispanic, White, Black, Asian, and multiple race categories or other race-ethnicity.

Income: This variable reports each respondent's total pre-tax wage and salary income, i.e., money received as an employee, for the previous year.

Current Population Survey (CPS) Data Methodology

The Current Population Survey (CPS) is a monthly survey administered by the U.S. Census Bureau to over 65,000 households. It collects data on education, labor force status, demographics, and other characteristics of the U.S. population. The CPS is widely used by demographers, economists, sociologists, and other researchers, and it serves as the primary source for the federal government's monthly unemployment statistics. In this report, we rely on the CPS because it provides 2024 data and allows for state-level employment estimates. However, since wage data are not collected from all households each month, the sample size is insufficient for analyzing wages among hospital workers in Colorado. As a result, we use the CPS solely to estimate the size of the hospital workforce and do not report wage data for this group.

Colorado Department of Health Care Policy & Financing (HCPF) Hospital Financial Transparency Report

Data

This report used the Colorado Department of Health Care Policy and Financing (HCPF) 2025 Hospital Financial Transparency Report to analyze the statewide net patient hospital revenue and total hospital operating costs. The data within this report represents the cumulation of both historic and current financial and utilization data reported to HCPF. HCPF developed rules for the data collection process to collect data from general hospitals and critical access hospitals. Data are collected and reported on a hospital fiscal year basis.

Measurement

The 2025 HCPF Financial Transparency Report provided data to describe and analyze labor costs, including contract labor, as a share of operating expenses. This report provides salaries, wages, and benefits spending for total payroll and benefits as well as contract labor (from staffing agencies). This information is also reported by type of expense, including direct patient, patient other, and general and admin. The measure of salaries, wages, and benefits were compared across total hospital expenses to compare Colorado hospitals' labor costs with other financial growth and spending.

National Academy for State Health Policy (NASHP) Hospital Costs Tool

Data

The National Academy for State Health Policy (NASHP) hospital cost tool dashboard includes measurements from all 50 states related to hospital revenue and expenditures related to patient care, including labor, derived from the national RAND data set. This Report utilized net patient revenue and full-time employee (FTE) cost data from 83 Colorado hospitals. Data was for years 2014 to 2023.

Measurement

Key measurements pulled from the NASHP hospital cost tool included hospital operating costs, net patient revenue, and total net income to analyze and describe Colorado hospital labor costs. The data used include direct patient care costs related to total FTE and contract labor FTE such as hourly rate and total costs to calculate contract labor utilization and cost trends, labor costs as a share of operating costs, and labor as a share of net patient revenue.

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State of Colorado Division of Insurance

Colorado Option Hospital Reimbursement Rate Floors Quality and Acuity Considerations

December 1, 2022

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Introduction

The Division of Insurance (the “Division”), part of the Department of Regulatory Agencies in the State of Colorado, retained Wakely Consulting Group, LLC (“Wakely”), in accordance with §10-16-1310(3) C.R.S., to provide recommendations on how to phase in, to the extent practicable, adjustments to the hospital-specific reimbursement floors that may be established per §10-16-1306(4). Specifically, the law requests an evaluation of potential acuity adjustments as measured by a hospital's case mix index, and quality metric adjustments that could be applied to the Division’s hospital reimbursement floor methodology.¹ The statute reads as follows:

Section 10-16-1310(3), C.R.S.

(3) (a) THE COMMISSIONER SHALL CONTRACT WITH AN INDEPENDENT THIRD-PARTY ORGANIZATION TO EVALUATE HOW TO PHASE IN, TO THE EXTENT PRACTICABLE, TO A HOSPITAL'S REIMBURSEMENT RATE METHODOLOGY DESCRIBED IN SECTION 10-16-1306: (I) A QUALITY METRIC ADJUSTMENT; AND (II) AN ACUITY ADJUSTMENT AS MEASURED BY A HOSPITAL'S CASE-MIX INDEX.

(b) THE EVALUATION MUST BE COMPLETED BY DECEMBER 31, 2022.

This report summarizes Wakely’s recommendations and related considerations. This document has been prepared for the sole use of the Colorado Division of Insurance, although we understand that it will be distributed to the Colorado General Assembly and made available on the Division’s public website. This document contains the results, data, assumptions, and methods used in our analyses and satisfies the Actuarial Standard of Practice (ASOP) 41 reporting requirements. Using the information in this report for other purposes may not be appropriate.

Recommendations

Wakely recommends no additional adjustment to the hospital reimbursement floor methodology for acuity since the floor formula is based on Medicare reimbursement which already reflects acuity. The “Acuity Considerations” section of this report provides more context around this recommendation, including the mechanics of acuity weighting in Medicare reimbursement.

¹ At the time of this report, the Division has issued Proposed New Regulation 4-2-91 that outlines the methodology the Commissioner will use to set reimbursement rates for Colorado Option Standardized Plans, as applicable. Any changes to the methodology would require the Division to amend Proposed New Regulation 4-2-91. At the time of this report, the Division has issued Proposed New Regulation 4-2-91 that outlines the methodology the Commissioner will use to set reimbursement rates for Colorado Option Standardized Plans, as applicable. Any changes to the methodology would require the Division to amend Proposed New Regulation 4-2-91.

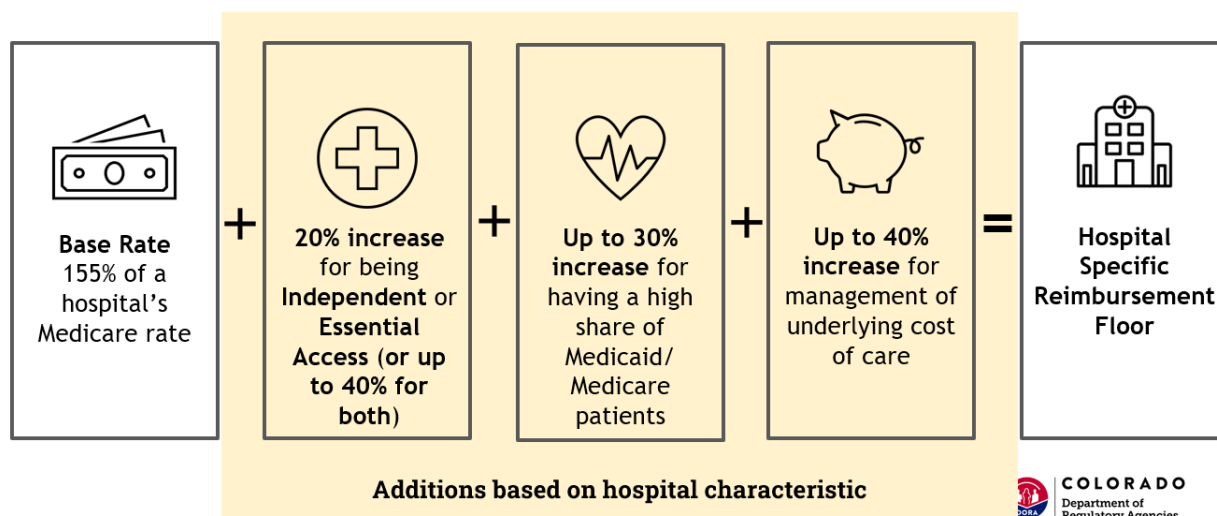
Wakely also recommends no adjustment to the hospital reimbursement floor methodology for quality. Similar to acuity, Medicare reimbursement levels are already inclusive of a hospital's quality performance, and a further adjustment for quality could be duplicative. In addition, selecting a quality program for an adjustment is subjective as hospital performance can vary depending on what measure or program is used.

Although we do not recommend adding a quality metric adjustment to the hospital floor methodology, we do recommend that hospitals report their Hospital Transformation Program (HTP) metrics to the Division for review and future consideration. The "Quality Considerations" section of this report provides more detail on our recommendations.

Background on Hospital Reimbursement Rate Floors

Within the Colorado Option Program, Colorado Option Standardized Plans are required to reduce premiums by targeted amounts each year. Starting in Plan Year 2024, if a Standardized Plan fails to meet the premium reduction requirement, a public hearing is held to determine the reason(s) for the carrier's failure to meet the requirement. If contracted reimbursement rates with a given hospital or health care provider is a contributing reason for the carrier not meeting the premium rate requirements or network adequacy requirements, the Commissioner of Insurance can require that the hospital or health care provider accept a reimbursement rate set by the Commissioner. The reimbursement rate must be greater than or equal to the minimum rate specified in the statute (i.e. the "floor").

The reimbursement rate floor is defined by a formula, and it is hospital specific. The floor is increased for certain types of hospitals, as defined in the statute. The current formula for the Hospital Specific Reimbursement Floor is summarized in the graphic below:



Section 10-16-1310(3) tasks the Division to study whether further adjustments should be introduced into the methodology above, specifically adjustments to recognize providers with a higher level of acuity (i.e. those that, on average, serve patients with a greater severity of illness) and that provide higher quality care.

Acuity Considerations

Overall Recommendations

Wakely recommends no additional adjustment to the Hospital Specific Reimbursement Floor. Medicare reimbursement is already tied to acuity through the relative weighting calculations employed by the respective prospective payment systems. Hospitals exempt from prospective payment systems are reimbursed at “reasonable cost” based on cost and charge information submitted by hospitals in their Cost Reports. Presumably, higher cost treatments for higher acuity cases would also be reflected in that collected data.

Definition of Acuity

In this context, “acuity” refers to the severity of illness within a hospital or provider. A hospital that serves sicker than average patients require a higher reimbursement level than a hospital with a less severe caseload.

For inpatient hospital stays, acuity is traditionally measured with a Case Mix Index (or “CMI”). The CMI is calculated based on average relative Medicare Severity-Diagnosis Related Group (“MS-DRG”) weight, where the MS-DRG represents how Medicare classifies and pays for an inpatient stay related to a particular diagnosis and severity level. Each patient discharge is assigned one of 767 DRGs where the DRG recognizes the severity of illness and estimated length of stay for the discharge and serves as a proxy for expected hospital resource consumption associated with the discharge.

The CMI for a given hospital is calculated as the average MS-DRG weight across all discharges at that hospital:

$$\text{CMI}_{\text{Hospital A}} = \frac{\sum (\text{MS-DRG Weight for Each Discharge at Hospital A})}{\text{Total Number of Discharges at Hospital A}}$$

For outpatient care, acuity is measured differently (since the MS-DRG system is for inpatient care only). Medicare reimbursement for outpatient care is built on a classification system known as Ambulatory Payment Classification (or “APC”). Outpatient services are classified into APC groupings based on the HCPCS codes on a claim. The APC captures expected clinical intensity and expected resource utilization and cost.

Acuity Included in Current Medicare Reimbursement

Details of Medicare Reimbursement change from year to year and are published in rulemaking notifications from the Centers for Medicare & Medicaid Services (CMS). However, the fundamental methodologies are consistent and set reimbursement using a prospective payment system (PPS) to control costs and stabilize payments.

The Acute Care Hospital Inpatient Prospective Payment System (IPPS), at its most basic terms, consists of a facility-specific base rate multiplied by discharge-specific Diagnosis-related Group (DRG) Weight. In fiscal year 2008, CMS replaced the CMS DRG system with the Medicare Severity Diagnosis-Related Group (MS-DRG) system to better recognize the severity of illness in their payment rates. Each discharge is assigned a major diagnostic category (MDC) and then further classified using more narrow diagnosis categories and procedure categories into a base DRG. Most are further divided based on the presence of a complication or comorbidity (CC) or major complication or comorbidity (MCC.) In order to represent materially different acuities, The CC and MCC subgroups are created within the base DRG when all the following criteria are met:

- A reduction in variance of costs of at least 3 percent.
- At least 5 percent of the patients in the MS-DRG fall within the CC or MCC subgroup.
- At least 500 cases are in the CC or MCC subgroup.
- There is at least a 20-percent difference in average costs between subgroups.
- There is a \$2,000 difference in average costs between subgroups.

Each MS-DRG has a corresponding weight calculated by estimates of average resource intensity per case. The DRG weight is calculated by dividing the geometric mean cost for each DRG by the geometric mean cost for all DRGs. A step-by-step guide to the MS-DRG relative weight calculation can be found in the most recent IPPS Final Rule.²

The Outpatient Prospective Payment System (OPPS) functions similarly. Instead of DRGs, CMS classifies services by HCPCS code to an Ambulatory Payment Classification (APC) based on clinical and cost similarity. The payment rate for each service is the APC relative weight multiplied by the wage adjusted conversion factor.

Where DRGs are typically divided into 3 categories of severity, APCs have more variability in the division of severity and vary by clinical classification. Although there are some very specific services that have only one APC, the majority of classifications have between three and six levels. Like DRGs, the APC weight is an estimation of the average costs for the service. Estimated average costs are standardized to APC 5012 (Level 2 Examinations and Related Services) as it

² <https://www.govinfo.gov/content/pkg/FR-2022-08-10/pdf/2022-16472.pdf>

is the APC resulting from the most commonly billed outpatient service. The APC weight is calculated by dividing the geometric mean cost for each APC by the geometric mean cost for APC 5012. A more detailed accounting of APC Relative Weight calculation can be found the most recent Notice of Final Rulemaking (NFRM) OPSS Claim Accounting³.

Although not all facilities are reimbursed using IPPS and OPSS, the development of the relative weights uses a large enough claim data set that the use of the weights as a measure of acuity is still valid regardless of a facility's current reimbursement rules. Certain services are not covered by Medicare, covered under a different code, or only covered in certain circumstances. Wakely has reviewed the proportion of commercial claims that are affected by these Medicare rules and determined the volume would not substantially affect an overall percentage of Medicare calculation.

Critical Access Hospitals (CAHs) are one type of hospital that is exempt from IPPS and OPSS and serve populations where access to facility care is limited. These facilities are paid interim payments based on 101% of average cost per day for inpatient stays and a percentage of charges for outpatient care, both calculated based on the previous year's cost report. The interim rate of payment can be adjusted if evidence is submitted that costs are or will be significantly different than the calculated rate.

Finally, Inpatient CMI tends to be significantly higher at large urban hospitals when compared to their rural peers. Adjusting the hospital specific floor methodology for acuity would be doubly punitive to facilities without the resources to provide the highest acuity care. Inpatient CMI by facility is included in Appendix A. Outpatient claim information was unavailable for a comparable calculation.

Quality Considerations

In accordance with the statute, Wakely also worked with the Division to consider adjustments to the hospital reimbursement floor methodology for quality performance (i.e. a higher floor for hospitals that provide higher quality care).

Overall Recommendations

At this time, Wakely does not recommend an adjustment for quality due to the following reasons:

- 1) For inpatient reimbursement, the current hospital reimbursement floor methodology already includes an adjustment for quality performance given that the formula's base rate is equal to a percentage of the hospital's Medicare rate. The IPPS Medicare rate is already inclusive of incentive payments and payment reductions related to quality performance,

³ <https://www.cms.gov/files/document/2023-nfrm-opss-claims-accounting.pdf>

as described later in the “Quality Included in Current Medicare Reimbursement” section of this report.

For claims paid under OPPTS, quality adjustments built into the payment are more limited. The Outpatient Quality Reporting (OQR) program requires hospitals to report quality data in order to receive their full OPPTS reimbursement. If they do not meet the reporting requirements, payment is reduced by 2%.

For inpatient claims, any further adjustment to the hospital reimbursement floor methodology for quality performance runs the risk of being duplicative and double penalizing or double rewarding a hospital. Outpatient claims or claims at facilities outside of PPS could warrant an additional adjustment, but if so, further study is required to determine the appropriate measure(s) and methodology.

- 2) There is subjectivity involved in determining the appropriate quality measure(s) or program. A hospital’s quality performance relative to other hospitals can vary across programs, depending on what measures are used. There can be instances where a given hospital performs very favorably under certain quality metrics but unfavorably under other metrics. See Table 1 in the “Other Existing Quality Programs” section of this report for real-life examples of this variability in Colorado hospitals’ scoring across existing quality programs.
- 3) Quality measures can be manipulated by certain hospital practices, so any adjustment to the hospital reimbursement floor methodology would need to be monitored accordingly. An example of this could be a facility utilizing observation status as opposed to admitting a patient which reduces the readmission count.
- 4) Some measures can disproportionately penalize certain hospitals, such as Safety Net, Critical Access, or rural hospitals. For example, hospitals that serve a larger number of patients facing housing insecurity may be adversely affected in certain quality metrics due to this economic instability and regardless of the quality of care provided.

While Wakely does not recommend an adjustment to the hospital floor reimbursement methodology, we do recommend that the Division collect quality metrics from the hospitals for the Colorado Health Transformation Program (“HTP”). See the “Colorado Health Transformation Program” section of the report for background and considerations related to HTP.

The hospitals are already reporting HTP metrics so the added administrative burden to do this reporting is low. By collecting these metrics, the Division can review them and give further consideration to whether an adjustment to the hospital reimbursement floor methodology, particularly for outpatient claims and facilities not paid under PPS, should be implemented at a future date.

Quality Included in Current Medicare Reimbursement

As mentioned, the current IPPS Medicare fee-for-service (FFS) reimbursement includes incentive payments and payment reductions related to quality performance. CMS operates four programs in the inpatient setting upon which quality incentives/reductions are based. These incentive/reductions are payment amounts incorporated into each hospital specific base rate used to calculate each per discharge payment at 100% of Medicare. The current programs are summarized below and apply to all hospitals paid under IPPS:

1) Hospital Inpatient Quality Reporting Program (IQR):

- Measures⁴ in FY2024 include National Healthcare Safety Network measures, Chart-Abstracted Clinical Process of Care measures, EHR-based measures, data in the eCQM measure set, patient survey results, outcome measures, claims-based measures (including risk-adjusted mortality, and readmission measures).
- Results for almost all measurements are publicly reported on Hospital Compare.⁵
- Hospitals that don't meet the measurement criteria have a payment reduction. The annual market basket update is reduced by one-fourth⁶ for these hospitals. In recent years, most hospitals (over 95%) met the requirements and avoided the payment reduction.

2) Hospital Readmissions Reduction Program (HRRP)

- Reduces reimbursement to hospitals with excessive readmissions. The payment reduction⁷ is calculated with a peer grouping methodology and is capped at 3%.
- The measurement metric is an excess readmission ratio (ERR) for the following conditions:⁸ Acute Myocardial Infarction, Chronic Obstructive Pulmonary Disease, Heart Failure, Pneumonia, Coronary Artery Bypass Graft Surgery, Elective Hip or Knee Arthroplasty.
- Safety Net hospitals were found to have higher readmission rates and were initially penalized more frequently. Today, a peer grouping methodology is followed where hospitals are grouped into quintiles according to their proportion of dual-eligible

⁴ <https://qualitynet.cms.gov/inpatient/iqr/measures>

⁵ <https://www.medicare.gov/care-compare/?providerType=Hospital&redirect=true>

⁶ <https://www.cms.gov/medicare/quality-initiatives-patient-assessment-instruments/hospitalqualityinits/hospitalrhqdapu>

⁷ https://qualitynet.cms.gov/files/62ed828525af600016945280?filename=FY2023_HRRP_PymntRdctnFormula.pdf

⁸ <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/HRRP/Hospital-Readmission-Reduction-Program>

patients. The HRRP payment adjustment is determined by comparing within the peer group.

3) Hospital-Acquired Conditions Reduction Program (HACRP)

- Measures of hospital-acquired conditions include the CMS PSI 90 composite patient safety measure and the CDC's healthcare-associated infection ("HAI") tracking measures.
- The lowest performing 25 percent of hospitals in the country receive a 1% reduction in their final IPPS payment. The reduction is made to the final payment (as opposed to the base payment prior to adjustments like GME and DSH).
- In 2023, due to the impact of COVID-19 on measure data, no hospital will be ranked in the worst-performing quartile or subject to the 1-percent payment reduction. All paused measures will continue to be reported.

4) Value-based Purchasing (VBP) Program:

- VBP is a budget-neutral program that begins with a 2% withhold in participating hospitals' Medicare payments. The total withheld amount then funds incentive payments that are doled out to hospitals based on their performance in VBP measures. Depending on the hospital's performance, a hospital may earn back a percentage that is less than, equal to, or more than the amount withheld.
- Measures include: Clinical Care (weighted 25%), Person and Community Engagement (25%), Safety (25%), and Efficiency and Cost Reduction (25%).

For outpatient services, CMS utilizes the Outpatient Quality Reporting (OQR) program. This program requires hospitals to report quality data in order to receive their full OPSS reimbursement. Current measures include measures that assess processes of care, imaging efficiency patterns, care transitions, ED throughput efficiency, the use of health information technology, care coordination, patient safety, and volume. The reported data is publicly available by hospital on the CMS Care Compare website. If a hospital does not meet the OQR reporting requirements, OPSS payment is reduced by 2%.

Other Existing Quality Programs

If a further adjustment to the hospital reimbursement floor methodology for quality were deemed necessary, now or in the future, the Division should carefully consider the appropriate quality program to use. The appropriate program is likely an existing program, since creating something new would be onerous for the hospitals.

A few examples of existing quality programs include:

- CMS Hospital Star Ratings: developed by CMS to improve the usability of publicly reported data on its Care Compare website. The Overall Star Rating combines the results across many measures and five areas of quality into a single summary score. Weights across the five areas are: Mortality (22%), Safety (22%), Readmission (22%), Patient Experience (22%), Timely & Effective Care (12%).
- LeapFrog Group: survey assessment of inpatient and outpatient hospital performance on measures of safety, quality, and efficiency. The LeapFrog Group also reports a Hospital Safety Grade representing a hospital's performance in patient safety related to infections, errors, injuries, and accidents.
- Agency for Healthcare Research and Quality (AHRQ) Quality Indicators (QIs): quality measures in four modules: Inpatient Quality Indicators (IQI), Pediatric Quality Indicators (PQI), Prevention Quality Indicators (PQI), Patient Safety Indicators (PSI). Many are endorsed by the National Quality Forum (NQF).
- The Joint Commission's ORYX Performance Measures: The Joint Commission integrates performance measurement data into the accreditation process. Hospital data reported is publicly available on The Joint Commission's Quality Check website.
- CAHPS Patient Experience Surveys: survey results about patient hospital experience. NQF-endorsed.

The table below summarizes the state's highest volume⁹ hospitals (top 15 by bed size) in Colorado and how each performed under various existing quality programs:

Table 1: Hospital Performance Across Multiple Quality Programs

Hospital	Bed Size	Medicaid %age - % of IP Days ¹⁰	Location	CMS Star Rating ¹¹	LeapFrog Safety Grade ¹²	CAHPS ¹³
UNIVERSITY OF COLORADO HOSPITAL AUTHORITY	653	35%	AURORA	4	D	4
CENTURA HEALTH-PENROSE ST FRANCIS HEALTH SERVICES	473	26%	COLORADO SPRINGS	5	A	4
UCH-MEMORIAL HEALTH SYSTEM	425	32%	COLORADO SPRINGS	4	C	4
DENVER HEALTH & HOSPITAL AUTHORITY	369	60%	DENVER	3	B	3
SAINT JOSEPH HOSPITAL	358	26%	DENVER	5	A	5
HCA-HEALTHONE DBA SWEDISH MEDICAL CENTER	342	26%	ENGLEWOOD	3	A	4

⁹Top 15 hospitals by inpatient bed size in the 2023 Final Rule IPPS Impact file. For a full listing of all hospitals, see Appendix B.

¹⁰From the 2023 Final Rule IPPS Impact file. Medicaid days as a percent of total inpatient days.

¹¹July 2022 Overall Star Rating. Time period for specific measures varies as shown here: <https://qualitynet.cms.gov/inpatient/public-reporting/overall-ratings/data-collection>

¹²2022 LeapFrog Hospital Safety Grade

¹³HCAHPS, Patient Survey Star Rating for 2021 (<https://data.cms.gov/provider-data/topics/hospitals>)

Hospital	Bed Size	Medicaid %age - % of IP Days ¹⁰	Location	CMS Star Rating ¹¹	LeapFrog Safety Grade ¹²	CAHPS ¹³
AURORA SOUTH HOSPITAL AND MEDICAL CENTER	322	36%	AURORA	4	C	3
PRESBYTERIAN ST LUKE'S MEDICAL CENTER	315	43%	DENVER	3	A	4
SKY RIDGE MEDICAL CENTER	274	13%	LONE TREE	5	A	3
PARKVIEW MEDICAL CENTER, INC	268	31%	PUEBLO	3	D	3
ST MARYS MEDICAL CENTER	253	29%	GRAND JUNCTION	4	A	4
POUDRE VALLEY HOSPITAL	243	28%	FORT COLLINS	5	C	4
CENTURA HEALTH-ST ANTHONY HOSPITAL	220	23%	LAKESWOOD	4	B	4
ROSE MEDICAL CENTER	219	25%	DENVER	5	A	4
NORTH COLORADO MEDICAL CENTER	206	35%	GREELEY	2	A	3

Depending on the measures used, a hospital's quality performance relative to other hospitals can vary across programs. For example, in the table above, University of Colorado Hospital Authority (the largest hospital by bed size) achieved an above-average rating (4) for CMS Stars and CAHPS but a below-average rating (D) for its LeapFrog Safety Grade. North Colorado Medical Center in Greeley received a below-average rating (2) for CMS Stars but the highest grade (A) for LeapFrog Safety.

Equity is another consideration in selecting the appropriate quality measure to use. Measures of outcome and readmission can be impacted by factors well outside of a hospital's control. Hospitals that serve patients that are limited by housing, food or transportation insecurity may be adversely affected in those quality metrics by economic instability regardless of the quality of care provided. In Table 1 above, we see that the hospitals serving the highest proportion of Medicaid patients, Denver Health & Hospital Authority (60% of inpatient bed days) and Presbyterian St. Luke's Medical Center (43% of inpatient bed days) score relatively low under the CMS Star Rating system, both with a score of "3". Conversely, the hospitals with the lowest proportion of Medicaid business, Sky Ridge Medical Center (13% of inpatient bed days) and Rose Medical Center (25% of inpatient bed days) both received a score of "5" (highest possible score) under the CMS Star Rating system.

The variability in hospital performance across existing quality programs presents a risk in selecting a program to use for the hospital reimbursement floor methodology adjustment. Depending on which measures are used in an adjustment to the floor, a hospital could be rewarded or penalized differently relative to its peers. Furthermore, rewarding based on a particular quality program could produce unintended consequences if not given careful consideration.

Colorado Hospital Transformation Program

In Colorado, a new program called the Colorado Hospital Transformation Program (HTP) was implemented for Colorado Medicaid with a goal of improving hospital quality for Medicaid members. HTP measures are focused in three areas: 1) maternal health and perinatal care; 2) patient safety; and 3) patient experience. More details on the specific measures in each area and the scoring can be found at: <https://hcpf.colorado.gov/hospital-quality-incentive-payment-program>.

HTP ties hospital payments to quality-based initiatives, with the payment structure transitioning over a five year period. The program began on October 1, 2021, with its first Program Year ending on September 30, 2022.

HTP was designed for a Medicaid population and certain aspects of the program may not be relevant or appropriate for the Colorado Option Program. Given this and given that HTP is still in its early stages of implementation, we recommend further study on its application. At this time, we do not recommend that HTP metrics be used for an adjustment to the floor formula.

We do, however, recommend that the Division collect quality metrics from the hospitals for HTP. The hospitals are already reporting HTP metrics so the added administrative burden to do this reporting is low. By collecting these metrics, the Division can review them and give further consideration to whether an adjustment to the hospital reimbursement floor methodology should be implemented at a future date.

Reliances and Caveats

The following is a list of the data Wakely relied on for the analysis:

- 2023 Final Rule IPPS Impact File
- Hospital Compare data for quality comparisons such as CMS Star Rating and CAHPS scores
- LeapFrog Safety Grade website
- Colorado All Payer Claims Database reports

The following are additional reliances and caveats that could have an impact on results:

- Data Limitations. We did not perform data analysis to determine which hospitals would be winners or losers if an additional adjustment for acuity or quality were to be implemented. Our recommendations are based on publicly available data and on knowledge of acuity and quality adjustments already included in Medicare reimbursement.

- **Political Uncertainty.** There is significant policy uncertainty. Future federal actions such as changes to Medicare reimbursement and the IPPS/OPPS rules, could change the recommendations enclosed in this report.
- **Economic Uncertainty.** There remains considerable uncertainty as to the economic conditions in 2023, which could affect hospitals' utilization and financial patterns and could present a reason to revisit the recommendations enclosed in this report.

Disclosures and Limitations

Responsible Actuaries. Emily Janke is the actuary responsible for this communication. She is a Member of the American Academy of Actuaries and Fellow of the Society of Actuaries. She meets the Qualification Standards of the American Academy of Actuaries to issue this report. Julie Steiner contributed significantly to the analysis and report.

Intended Users. This information has been prepared for the sole use of the state of Colorado. Distribution to parties should be made in its entirety and should be evaluated only by qualified users. The parties receiving this report should retain their own actuarial experts in interpreting results.

Risks and Uncertainties. The assumptions and resulting estimates included in this report and produced by the modeling are inherently uncertain. Users of the results should be qualified to use it and understand the results and the inherent uncertainty. Actual results may vary, potentially materially, from our estimates. Wakely does not warrant or guarantee that Colorado or the carriers will attain the estimated values included in the report. It is the responsibility of those receiving this output to review the assumptions carefully and notify Wakely of any potential concerns.

Conflict of Interest. Wakely provides actuarial services to a variety of clients throughout the health industry. Our clients include commercial, Medicare, and Medicaid health plans, the federal government and state governments, medical providers, and other entities that operate in the domestic and international health insurance markets. Wakely has implemented various internal practices to reduce or eliminate conflict of interest risk in serving our various clients. Except as noted here, the responsible actuary is financially independent and free from conflict concerning all matters related to performing the actuarial services underlying this analysis. In addition, Wakely is organizationally and financially independent to the state of Colorado.

Data and Reliance. We have relied on others for data and assumptions used in the assignment. We have reviewed the data for reasonableness but have not performed any independent audit or otherwise verified the accuracy of the data/information. If the underlying information is incomplete or inaccurate, our estimates may be impacted, potentially significantly. The information included in the 'Reliances and Caveats' sections identifies the key data and reliances.

Subsequent Events. Material changes to Medicare IPPS or OPSS rules may have a material impact on the results included in this report. There are no other known relevant events subsequent to the date of information received that would impact the results of this report.

Contents of Actuarial Report. This document constitutes the entirety of actuarial report and supersedes any previous communications on the project.

Deviations from ASOPs. Wakely completed the analyses using sound actuarial practice. To the best of our knowledge, the report and methods used in the analyses are in compliance with the appropriate ASOPs with no known deviations.

Appendix A

Case Mix Index¹⁴ by Facility

Facility Name	Admission Volume	Case Mix Index
SAINT JOSEPH HOSPITAL, INC	42,990	1.396
ROSE MEDICAL CENTER	31,908	1.048
SKY RIDGE MEDICAL CENTER	30,200	1.278
GOOD SAMARITAN MEDICAL CENTER, LLC	20,032	1.138
UCH-MHS	16,390	1.287
UNIVERSITY OF COLORADO HOSPITAL AUTHORITY	15,536	2.555
PORTERCARE ADVENTIST HEALTH SYSTEM	14,104	1.086
CENTURA HEALTH - PENROSE ST. FRANCIS HEALTH	11,576	1.347
SWEDISH MEDICAL CENTER	11,352	1.833
PRESBYTERIAN/ST. LUKE'S MEDICAL CENTER	10,500	2.519
CENTURA HEALTH-CASTLE ROCK ADVENTIST HOSPITAL	10,350	1.119
POUDRE VALLEY HEALTH CARE INC.	10,064	1.420
DENVER HEALTH AND HOSPITAL AUTHORITY	8,880	1.146
THE MEDICAL CENTER OF AURORA	6,930	1.305
ST. MARY'S HOSPITAL AND MEDICAL CENTER, INC.	6,924	1.525
NORTH SUBURBAN MEDICAL CENTER	6,420	1.352
MEDICAL CENTER OF THE ROCKIES	5,136	1.230
PARKVIEW MEDICAL CENTER, INC.	5,110	0.900
UCHEALTH HIGHLANDS RANCH HOSPITAL	4,576	0.985
CENTURA HEALTH - PORTER ADVENTIST HOSPITAL	3,496	2.122
BOULDER COMMUNITY HEALTH	3,342	0.904
MERCY REGIONAL MEDICAL CENTER	3,252	1.081
LITTLETON ADVENTIST HOSPITAL	2,598	0.772
LONGS PEAK HOSPITAL	2,136	0.805
UCHEALTH GREELEY HOSPITAL	1,744	0.865
VALLEY VIEW HOSPITAL ASSOCIATION	1,740	0.711

¹⁴ High case mix index (over 1) indicates higher acuity

Facility Name	Admission Volume	Case Mix Index
CHILDREN'S HOSPITAL COLORADO	1,453	1.831
PLATTE VALLEY MEDICAL CENTER	1,280	0.611
CENTURA HEALTH - ST. ANTHONY SUMMIT MEDICAL	1,088	0.669
BANNER HEALTH	1,032	0.772
COMMUNITY HOSPITAL	960	1.013
VAIL HEALTH HOSPITAL	954	1.262
YAMPA VALLEY MEDICAL CENTER	896	0.661
LONGMONT UNITED HOSPITAL	880	0.788
CENTURA HEALTH - ST. ANTHONY HOSPITAL	784	1.660
MONTROSE MEMORIAL HOSPITAL, INC	688	1.009
NORTH COLORADO MEDICAL CENTER	606	1.134
LUTHERAN HOSPITAL ASSOCIATION OF THE SAN LUIS VALLEY	366	0.715
MCKEE MEDICAL CENTER	240	1.019
UCHEALTH GRANDVIEW HOSPITAL	198	1.878
DELTA COUNTY MEMORIAL HOSPITAL	168	1.845
ASPEN VALLEY HOSPITAL DISTRICT	113	0.612
STERLING REGIONAL MEDCENTER	110	0.531
CURAWEST, LLC	106	0.826
ARKANSAS VALLEY REGIONAL MEDICAL CENTER	32	1.394
SALIDA HOSPITAL DISTRICT	30	0.386
WRAY COMMUNITY DISTRICT HOSPITAL	30	0.461
EASTERN RIO BLANCO COUNTY HEALTH SERVICE DISTRICT	30	1.878

Appendix B

Hospital	Location	CMS Star Rating	LeapFrog Safety Grade	CAHPS
ANIMAS SURGICAL HOSPITAL, LLC	DURANGO	Not Available	Not Available	5
ARKANSAS VALLEY REGIONAL MEDICAL CENTER	LA JUNTA	1	Not Available	Not Available
ASPEN VALLEY HOSPITAL	ASPEN	Not Available	Not Available	4
AURORA SOUTH HOSPITAL AND MEDICAL CENTER	AURORA	4	C	3
BANNER FORT COLLINS MEDICAL CENTER	FORT COLLINS	Not Available	B	4
BOULDER COMMUNITY HEALTH	BOULDER	5	B	4
CASTLE ROCK ADVENTIST HOSPITAL	CASTLE ROCK	5	A	4
CEDAR SPRINGS HOSPITAL	COLORADO SPRINGS	Not Available	Not Available	Not Available
CENTENNIAL PEAKS HOSPITAL	LOUISVILLE	Not Available	Not Available	Not Available
CENTURA HEALTH-AVISTA ADVENTIST HOSPITAL	LOUISVILLE	3	A	4
CENTURA HEALTH-PENROSE ST FRANCIS HEALTH SERVICES	COLORADO SPRINGS	5	A	4
CENTURA HEALTH-PORTER ADVENTIST HOSPITAL	DENVER	4	A	4
CENTURA HEALTH-ST ANTHONY HOSPITAL	LAKEWOOD	4	B	4
CENTURA HEALTH-ST ANTHONY NORTH HEALTH CAMPUS	WESTMINSTER	5	A	4
CENTURA HEALTH-ST THOMAS MORE HOSPITAL	CANON CITY	2	Not Available	3
CHILDREN'S HOSPITAL COLORADO	AURORA	Not Available	Not Available	Not Available
CHILDREN'S HOSPITAL COLORADO - COLORADO SPRINGS	COLORADO SPRINGS	Not Available	Not Available	Not Available
COLORADO CANYONS HOSPITAL AND MEDICAL CENTER	FRUITA	Not Available	Not Available	Not Available
COLORADO MENTAL HEALTH INSTITUTE AT FT LOGAN	DENVER	Not Available	Not Available	Not Available
COLORADO MENTAL HEALTH INSTITUTE AT PUEBLO-PSYCH	PUEBLO	Not Available	Not Available	Not Available
COLORADO PLAINS MEDICAL CENTER	FORT MORGAN	4	Not Available	3
COMMUNITY HOSPITAL	GRAND JUNCTION	4	A	4
DELTA COUNTY MEMORIAL HOSPITAL	DELTA	4	C	3
DENVER HEALTH & HOSPITAL AUTHORITY	DENVER	3	B	3
DENVER SPRINGS	ENGLEWOOD	Not Available	Not Available	Not Available
EAST MORGAN COUNTY HOSPITAL	BRUSH	3	Not Available	Not Available

Hospital	Location	CMS Star Rating	LeapFrog Safety Grade	CAHPS
EASTERN RIO BLANCO COUNTY HEALTH SERVICE DISTRICT	MEEKER	Not Available	Not Available	4
ESTES PARK MEDICAL CENTER	ESTES PARK	Not Available	Not Available	Not Available
GOOD SAMARITAN MEDICAL CENTER LLC	LAFAYETTE	4	A	4
GRAND RIVER HOSPITAL DISTRICT	RIFLE	Not Available	Not Available	3
GUNNISON VALLEY HOSPITAL	GUNNISON	Not Available	Not Available	Not Available
HAXTUN HOSPITAL DISTRICT	HAXTUN	Not Available	Not Available	Not Available
HCA-HEALTHONE DBA SWEDISH MEDICAL CENTER	ENGLEWOOD	3	A	4
HEART OF THE ROCKIES REGIONAL MEDICAL CENTER	SALIDA	4	Not Available	4
HIGHLANDS BEHAVIORAL HEALTH SYSTEM	LITTLETON	Not Available	Not Available	Not Available
KEEFE MEMORIAL HOSPITAL	CHEYENNE WELLS	Not Available	Not Available	Not Available
KIT CARSON COUNTY MEMORIAL HOSPITAL	BURLINGTON	Not Available	Not Available	Not Available
LINCOLN HEALTH HOSPITAL	HUGO	Not Available	Not Available	Not Available
LITTLETON ADVENTIST HOSPITAL, CENTURA HEALTH	LITTLETON	4	B	4
LONGMONT UNITED HOSPITAL	LONGMONT	3	A	3
LONGS PEAK HOSPITAL	LONGMONT	5	D	4
LUTHERAN MEDICAL CENTER	WHEAT RIDGE	4	A	4
MCKEE MEDICAL CENTER	LOVELAND	4	A	3
MEDICAL CENTER OF THE ROCKIES	LOVELAND	5	C	4
MELISSA MEMORIAL HOSPITAL	HOLYOKE	Not Available	Not Available	Not Available
MEMORIAL HOSPITAL, THE	CRAIG	Not Available	Not Available	Not Available
MERCY REGIONAL MEDICAL CENTER	DURANGO	5	B	4
MIDDLE PARK MEDICAL CENTER	KREMMLING	Not Available	Not Available	Not Available
MONTROSE REGIONAL HEALTH	MONTROSE	4	B	4
MT SAN RAFAEL HOSPITAL	TRINIDAD	5	Not Available	Not Available
NATIONAL JEWISH HEALTH	DENVER	Not Available	Not Available	Not Available
NORTH COLORADO MEDICAL CENTER	GREELEY	2	A	3
NORTH SUBURBAN MEDICAL CENTER	THORNTON	3	C	2
ORTHOCOLORADO HOSPITAL AT ST ANTHONY MED CAMPUS	LAKESWOOD	Not Available	Not Available	5

Hospital	Location	CMS Star Rating	LeapFrog Safety Grade	CAHPS
PAGOSA SPRINGS MEDICAL CENTER	PAGOSA SPRINGS	Not Available	Not Available	Not Available
PARKER ADVENTIST HOSPITAL	PARKER	4	A	3
PARKVIEW MEDICAL CENTER, INC	PUEBLO	3	D	3
PEAK VIEW BEHAVIORAL HEALTH	COLORADO SPRINGS	Not Available	Not Available	Not Available
PLATTE VALLEY MEDICAL CENTER	BRIGHTON	4	A	3
POUDRE VALLEY HOSPITAL	FORT COLLINS	5	C	4
PRESBYTERIAN ST LUKE'S MEDICAL CENTER	DENVER	3	A	4
PROWERS MEDICAL CENTER	LAMAR	Not Available	Not Available	Not Available
RANGELY DISTRICT HOSPITAL	RANGELY	Not Available	Not Available	Not Available
RIO GRANDE HOSPITAL	DEL NORTE	Not Available	Not Available	4
ROSE MEDICAL CENTER	DENVER	5	A	4
SAINT JOSEPH HOSPITAL	DENVER	5	A	5
SAN LUIS VALLEY HEALTH	ALAMOSA	2	D	2
SAN LUIS VALLEY HEALTH CONEJOS COUNTY HOSPITAL	LA JARA	Not Available	Not Available	Not Available
SEDGWICK COUNTY MEMORIAL HOSPITAL	JULESBURG	Not Available	Not Available	Not Available
SKY RIDGE MEDICAL CENTER	LONE TREE	5	A	3
SOUTHEAST COLORADO HOSPITAL DISTRICT	SPRINGFIELD	Not Available	Not Available	Not Available
SOUTHWEST MEMORIAL HOSPITAL	CORTEZ	3	Not Available	3
SPANISH PEAKS REGIONAL HEALTH CENTER	WALSENBURG	Not Available	Not Available	Not Available
ST ANTHONY SUMMIT MEDICAL CENTER	FRISCO	Not Available	A	5
ST MARY CORWIN MED CTR, CENTURA HEALTH	PUEBLO	4	A	3
ST MARYS MEDICAL CENTER	GRAND JUNCTION	4	A	4
ST VINCENT GENERAL HOSPITAL DISTRICT	LEADVILLE	Not Available	Not Available	Not Available
STERLING REGIONAL MEDCENTER	STERLING	3	Not Available	3
UCHEALTH BROOMFIELD HOSPITAL	BROOMFIELD	Not Available	A	Not Available
UCHEALTH GRANDVIEW HOSPITAL	COLORADO SPRINGS	Not Available	Not Available	4
UCHEALTH GREELEY HOSPITAL	GREELEY	Not Available	B	4
UCHEALTH HIGHLANDS RANCH HOSPITAL	HIGHLANDS RANCH	3	C	4

Hospital	Location	CMS Star Rating	LeapFrog Safety Grade	CAHPS
UCHEALTH PIKES PEAK REGIONAL HOSPITAL	WOODLAND PARK	Not Available	Not Available	4
UCHEALTH YAMPA VALLEY MEDICAL CENTER	STEAMBOAT SPRINGS	5	B	4
UCH-MEMORIAL HEALTH SYSTEM	COLORADO SPRINGS	4	C	4
UNIVERSITY OF COLORADO HOSPITAL AUTHORITY	AURORA	4	D	4
VAIL HEALTH HOSPITAL	VAIL	5	A	4
VALLEY VIEW HOSPITAL ASSOCIATION	GLENWOOD SPRINGS	4	C	4
WEISBROD MEMORIAL COUNTY HOSPITAL	EADS	Not Available	Not Available	Not Available
WEST SPRINGS HOSPITAL, INC	GRAND JUNCTION	Not Available	Not Available	Not Available
WRAY COMMUNITY DISTRICT HOSPITAL	WRAY	Not Available	Not Available	Not Available
YUMA DISTRICT HOSPITAL	YUMA	Not Available	Not Available	Not Available



Analysis of the Colorado Option, pursuant to § 10-16-1310, C.R.S.

Final Report

January 16, 2026

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Executive Summary

The Colorado Option requires insurance carriers to offer standardized health insurance plans in the individual and small-group markets with the goal of making coverage more affordable, easier to understand, and more culturally responsive. It does this by standardizing benefits (including more zero-dollar, predeductible coverage of high-value services), setting premium rate reduction (PRR) requirements that put downward pressure on underlying healthcare costs, and establishing expectations for culturally responsive provider networks.

This analysis, required by 10-16-1304(5), C.R.S., covers plan years 2023 and 2024 (the first two years of the Colorado Option) and synthesizes evidence in three areas: (1) policy design and implementation; (2) enrollment trends and consumer experiences; and (3) affordability, including premiums and out-of-pocket costs (what consumers pay when they use care). Findings draw on plan filings and Marketplace enrollment and premium data; Colorado's all-payer claims database; and interviews and focus groups with consumers, brokers and assisters, carriers, hospitals, providers, and state partners.

What this analysis covers

Mathematica examined the impact of the Colorado Option on (1) health plan enrollment in the individual and small-group health insurance markets, (2) health insurance affordability (including premiums and total out-of-pocket healthcare spending) in the individual and small-group markets, and (3) health equity. Specifically, this analysis relied on the following components:

- **Qualitative insights.** Interviews and focus groups with consumers, brokers and assisters, carriers, hospitals, providers, and state officials to understand experiences with the Colorado Option program
- **Marketplace and filings data.** Plan availability, pricing, and plan designs to see how Colorado Option plans are positioned against other offerings
- **Claims from the all-payer claims database.** Out-of-pocket spending and use of services that the Colorado Option standardized plans cover at \$0 before the deductible (for example, primary and preventive care, behavioral health care, and prenatal and postpartum care)
- **Triangulation and synthesis.** Cross-checking findings across quantitative and qualitative data sources to avoid over-attributing changes to any single factor

Colorado Option at a glance

- **Purpose.** Lower costs, simplify choices, and advance health equity in the individual and small-group markets
- **How it works.** Standardized plan designs with copays and first-dollar coverage for high-value services; premium rate reduction accountability with a public-hearing backstop to keep prices reasonable; culturally responsive network expectations and reporting
- **Who it serves.** Individuals and families shopping on and off the Marketplace; small employers and their employees
- **What success looks like.** Competitive premiums, lower out-of-pocket costs, easier plan comparisons, and better access and experience for communities historically underserved by commercial coverage.▲

Key findings

The analysis of the Colorado Option generated the following key results:

- **Competitive pricing.** In many rating areas and metal tiers, Colorado Option plans were priced at or below comparable non-Colorado Option plans, helping consumers save on monthly premiums.
- **Lower out-of-pocket costs.** Enrollees in Colorado Option plans spent less out of pocket over the year on average, consistent with Colorado Option standardized plan designs that emphasize copays instead of coinsurance and provide first-dollar coverage for high-value services.
- **Simpler choices, clearer benefits.** Standardized plans made it easier for consumers to understand what benefits they get from their plans, what they will pay out-of-pocket, and compare across plans—especially for common services. Brokers and community-based assisters remain crucial guides.
- **Implementation is functioning as intended.** Negotiations between carriers and providers, backed by a public-hearing process, helped move underlying prices toward premium targets.
- **Expectations for culturally responsive networks are in place.** There are continued needs for training of providers and collection of optional provider demographic data.
- **The small-group market is an opportunity area.** Awareness is lower, and product fit varies. Employers and brokers expressed unmet need for options such as health savings account-compatible designs where feasible.
- **Persistent challenges with cost predictability.** Consumers reported uncertainty about services subject to coinsurance (notably lab tests) and when prior authorization is required, which reflects common concerns across all types of commercial insurance.

What Coloradans experienced

Consumers valued the Colorado Option's first-dollar coverage for high-value care and straightforward copays, which helped many people get needed services without fear of large, unexpected bills. When comparing plans, most consumers prioritized three things: having their doctors in network, the monthly premium, and how much they would pay when they use care. Clear Marketplace labels and the ability to filter for standardized plans helped visibility. Brokers and community-based assisters further reduced confusion and helped consumers make confident plan choices. Some small employers saw the Colorado Option as a good fit, especially when predictability and straightforward benefits were top priorities, but others were unaware of Colorado Option plans.

Findings by area

Implementation of the Colorado Option

Standing up the Colorado Option involved engaging a wide range of stakeholders and required repeated cycles of rulemaking, guidance, and communication among the Division of Insurance (DOI), carriers, hospitals, providers, Connect for Health Colorado, consumer advocates, and brokers. Three design levers anchor the program: standardized plans ("Colorado Option plans"), PRR-driven price negotiations with a public-hearing backstop, and culturally responsive provider networks. DOI designed standardized plans

with stakeholder input to emphasize \$0, preeductible coverage for primary and preventive care, behavioral health care, diabetic supplies, and prenatal and postpartum services. DOI and stakeholders iterated annually to stay within federal plan design rules while improving clarity. The Premium Rate Reduction and public hearing process encouraged negotiated solutions so that formal proceedings were unnecessary. Culturally responsive networks set expectations for language access, provider training, essential community providers, and collection of demographic data to improve trust between consumers and providers.

Enrollment

In the individual market, Colorado Option enrollment increased year over year amid clearer plan labeling, broker engagement, and consumer awareness of first-dollar benefits. Colorado Option plans were first offered in the individual and small group markets in Plan Year 2023. By the end of the Plan Year 2025 open enrollment period, a record 132,791 people had enrolled in Colorado Option plans through Connect for Health Colorado. Colorado Option enrollment represented 47 percent of all 2025 selections during open enrollment, up from 34 percent in Plan Year 2024 and 13 percent in Plan Year 2023.

Clear plan names, logos, and filters for Colorado Option plans on the Marketplace, consumer-tested marketing materials, and brokers/assisters equipped with simple explanations of \$0 services and typical copays helped consumers identify Colorado Option plans. Enrollment patterns varied by county and metal tier, with strong interest in Silver and Gold plans in many areas. In the small-group market, take-up was more modest, reflecting lower awareness, concerns about product fit, and the importance of Health Savings Account (HSA)-compatible and high-deductible options for some employers.

Affordability

Affordability improved for many Coloradans both at the time of plan purchase (monthly premiums) and when they used care (out-of-pocket costs). Colorado Option plans were priced competitively against similar non-Colorado Option plans, especially in Bronze and Silver metal levels. **Colorado Option plan enrollees paid about 15 percent less out of pocket on average**—consistent with plan designs that replace coinsurance with copays and cover key services before reaching the deductible. Use of zero-dollar services among Colorado Option enrollees increased in targeted areas like prenatal and postpartum care.

Health equity

The Colorado Option weaves equity throughout plan design and implementation. First-dollar coverage for high-value services seeks to reduce financial barriers in areas where disparities are largest. Expectations for culturally responsive networks—language access, essential community providers, and provider training—are designed to improve trust between enrollees and their providers.

Limitations

Results reflect both the program and the broader environment. Observational studies—even with careful comparison groups and trend adjustments—cannot capture every factor. The period studied overlaps with Medicaid unwinding from the COVID-19 public health emergency, post-pandemic changes in utilization, and market dynamics that also affect premiums and out-of-pocket costs. Due to limited data, this analysis could not disaggregate all outcomes by race and ethnicity.

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I. Introduction

This report presents the statutory analysis of the Colorado Option—Colorado’s standardized health insurance program designed to improve affordability, promote access, and advance racial health equity in the state’s individual and small-group markets. This analysis is required under Section 10-1310(5), Colorado Revised Statutes (C.R.S.). Enacted in 2021 and implemented beginning with Plan Year 2023, the Colorado Option combines standardized plans (“Colorado Option plans”) with targeted regulatory tools and a federal waiver strategy to reduce premiums over time, lower enrollees’ out-of-pocket costs, and encourage more culturally responsive provider networks. The report synthesizes evidence from policy implementation, enrollment patterns and experiences, and affordability metrics (premiums and out-of-pocket costs) to assess what the Colorado Option has achieved in its first two years and identify opportunities to maximize its impact.

House Bill (HB) 21-1232 established the Colorado Option and charged the Colorado Division of Insurance (DOI) with designing and implementing four components: (1) standardized benefit designs, (2) phased premium rate reduction (PRR) requirements that carriers can meet by negotiating lower provider reimbursement rates, (3) culturally responsive provider networks meeting improved access and reporting standards, and (4) a federal Section 1332 waiver to capture pass-through savings. Subsequent legislation enhanced DOI’s tools by authorizing limits on carrier administrative costs and profits for standardized plans and improving the visibility of Colorado Option plans in the Marketplace.

This analysis is required under HB21-1232 and seeks to assess the impact of the Colorado Option on (1) health plan enrollment in the individual and small-group health insurance markets, (2) health insurance affordability (including premiums and total out-of-pocket healthcare spending) in the individual and small-group markets, and (3) health equity. This analysis followed a mixed-methods approach consisting of qualitative data collection and analysis of key informant interviews, consumer focus groups, and document review, as well as quantitative analysis of enrollment, premium, insurance filing, and all-payer claims database (APCD) data. By synthesizing findings from the qualitative and quantitative analyses, this report provides a comprehensive picture of the impact of the Colorado Option during its first two plan years (2023 and 2024). Exhibit I.1 lists the research questions addressed and the analysis hypotheses assessed in this report.

Exhibit I.1. Research questions and hypotheses

Research questions for the qualitative implementation analysis	
RQ1	1a. How effective was DOI in designing and implementing the Colorado Option to meet the legislative intent of making insurance more affordable and accessible, lowering healthcare costs, and advancing racial health equity? 1b. How well did DOI engage stakeholders and regulated entities during the implementation process?
RQ2	2a. How did industry (health insurance carriers, hospitals, and healthcare providers) work together on behalf of members/patients to lower the cost of care and lower premiums? How effective have organizations been in meeting the legislative intent of the Colorado Option law to lower the underlying costs of care? 2b. What work were carriers doing prior to the Colorado Option to advance health equity for their enrollees? How has the Colorado Option enhanced these efforts?

Research questions for the qualitative implementation analysis	
RQ3	How are carriers marketing Colorado Option plans to customers compared with how they market non–Colorado Option plans (by market: individual and small group)? What differences have they seen in the type of customer who enrolls in a Colorado Option plan versus a non–Colorado Option plan?
RQ4	What strategies did DOI and organizations use to inform consumers and brokers about Colorado Option plans? How effective were these strategies? What were the facilitators of and barriers to reaching and enrolling consumers?
RQ5	What has been consumers’ experience with the Colorado Option, including learning about the Colorado Option, selecting and enrolling in a plan, and understanding and using the coverage?
RQ6	For consumers enrolled in the Colorado Option, has enrollment changed the way they use healthcare? Do they feel they are better able to meet their healthcare needs and that the care provided is culturally responsive?
Hypotheses for the quantitative impact analysis	
H1	Increased awareness of Colorado Option plans leads to increased enrollment in the individual and small-group markets.
H2	The Colorado Option increases insurance affordability in the individual and small-group markets.
H3	The Colorado Option advances health equity.

DOI = Division of Insurance; RQ = research question.

The analysis used a logic model linking activities by DOI, its partners, and insurance carriers to short-term, intermediate, and long-term outcomes to provide a framework for how the Colorado Option legislation may affect these outcomes. The logic model also accounts for moderating factors (such as the plan portfolios carriers offer and the willingness of hospitals and providers to negotiate reimbursement rates) and confounding and contextual factors (such as federal regulations and consumer health needs and literacy), both of which shape outcomes in ways that the Colorado Option cannot directly control but must navigate. This framework informs our interpretation of implementation choices and observed outcomes throughout the report.

The logic model also guides the organization of this report, which consists of three chapters:

- **Chapter II—Policy and Implementation** examines how the Colorado Option statute and subsequent rulemaking were carried out by DOI, how market participants (such as carriers, hospitals, and healthcare providers) responded to price reduction targets and network requirements, how stakeholder engagement informed the standardized plan design, and how the section 1332 waiver was used to support affordability. Findings draw on document review and key informant interviews with state officials, carriers, hospitals, providers, brokers, consumer advocates, and other stakeholders.
- **Chapter III—Enrollment** analyzes enrollment trends and consumer experiences with Colorado Option plans relative to non-Colorado Option plans in the individual and small-group markets, including who enrolls, how consumers learn about the program, the role of brokers and community-based assisters, and barriers and facilitators to take-up. Results are based on analysis of enrollment data, key informant interviews, and consumer focus groups.
- **Chapter IV—Affordability** assesses premiums and out-of-pocket spending before and after implementation; examines the use of high-value services and zero-dollar, predeductible coverage under Colorado Option plans; and investigates how the public hearing process and negotiated reimbursement

levels affected hospitals' daily rates for inpatient stays. Analyses used premium data and Colorado's APCD, complemented by interviews and consumer focus groups.

The report uses a mixed-methods approach to integrate findings from qualitative and quantitative analyses. On the qualitative side, we conducted key informant interviews with state officials (including DOI), carriers and brokers, hospitals and providers, consumer and small-business advocates, Connect for Health Colorado (C4HCO), and other partners. We also convened consumer focus groups to understand awareness of Colorado Option plans, plan selection, enrollment assistance experiences, and perceptions of affordability and care use under Colorado Option plans. (Appendix B describes the qualitative data collection and analysis in more detail.) On the quantitative side, we analyzed carrier plan filing data from DOI and Marketplace data from C4HCO to assess enrollment patterns, premium levels, and premium growth in Colorado Option and non-Colorado Option plans. We also used APCD claims to estimate changes in out-of-pocket spending and the use of high-value services with zero-dollar, preeductible coverage. Quantitative estimates use research designs that address selection and confounding concerns to the extent possible in observational data, including difference-in-differences with inverse propensity score weighting where appropriate. (Appendix C describes quantitative data sources, and Appendix D describes the analytic methods in more detail.) Qualitative findings are coded thematically, triangulated across stakeholder types, and used to interpret quantitative results (see Appendix B for details).

As with any analysis of policies and programs, the Colorado Option's effects unfold alongside other policy changes and market events, including Medicaid unwinding from the COVID-19 Public Health Emergency, and macro-level utilization and price pressures. The report's mixed-methods design and its difference-in-differences strategies help lessen (but cannot eliminate) concerns about confounding and selection. We therefore caution against attributing all observed changes solely to the Colorado Option. Instead, we interpret patterns as the combined result of program design choices (for example, standardized benefits and negotiated reimbursement) and moderating and contextual factors affecting the outcomes.

Advancing health equity is a statutory objective and a design priority for the Colorado Option. The standardized plans emphasize first-dollar coverage for high-value services (including behavioral health and perinatal care) that can reduce financial barriers where disparities are most pronounced; implementation requires collecting and using demographic information to better match networks and services to enrollee needs; and outreach and education strategies—developed with consumer and community input—aim to improve awareness and trust among populations historically underserved. The report therefore considers equity both as a cross-cutting research lens (for example, differences by geography or demographic subgroups in Colorado Option enrollment) and as a program design feature to be monitored for fidelity and impact over time.

The chapters that follow examine how the Colorado Option's policy levers were implemented (Chapter II), whether awareness and marketing translated into take-up by the consumers most likely to benefit (Chapter III), and whether affordability improved where it matters most—to consumers shopping for plans and to enrollees using care (Chapter IV).

The Colorado Option represents an ambitious attempt to use state authority, standardized benefits, and market oversight to bend cost trends, protect consumers at the point of care, and make plan choice

simpler. This analysis provides a comprehensive picture of how the Colorado Option's design and implementation impacted health plan enrollment, health insurance affordability, and health equity.

II. Policy and Implementation

House Bill (HB) 21-1232 established the Colorado Option, a state-based, public option health insurance program, in the 2021 legislative session. This legislation builds on previous health coverage legislation passed to address affordability in Colorado, including the creation of the reinsurance program and the Health Insurance Affordability Enterprise. The four main components of the Colorado Option legislation are (1) Colorado Option standardized plans, (2) premium rate reduction (PRR) requirements, (3) culturally responsive provider networks, and (4) a federal Affordable Care Act Section 1332 waiver. In the 2023 legislative session, the Colorado legislature passed HB 23-1224, which strengthens DOI's ability to implement the Colorado Option by allowing the Commissioner of Insurance to place limits on carriers' administrative costs and profits for standardized plans and requiring the individual health insurance Marketplace to display Colorado Option plans so they can be easily identified. This chapter discusses stakeholder engagement with the Colorado Option and how DOI, health insurance carriers, healthcare providers, C4HCO, and other stakeholders implemented each component of the legislation. Findings are based on a document review and interviews with key informants.

Key takeaways

- The design and implementation of the Colorado Option provided substantial opportunities for stakeholder engagement through formal and informal channels.
- Developing the standardized plan involved significant stakeholder input to balance offering rich benefits, affordable premiums, and federal actuarial value requirements. The plan design prioritized benefits that have the potential to impact health disparities.
- The premium rate reduction requirements prompted carriers and providers to negotiate to reduce reimbursement rates, with all negotiations settled before going to a public hearing.
- Carriers have generally met requirements related to network adequacy and inclusion of essential community providers, but carriers face challenges collecting voluntary provider training and demographic data.
- Colorado's use of the 1332 waiver to implement the Colorado Option has positioned Colorado as a model for other states.▲

A. Stakeholder engagement

1. Requirements

The Colorado Option legislation makes stakeholder engagement a central feature of both design and implementation. The Colorado Option legislation requires that the Colorado Option standardized benefit design be created through a stakeholder engagement process that includes stakeholders with varied experience in healthcare (such as providers, healthcare industry representatives, and individuals working in or representing communities that are diverse).¹ The legislation also notes that any annual updates to the standardized benefit design should use the same stakeholder process as the initial design.

The legislation also created the Colorado Option Advisory Board to provide stakeholder insight to the Commissioner in the implementation of the Colorado Option. The Governor appoints up to 11 members

¹ The text of Colorado General Assembly HB 21-1232 can be found at https://leg.colorado.gov/sites/default/files/2021a_1232_signed.pdf.

to the Board. Members of the Board represent a variety of stakeholders including consumer advocacy organizations, carrier representatives, hospital organizations, and healthcare provider organizations and include members who are licensed or retired physicians or have expertise in health equity. The Board meets every other month, or more or less frequently as needed.²

2. Implementation

DOI successfully engaged stakeholders representing consumers, carriers, providers, small businesses, and community organizations throughout the design and implementation process (Exhibit II.1). The DOI consulted with key stakeholders throughout the process of designing the Colorado Option plans before they were first available on the Marketplace in Plan Year 2023. For example, DOI held 15 public stakeholder meetings and conducted individual outreach to 96 organizations across the state. Engagement opportunities included both general sessions and sessions targeted at certain stakeholder groups, such as carriers, rural communities, and consumer advocates. These stakeholder meetings resulted in updates to the Colorado Option plan design, including what services would be covered preeductible. The Division also hosted stakeholder meetings to gather feedback on the premium rate reduction methodology, public hearing process, and design of culturally responsive provider network requirements.

DOI employed various strategies to make this process inclusive and accessible, including providing Spanish translation, making accommodations for individuals with disabilities, offering virtual meetings, having the meetings at different times of the day, and publishing meeting materials online. DOI informed stakeholders about these opportunities through announcements on DOI's website, emails to broad contact lists, and by drawing on relationships with community-based organizations and professional organizations. For example, DOI

"DOI is highly effective in their stakeholder approach... there's significant engagement...many opportunities for organizations, individuals, consumers, patients, doctors, health systems to be able to provide perspective on the Colorado Option, so I think the stakeholder process has been robust in that regard."

Healthcare provider

Exhibit II.1. Overview of Colorado Option implementation stakeholder engagement

Plan design for Plan Year 2023

- 15 public stakeholder meetings where average attendance was 179 participants
- Individual outreach to 96 organizations across state and held 13 individual meetings
- Specific stakeholder meetings with community members, carriers, brokers, and employers, etc., where average attendance was 50 participants

Other implementation activities

- Two public hearings and one Tribal consultation meeting regarding the section 1332 waiver
- Three stakeholder meetings focused on culturally responsive provider networks
- Specific stakeholder meetings for the premium rate reduction requirements including carrier-specific, provider-specific, and consumer-specific meetings
- 10+ individual meetings with hospital and provider groups and the Department of Health Care Policy and Financing on the methodology for developing the hospital specific reimbursement rate floors▲

² Colorado Option Advisory Board materials can be found at <https://doi.colorado.gov/colorado-option>.

contacted professional associations, medical societies, and advocacy groups for different communities, such as people with disabilities.

Representatives of most stakeholder groups voiced appreciation for the opportunity to provide input during the Colorado Option’s design and implementation. Several stakeholders emphasized that DOI created many opportunities for engagement, and it was willing to have formal and informal discussions about the requirements.

Since the initial design and implementation stages, DOI continues to seek engagement and feedback from stakeholders, particularly from consumers. The Colorado Option Advisory Board meets to discuss policy and programmatic topics related to the Colorado Option, such as Colorado Option rates and enrollment, regulatory updates, and federal reporting. DOI also regularly seeks consumer feedback through formal and informal channels. For example, DOI obtains consumer feedback on the Colorado Option through C4HCO’s annual Marketplace customer survey, which includes Colorado Option-specific questions. To understand consumer perspectives on messaging around Colorado Option plans, DOI contracted with a communications firm to conduct consumer focus groups. DOI also responds to issues raised by consumers and brokers. For example, the DOI made updates to its regulatory requirements regarding carrier coverage of \$0 diabetic supplies under Colorado Option plans to ensure that carriers were transparently and publicly displaying which supplies were covered at no cost to consumers. DOI also made regulatory changes to how carriers display plans for small employers and brokers to ensure that carriers were not restricting access to Colorado Option plans. Interview respondents highlighted the value of these engagement efforts and emphasized the importance of continued engagement and transparency.

B. Standardized plans

1. Requirements

Standardized plans aim to make shopping for a health plan easier because the cost sharing and benefits are the same across all health insurance carriers offering these plans. This standardization enables consumers to focus on comparing other plan features such as premiums, provider networks, quality, and customer service. The Colorado Option legislation required that the standardized plans have a defined benefit design and cost sharing that maximizes access and affordability. According to the law, the plans must also be designed to improve racial health equity and decrease racial health disparities through improving perinatal coverage and providing first-dollar, preeductible coverage for certain high-value services, such as primary care and behavioral healthcare.

Carriers must offer a Colorado Option Gold, Silver, and Bronze plan in any county where they offer health plans in the individual and small-group markets. DOI updates standardized plan designs each year to

Exhibit II.2. Key features of Colorado Option plans

- Standardized plan designs for easy comparison
- Free preventive care, screenings, and immunizations
- Free primary care or nonspecialist practitioner visits to treat an injury or illness
- Free prenatal and postpartum visits
- Free mental health and substance use disorder office visits
- Free or low-cost diabetic supplies
- Provider network that is culturally responsive▲

ensure their cost sharing and benefits meet federal actuarial value (AV) and benefit requirements for the applicable plan year. The Commissioner must hold stakeholder meetings when making changes to the standardized plan benefit design.³ DOI did not make updates to the standardized plan benefit design for Plan Year 2024 and 2025, other than the updates to plans' cost-sharing (such as the deductible and maximum out-of-pocket) to account for the federal AV changes. These updates were made in Colorado Insurance Regulation 4-2-81 and followed the DOI rulemaking process, including offering multiple opportunities for public comment before these changes were adopted in regulation.

2. Implementation

The development of the standardized plan was an iterative process that required balancing the inclusion of high-value benefits while still meeting the federal AV requirements. The federal AV requirements place limitations on the cost sharing that can be offered in Bronze, Silver and Gold plans; therefore maintaining AV compliance was a driving factor in the plan design process. Shortly after the legislation passed,⁴ DOI began working with actuarial consultants to model example plan designs. DOI then met with consumer advocates, providers, hospitals, carriers, and other partners to understand tradeoffs and implications of different design features. These conversations helped DOI prioritize benefits and plan features. After presenting example plan designs and gathering feedback, DOI adjusted the proposed plans, shared updated plan designs, and continued iterating with stakeholders until they arrived at the final plan design. Exhibit II.2 lists key features of the Colorado Option plan.

To address the legislation's health equity goals, DOI and its partners centered health equity in the standardized plan design. During the 15 stakeholder meetings focused on the standardized plan design, DOI gathered input about what benefits and cost-sharing structures had the potential for the greatest impact on health equity. Throughout this process, DOI worked closely with partners at the Colorado Department of Public Health and Environment (CDPHE) to understand the health disparities experienced by Colorado healthcare consumers. Based on these conversations with stakeholders and CDPHE, the final plan design prioritized services with significant equity impact, such as free prenatal and postpartum visits and free or low-cost diabetic supplies.

Healthcare providers and consumer advocates praised the standardized plan benefit design, believing first-dollar coverage of primary care and behavioral health services will promote accessibility and affordability. A representative from a hospital system described the plan design as "smart" and noted that the no-cost behavioral health services and other primary care services "opened up the door for consumers to access health care at a lower cost." Similarly, a healthcare provider noted their professional organization's excitement about the first-dollar coverage of primary care visits, citing evidence that providing access to preventive care will reduce future acute care needs. Overall, these stakeholders emphasized that offering low-cost, high-value services will reduce out-of-pocket costs for

³ Materials from the Colorado Option Standardized Plan meetings can be found at <https://doi.colorado.gov/colorado-option>.

⁴ Materials from the Colorado Option Advisory Board meeting in August 2022 can be found at <https://doi.colorado.gov/colorado-option>.

consumers in the short term, and through expanded access to these services, lower overall healthcare costs through reduced hospital admissions.

Carriers incorporated the standardized plan design as required by the Colorado Option legislation.

Other than some initial technical considerations related to ensuring compliance with mental health parity, carrier respondents did not report major barriers incorporating the standardized plans into their product lines. One carrier respondent noted that the rich benefits and standardized design “sell themselves” and are attractive to consumers.

C. Premium rate reduction requirements

1. Requirements

The Colorado Option legislation established PRR requirements that phase in premium reductions over time (Exhibit II.3). Every year, carriers must submit their proposed premiums for the upcoming plan year and supporting documentation to DOI for review, including whether or not Colorado Option plans comply with the specified PRR targets.

If a carrier fails to meet the PRR requirements and network adequacy requirements, the carrier is required to notify the Commissioner of the reasons for noncompliance and provide any related documents,⁵ and they may file a complaint that identifies providers that contributed to their noncompliance. DOI may also initiate a complaint, or cross-complaint, against any providers after reviewing the carrier’s filings. Any carrier alleged to fail to meet the PRR requirements, or a hospital or provider named in a complaint, can file a response to the complaint within 21 days. The carrier, hospitals and/or providers, and DOI may negotiate a settlement to lower reimbursement rates for Colorado Option plans. Prior to the settlement, the carrier provides documentation to verify reimbursement rates and their premium impacts.

Exhibit II.3. Premium rate reduction targets: Timeline and details

Plan year	Colorado Option premium rate reduction (PRR) and reimbursement rate reduction targets
2023	PRR Target: At least a 5-percent reduction in premiums relative to the premiums offered by the carrier in the same county in 2021, adjusted for medical inflation
2024	PRR Target: At least a 10-percent reduction in premiums relative to the premiums offered by the carrier in the same county in 2021, adjusted for medical inflation Reimbursement Rate Reduction Target (through public hearing process): 20% from Plan Year 2023 negotiated rate or 2024 Hospital-Specific Reimbursement Rate Floor
2025	PRR Target: At least a 15-percent reduction in premiums relative to the premiums offered by the carrier in the same county in 2021, adjusted for medical inflation Reimbursement Rate Reduction Target (through public hearing process): 20% from Plan Year 2024 negotiated rate or 2025 Hospital-Specific Reimbursement Rate Floor
2026 and later	PRR Target: Premium increases by the carrier in the same county are limited to adjustments for medical inflation Reimbursement Rate Reduction Target (through public hearing process): 20% from prior year negotiated rate or Hospital-Specific Reimbursement Rate Floor for the applicable plan year

⁵ For example, an actuarial analysis or profit, administrative spending, and other rate elements for the plan.

The Commissioner may hold a public hearing if the carrier has failed to meet their PRR requirements and a settlement is not reached with the hospital or provider.⁶ At the public hearing, carriers can demonstrate that they have reduced provider reimbursement rates by the maximum amount allowed under statute to demonstrate compliance. Based on evidence presented at the hearing, the Commissioner may establish and require hospitals and providers to accept reimbursement rates. The Commissioner may not set a reimbursement rate for a hospital or provider that is lower than the reimbursement floor.⁷ (Chapter IV, Section D presents empirical evidence on how the public hearing process affected hospital reimbursement rates.)

2. Implementation

Carriers and providers worked to comply with PRR requirements by negotiating reimbursement rates. Carriers noted that the requirements of the legislation have pushed both carriers and providers to work towards reducing premiums. As a result, through Plan Year 2026, all public hearings have been vacated because carriers, providers, and the DOI reached settlements to lower reimbursement rates. One carrier noted that by contracting at the hospital reimbursement floor with hospitals in their networks, they have been able to reduce the cost of their Colorado Option plans compared to their non-Colorado Option plans. Over three years, this carrier reported achieving a 7 percent premium reduction in their Colorado Option plans. The same carrier described limiting their profit and administrative expenses for these plans but emphasized that provider reimbursement rates drove most of the affordability gains. Another carrier described communicating to hospitals that they must agree to a certain rate reduction to achieve compliance and avoid being called into a public hearing. In most cases, carriers reported that providers agreed to these lower rates.

DOI interacts closely with carriers to ensure they are submitting the information needed to assess compliance with the PRR requirements. Each year, DOI releases detailed instructions for the PRR filing requirements and accompanying templates to ensure that documentation is submitted “properly, efficiently, and pursuant to Colorado Insurance Regulations 4-2-85 and 4-2-92.”⁸ Throughout the rate filing process, DOI staff make themselves available to carriers through group sessions, one-on-one meetings, and ad hoc communications. For example, one carrier reported interacting regularly with DOI to clarify questions on rate filing and interpretations of bulletins and regulations, as well as to ensure they submit data in the expected format and in accordance with the deadlines.

⁶ The Colorado Option public hearing process is outlined in Colorado Insurance Regulation 4-2-92, which can be access at <https://doi.colorado.gov/sites/doi/files/documents/Amended%20Regulation%204-2-92%20-%20Colorado%20Option%20Public%20Hearing.pdf>.

⁷ The methodology for calculating reimbursement rate floors is set in statute and outlined in Colorado Insurance Regulation 4-2-91. The reimbursement rate floor for hospitals is calculated as 155 percent of a hospital’s Medicare rate with potential increases for independent or essential access hospitals (up to 40 percent for both, up to 40 percent for management of underlying cost of care, and up to 30 percent for having a high share of Medicaid and Medicare patients). The reimbursement rate floor for providers is 135 percent of the aggregate Medicare reimbursement rate. The DOI publishes the hospital-specific reimbursement floors for the upcoming plan year every year on its website.

⁸ “Colorado Option Premium Rate Reduction Filing Procedures” can be accessed at <https://doi.colorado.gov/insurance-industry/aca-annual-filing-information>.

From DOI's perspective, the rate filing and public hearing processes have evolved to be more efficient, but there are still opportunities to improve the process. Respondents from DOI noted that after the first year, carriers and providers achieved agreements on reimbursement rate reductions before or earlier in the public hearing process. These early agreements reduce administrative burden for DOI, carriers, and providers, while still having the intended outcome of lowering reimbursement rates for Colorado Option plans. Respondents from DOI reflected that the premium review process has proven successful at securing lower reimbursement rates.

The Colorado Option facilitates price transparency to reduce the cost of healthcare and, in turn, reduce premiums for consumers. Carriers have resisted providing negotiated rate details to the Division - pointing to the administrative burden that goes along with price transparency. To overcome this lack of transparency—and to enforce the Colorado Option's premium reduction goals and public hearing process—the Division requires carriers to collect and submit negotiated rate data. The Division has been working to improve communications to streamline this mandatory reporting. Carrier representatives described having to collect a large amount of data in a short time frame due to when the prior plan year ends and when the PRR filings are due in early March. In response to carrier feedback regarding the need for increased communication to understand the DOI's expectations, the Division worked to provide draft templates in the fall to gather carrier feedback and started holding calls with carriers in early winter to answer questions regarding the upcoming PRR filing. These communications led to fewer rounds of back-and-forth when carriers submitted their PRR filings in early March.

Although DOI, carriers, and providers have been able to negotiate settlement agreements, making a public hearing unnecessary, some stakeholders desire more communication about the public hearing processes.⁹ A representative from a consumer advocacy organization noted that there is a lack of transparency about what happens during the rate filing and public hearing process, which makes it difficult to understand what has been accomplished through the Colorado Option. In contrast, a representative of a provider organization assumed that they met premium reduction targets because the public hearings had been vacated, which suggests misunderstanding about the role of the public hearing process.

D. Culturally responsive provider networks

1. Requirements

The Colorado Option legislation requires that Colorado Option plans provide access to a provider network that is "culturally responsive and, to the greatest extent possible, reflects the diversity of its enrollees in terms of race, ethnicity, gender identity, and sexual orientation in the area that the network exists." The network must be no narrower (or offer fewer providers) than the narrowest nonstandardized plan (non-Colorado Option plan) offered by the carrier within the same metal tier and rating area for the plan year. Networks must also include at least 50 percent of the essential community providers (ECPs) in the service area. In addition, the legislation requires that carriers report on their efforts to construct these culturally

⁹ As described in Chapter IV Section D, some carriers and hospitals have gone through the public hearing process, either because a carrier or the Division filed a formal complaint, but the Commissioner vacated the scheduled public hearings because a settlement was reached beforehand.

responsive provider networks and how they will address health equity and reduce health disparities. Any carriers that cannot meet the legislative and regulatory requirements must file an action plan with DOI and identify a set of steps and goals for corrective action, a timeline for each step or goal for corrective action, and any plans to continue negotiation with providers, if applicable.

DOI conducted a series of stakeholder meetings to inform reporting and training requirements for providers and requirements for culturally responsive provider networks.¹⁰ The resulting requirements are as follows:

- **Training.** Carriers are required to set up a process for Colorado Option plan network providers and providers' front office staff to report on anti-bias, cultural competency, or a similar training and meet the following thresholds: at least 50 percent by 2023, at least 75 percent by 2024, and at least 90 percent by 2025.^{11,12} Carriers' customer service representatives, who assist applicants in the enrollment process and covered persons in using their Colorado Option Standardized Plan benefits, must complete at least one anti-bias, cultural competency, or similar training on an annual basis.
 - **Demographic data collection.** Carriers are required to collect demographic data (including race and ethnicity data, sexual orientation and gender identity data, and ability status) from network providers and enrollees and report this data in their Colorado Option plans' annual network adequacy filings. It is voluntary for providers and enrollees to provide this information to carriers.
1. **Provider directory requirements.** Colorado Option plan provider directories require information on the availability of translation and interpreter services, accessibility services and how to request them, and information on how to file a complaint about the accuracy of the provider directory and provider experience. Provider directories also require information on which staff are multilingual and which languages are spoken by staff and whether the provider offers extended or weekend hours.
 2. **Language access.** Carriers are required to offer no-cost language assistance services to Colorado Option enrollees during all points of contact and to develop a process to notify enrollees about these available services and how to access these services. Carriers must provide written notice of the availability of interpretation and translation services for documents. Carriers are also required to post taglines that communicate the availability of language services.¹³
 3. **ECPs.** Colorado Option plan networks must include a sufficient number of ECPs by one of two standards: (1) carriers include greater than 50 percent of the ECPs in each service area and (2) carriers

¹⁰ Culturally responsive provider network materials can be found at <https://doi.colorado.gov/colorado-option>.

¹¹ Colorado DOI. "Frequently Asked Questions (FAQs) on Colorado Option Culturally Responsive Provider Network Reporting and Training Requirements for Providers." February 2025. <https://doi.colorado.gov/sites/doi/files/documents/FAQ-Colorado-Option-Culturally-Responsive-Network-Reporting-Requirements-for-Providers.pdf>.

¹² "Amended Regulation 4-2-80 Concerning Network Adequacy for Colorado Option Plans" can be found at <https://doi.colorado.gov/sites/doi/files/documents/Regulation-4-2-80-Concerning-Network-Adequacy-Standards-And-Reporting-Requirements-For-Colorado-Option.pdf>

¹³ Taglines are required in at least the top 15 languages spoken by individuals with limited English proficiency, including American Sign Language and other communication services for people who are Deaf, Hard of Hearing, and DeafBlind.

have 50 percent of ECPs in the Health Professional Shortage Areas or zip codes where 30 percent or more of enrollees are below 200 percent of the federal poverty level (FPL).

2. Implementation

DOI designed flexible cultural competency training and provider demographic reporting requirements in response to stakeholder feedback.

Instead of mandating a specific training, providers can complete any anti-bias, cultural competency, or similar training. This decision allows for trainings that are tailored to the provider's specific context, such as providing care in rural settings. Similarly, DOI requires that carriers collect and report demographic information, but individual providers are not required to respond. DOI provided this flexibility in response to stakeholder concern that providers may feel uncomfortable providing demographic information.

"We, as an organization, have been providing this [training] to our members for a number of years. Implicit bias training, how to reduce help disparities in your patient population ...So, there's a lot of work going on this, but it's just not necessarily specific to the Colorado Option."

Healthcare provider

Carriers and providers support the intent of the cultural competency training and demographic reporting but cited challenges or confusion related to implementing and tracking these requirements.

The DOI has received questions from providers about the training requirements and whether these trainings are mandatory. Some providers, however, already required similar trainings, so it was "administratively easy to attest" to completion. Regarding demographic reporting requirements, carriers send surveys to providers to collect demographic data, but there is substantial variation in the quality of data received.

Carriers have generally been able to meet requirements related to network adequacy To meet the law's "narrow network" standard, many carriers use the same networks for their Colorado Option and non-Colorado Option plans, or build upon their most restrictive non-Colorado Option network, to ensure that the Colorado Option plan networks are no more restrictive than the carrier's narrowest non-Colorado Option network. Similarly, carriers have met the requirement to include ECPs in their networks.

E. Section 1332 waiver

1. Requirements

The Colorado Option legislation states that (1) the Commissioner may apply for an ACA Section 1332 waiver ("section 1332 waiver") from the federal government to capture any federal savings from implementation of the law and (2) the outlined PRRs for standardized plans are contingent on section 1332 waiver approval. Colorado had an approved section 1332 waiver to establish and operate a reinsurance program before the Colorado Option legislation took effect, so the state submitted its application for a section 1332 waiver amendment to the Centers for Medicare & Medicaid Services (CMS)

"Again, the limits of insurance policy is that you can't manufacture doctors that have cultural competency or have a shared background [with patients]."

DOI staff member

and the Department of the Treasury (“Treasury”) in November 2021. After public hearings and review, the federal government approved Colorado’s waiver amendment in June 2022 to include the Colorado Option and waive ACA sections 1312(c)(1) and 1312(c)(2), as implemented at 45 CFR § 156.80, to allow for plan-level rating variations. The approved waiver period is January 1, 2023, through December 31, 2027.

ACA Section 1332 State Innovation Waivers allow states to leverage federal premium tax credit (PTC) savings generated by state-based premium reduction programs (known as “pass-through funding”). Starting in Plan Year 2023, Federal pass-through funding for Colorado’s section 1332 waiver includes savings from lowering premiums through the Colorado Option and reinsurance programs.¹⁴ Colorado received \$245 million in pass-through funding in 2023, \$361 million in pass-through funding in 2024, and \$339 million in pass-through funding in 2025.¹⁵

2. Implementation

Implementation of the section 1332 waiver has required close coordination between DOI staff and federal partners. Colorado was the first state to use a section 1332 waiver to implement a public option-style insurance plan. In the first years after the waiver approval, the DOI and federal partners worked together on developing a methodology for calculating the savings impact of the reinsurance and Colorado Option programs that would determine the amount of pass-through funding provided to the state. Over time, this coordination process has become more efficient, and other states are now looking to Colorado for guidance as they implement similar policies.

¹⁴ Colorado DOI. “ACA Section 1332 Waiver Reinsurance & Colorado Option Programs.” 2023 Annual 1332 Waiver Public Forum, November 15, 2023.

https://doi.colorado.gov/sites/doi/files/documents/2023_annual_1332_waiver_public_forum_1.pdf.

¹⁵ CMS. “Section 1332: State Innovation Waivers.” Last modified August 14, 2025.

<https://www.cms.gov/marketplace/states/section-1332-state-innovation-waivers>.

III. Enrollment

Enrollment in Colorado Option plans has increased since their introduction in Plan Year 2023, suggesting that these plans are attractive to consumers. In this chapter, we first describe DOI's and other stakeholders' efforts to educate consumers and enrollment assisters about the Colorado Option. We then describe consumer awareness of the Colorado Option and motivations for their plan selection. Finally, we present findings from our analysis of enrollment data. Findings presented in this chapter were based on key informant interviews, two focus groups with consumers enrolled in Colorado Option and non-Colorado Option plans, and Mathematica's analysis of enrollment data.

Key takeaways for enrollment

- DOI's efforts to inform the public about the Colorado Option focused on engaging brokers and assisters.
- Consumers selected plans based on cost, coverage, and which providers were included in-network. Some consumers selected Colorado Option plans because of the plan's features, without realizing they were specifically choosing a Colorado Option plan.
- Enrollment in the individual market increased from 2023 to 2025, consistent with national trends; the increase could also be due to the expansion of Colorado Option enrollment.
- Enrollment into Colorado Option as a percentage of total enrollment grew substantially from 2023 to 2024 across all markets and metal tiers.
- Colorado Option enrollment in the small-group market has been limited due to limited awareness, and carrier restrictions in how plans are presented to small businesses. ▲

A. Awareness of Colorado Option plans and benefits

DOI informed enrollment assisters about Colorado Option plans by engaging the broker community and sharing information on its website. DOI does not directly enroll consumers in health insurance coverage or provide plan options in the way that brokers and assisters do. In partnership with C4CHO, DOI reviewed Marketplace enrollment data and found that the majority of enrollment on the exchange occurs through a broker.¹⁶ Based on this information, DOI staff collaborated with C4CHO to engage brokers through C4HCO's existing networks and infrastructure. For example, they engaged brokers through workgroups, focus groups, and the C4HCO annual enrollment conference. DOI also created a broker-focused enrollment guide with information about the Colorado Option. In addition to broker engagement, DOI informed consumers about the Colorado Option through its website and through DOI press releases around the annual open enrollment period.¹⁷

Brokers and assisters prioritized understanding consumer needs and presenting plan options to meet these needs; however, they did not specifically promote Colorado Option plans. A broker explained that they present consumers with various plans, including Colorado Option plans, but do not specifically promote Colorado Option plans. The broker felt that promoting only Colorado Option plans could be perceived by consumers as politically motivated. They also noted that some consumers are not

¹⁶ "Open Enrollment Report for Plan Year 2023: By the Numbers" is available at <https://c4-media.s3.amazonaws.com/wp-content/uploads/2023/03/31121205/By-the-Numbers-final-OE10.pdf>.

¹⁷ The Colorado Option website is available at <https://doi.colorado.gov/colorado-option>.

focused on whether the plan is a Colorado Option plan and that “all they care about is the coverage and price.”

Assisters are restricted from recommending specific plans and instead support consumers by helping them compare choices. Enrollment assisters generally recalled learning about Colorado Option plans and some of their key benefits, such as \$0 mental healthcare office visits. However, not all enrollment assisters were familiar with the specific features of the plans.

Community-based organizations, healthcare providers, and advocacy organizations played key roles in raising consumer awareness about open enrollment and health insurance options. A health system representative noted that they have resources posted about health insurance options for patients. A consumer advocacy organization engaged in messaging to alert consumers about Colorado Option plans newly available in the Marketplace. They intended their messaging to be informational and make consumers aware of the benefits, encouraging consumers to select the plan that best meets their needs. C4CHO focused their outreach on educating both consumers and enrollment assisters about the Colorado Option. They included information in their open enrollment materials to support enrollment assisters in helping consumers choose a plan.

“It was really about the education and making sure people knew, what is this new option? And developing some materials to include in our other Open Enrollment materials that would enable our partners ... to have what they needed to support folks...”

Respondent from a partner organization

DOI has worked with C4HCO, carriers, and consumer advocates to improve messaging around covered benefits.

In response to consumer confusion about diabetic supply coverage, DOI worked with consumer advocates and carriers to ensure that information about covered diabetic supplies is easier for consumers to find and understand. This effort led to a DOI bulletin and regulation updates requiring carriers to publicly disclose information about covered diabetic supplies on their websites. DOI also partnered with C4HCO to improve how Colorado Option plans and benefits are displayed on C4HCO’s enrollment platform, as required by HB23-1224.¹⁸ These updates included adding a Colorado Option logo to help consumers identify these plans and a new Colorado Option filter in the shopping portal. DOI also worked with C4HCO to more clearly differentiate between behavioral health office visits (which have a \$0 copay) and behavioral health outpatient visits (which have coinsurance) so that consumers could see the anticipated cost-sharing for these services when shopping for a plan.

“I don't recall seeing any advertising media for it. But I went through the website and it seemed like the best option available to me at the time.”

Colorado Option consumer

¹⁸ <https://leg.colorado.gov/bills/hb23-1224>

B. Consumer awareness and selection of Colorado Option plans

Most consumers enrolled in Colorado Option plans were aware of the Colorado Option and knew they were enrolled in one of these plans. In focus groups with consumers enrolled in a Colorado Option plan in Plan Year 2023 and/or 2024, most had heard of Colorado Option plans prior to the focus group, and about two-thirds were aware they were enrolled in a Colorado Option plan. In contrast, awareness of the Colorado Option was limited among focus group participants who had never been enrolled in a Colorado Option plan. Among these consumers, most either had not heard of the Colorado Option or were unsure if they had. This finding suggests that more messaging could be beneficial to inform consumers about the Colorado Option plans and their benefits.

Among consumers who recalled hearing about the Colorado Option, most first encountered Colorado Option plans during the open enrollment process. These people were introduced to the Colorado Option through the C4HCO website or when enrolling with the help of a broker. A couple of consumers recalled hearing about the Colorado Option through a family member. Consumers across both focus groups did not recall hearing or seeing any messages about the Colorado Option through any media platforms before the enrollment process.

Many consumers described the process for comparing and selecting a health insurance plan (regardless of whether it was Colorado Option or non-Colorado Option) as time-consuming and challenging; some noted that the tools on the C4HCO website helped facilitate this process. The Colorado Option standardized plan is designed to simplify the plan-comparison process for consumers. Across consumers with and without Colorado Option plans, consumers noted that it was time-consuming to compare the benefits covered by each plan and which providers were included in the plan's network. Consumers reviewed information available on the C4HCO website and, in some cases, reached out directly to the health insurance company or their healthcare providers to obtain more information.

Consumers frequently mentioned brokers and assisters as a key part of plan selection and enrollment. Most consumers, whether enrolled in Colorado Option plans or not, reported working with a broker or assister to select a health insurance plan. Trusted sources such as friends, employers, or C4HCO often referred consumers to these brokers. Consumers described brokers as helpful for the selection process. Overall, brokers' strong influence among both groups of consumers is consistent with the finding in Section A that brokers provide consumers with information about all plan options, including both Colorado Option and non-Colorado Option plans.

"For me, it was keeping the providers that I currently had, which was important, and then the maximum out-of-pocket, i.e., hospitalization, making sure that that number wasn't capped too high, just in case."

Colorado Option consumer

Consumers were primarily motivated to select plans based on cost, benefits, and provider networks, and these factors did not differ between those who enrolled in Colorado Option plans and those who did not. Across both focus groups, consumers described looking at monthly premiums, copays, deductibles, and out-of-pocket maximums when choosing a health insurance plan. In addition to affordability, consumers prioritized the ability to stay with their existing doctors. Some also mentioned

they factored in the types of services they and their families expected to use. One consumer, for example, described their decision-making process based on a 12-month investment, estimating yearly costs and choosing a high-deductible plan accordingly.

Some consumers selected a Colorado Option plan because of its cost and benefits without realizing that they chose a Colorado Option plan. State officials and consumer advocates noted that consumers typically chose these plans for their benefits and costs, not specifically because they knew it was a Colorado Option plan. An enrollment assister recalled that clients enroll in Colorado Option plans because of the mental health benefits. Consumer focus groups supported these findings.

“People choose Colorado Option... because they can access primary care and basic mental and behavioral health without a copay.”

Consumer advocate

C. Individual and small-group market enrollment

This section provides quantitative evidence for the hypothesis that the Colorado Option increased enrollment in the individual and small-group markets, using plan filing data for the individual on- and off-exchange and small-group markets and consumer-level data for the individual exchange C4HCO. It also provides qualitative context for small-group market enrollment.

1. Market-wide enrollment

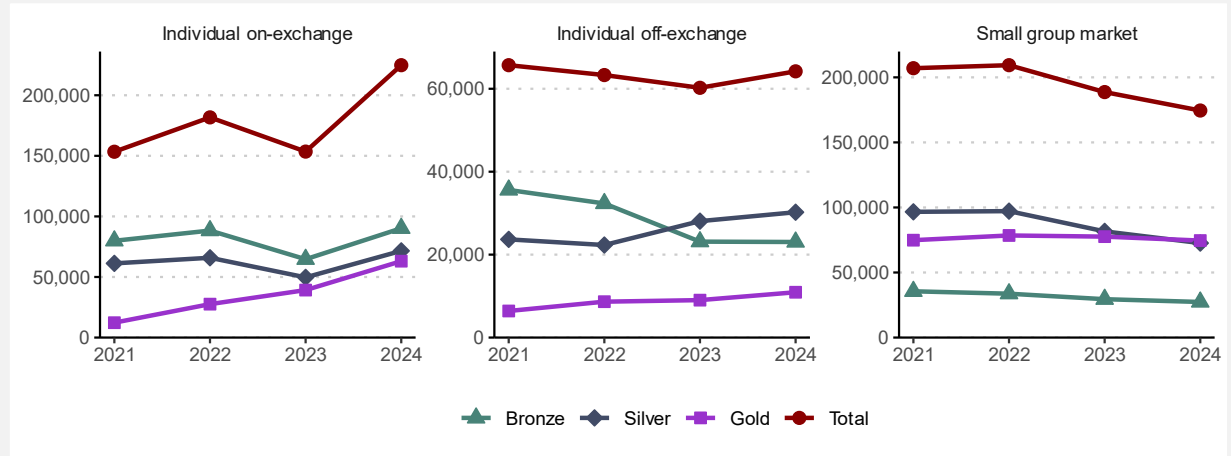
Enrollment in the individual Marketplace overall increased in 2024, potentially due to the expansion of the Colorado Option enrollment. From 2023 to 2024, enrollment in Colorado’s individual Marketplace surged by 46 percent (an increase of 71,321 enrollees) (Exhibit III.1, left panel). This growth outpaced the Federally Facilitated Marketplace increase of 30 percent between 2023 and 2024¹⁹ and is in contrast to enrollment from 2021 to 2023, which was relatively stable. The sharp rise in enrollment growth between 2023 and 2024 is likely due to the Medicaid unwinding process that began in April 2023; the Medicaid unwinding led people who were losing their Medicaid coverage due to the end of the COVID-19 Public Health Emergency (PHE) to seek commercial insurance on the Marketplace. Some of this enrollment growth could be due to the expansion of the Colorado Option as a new plan option offered on the Colorado Marketplace. Enrollment in all metal tiers increased from 2023 to 2024. Enrollment in Gold plans increased steadily during the entire study period, whereas Bronze and Silver enrollment declined from 2022 to 2023.

Enrollment in the off-exchange individual market and the small-group market remained stable or decreased slightly. Although enrollment in the on-exchange individual market surged in 2024, enrollment in the individual off-exchange market remained relatively stable from 2021 to 2024, hovering between about 59,000 and 66,000 while enrollment in the small-group market decreased from about 207,000 to 175,000 (Exhibit III.1, middle and right panels). On the off-exchange individual market, enrollment in Bronze plans declined over time, while enrollment in Silver and Gold plans increased. On the

¹⁹ Ortaliza, Jared, Cynthia Cox, and Krutika Amin. “Another Year of Record ACA Marketplace Signups, Driven in Part by Medicaid Unwinding and Enhanced Subsidies.” KFF, January 24, 2024. <https://www.kff.org/affordable-care-act/another-year-of-record-aca-marketplace-signups-driven-in-part-by-medicaid-unwinding-and-enhanced-subsidies/>.

small-group market, enrollment in Bronze and Silver plans declined over time, while enrollment in Gold plans was stable.

Exhibit III.1. Enrollment in the individual and small-group markets overall and by metal tier, 2021–2024



Source: Mathematica analysis of Colorado Division of Insurance filing data.

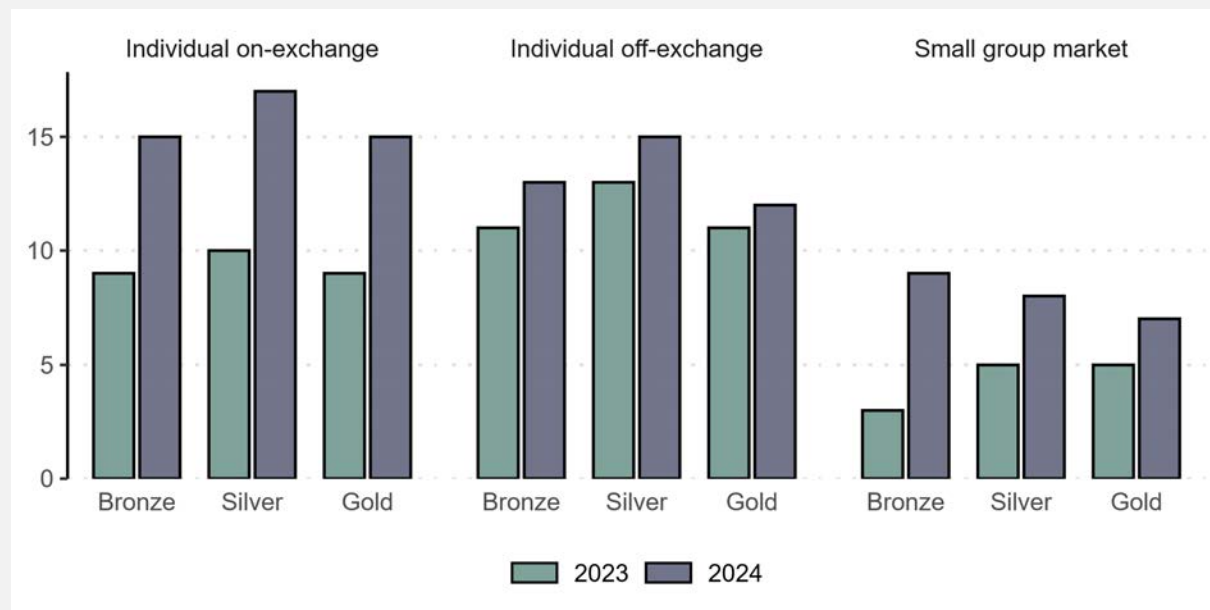
2. Enrollment in Colorado Option plans

Enrollment into Colorado Option plans grew substantially from 2023 to 2024 in all markets, both overall and as a percentage of total enrollment. In Plan Year 2023, the first year of the Colorado Option, overall enrollment in Colorado Option plans was about 24,000 in the individual on-exchange market, 12,000 in the individual off-exchange market, and 160 in the small-group market.²⁰ This corresponded to 15 percent of total enrollment in the individual on-exchange market, 19 percent in the individual off-exchange market, and less than 0.1 percent in the small-group market. In comparison, Washington state’s public option only captured about 1 percent of total enrollment on the exchange in its first year.²¹ In Plan Year 2024, total Colorado Option enrollment increased to about 79,000 (35 percent of total enrollment) in the individual on-exchange market, 15,000 (24 percent) in the individual off-exchange market, and 450 (0.3 percent) in the small-group market. Although the individual off-exchange market started with relatively high Colorado Option enrollment in 2023, the most rapid enrollment growth year over year occurred in the individual on-exchange market. While this analysis does not use detailed 2025 data, total Colorado Option enrollment increased to nearly 133,000 (47 percent of total enrollment) in the individual on-exchange market, 18,000 in the individual off-exchange market, and 850 in the small-group market.

²⁰ These numbers refer to totals over all metal tiers within a market (Exhibit III.3).

²¹ <https://dora.colorado.gov/press-release/approximately-35000-coloradans-chose-the-colorado-option-during-the-2023-open>

Exhibit III.2. Number of Colorado Option plans in the individual and small-group markets by metal tier, 2023 and 2024



Source: Mathematica analysis of Colorado Division of Insurance filing data.

Carriers offered more Colorado Option plans in 2024 than in 2023 across all markets and metal tiers. On the individual on-exchange market, carriers offered 9–10 plans in each metal tier in 2023 and 15–17 in 2024 (Exhibit III.2). On the individual off-exchange market, the number of plans increased from 11–13 to 12–15. Although carriers offered fewer plans on the small-group market, the number of plans increased in each metal tier, with the total number of plans almost doubling.

Absolute and relative enrollment in Colorado Option plans differed by metal tier in all three markets. In the individual on-exchange market, Colorado Option enrollment was concentrated in Silver and Gold plans, with enrollment in Silver Colorado Option plans accounting for 44 percent of all Silver plan enrollment and enrollment in Gold Colorado Option plans accounting for 60 percent of all Gold plan enrollment in 2024 (Exhibit III.3). In the individual off-exchange market, Colorado Option Silver plans accounted for 38 percent of total Silver plan enrollment in 2024, followed by Gold plan enrollment with 24 percent. In contrast, among the few Colorado Option enrollees in the small-group market, in absolute terms, most chose a Gold plan, but in relative terms, most chose a Bronze plan.

Colorado Option enrollment in the small-group market was low; stakeholders cited limited awareness of the plans and affordability concerns. As described above, enrollment in Colorado Option plans was low (fewer than 500 consumers) and accounted for only a small fraction of the small-group market (Exhibit III.3, bottom-right panel). Given these numbers, the Colorado Option likely did not have a significant impact on overall small-group market enrollment.

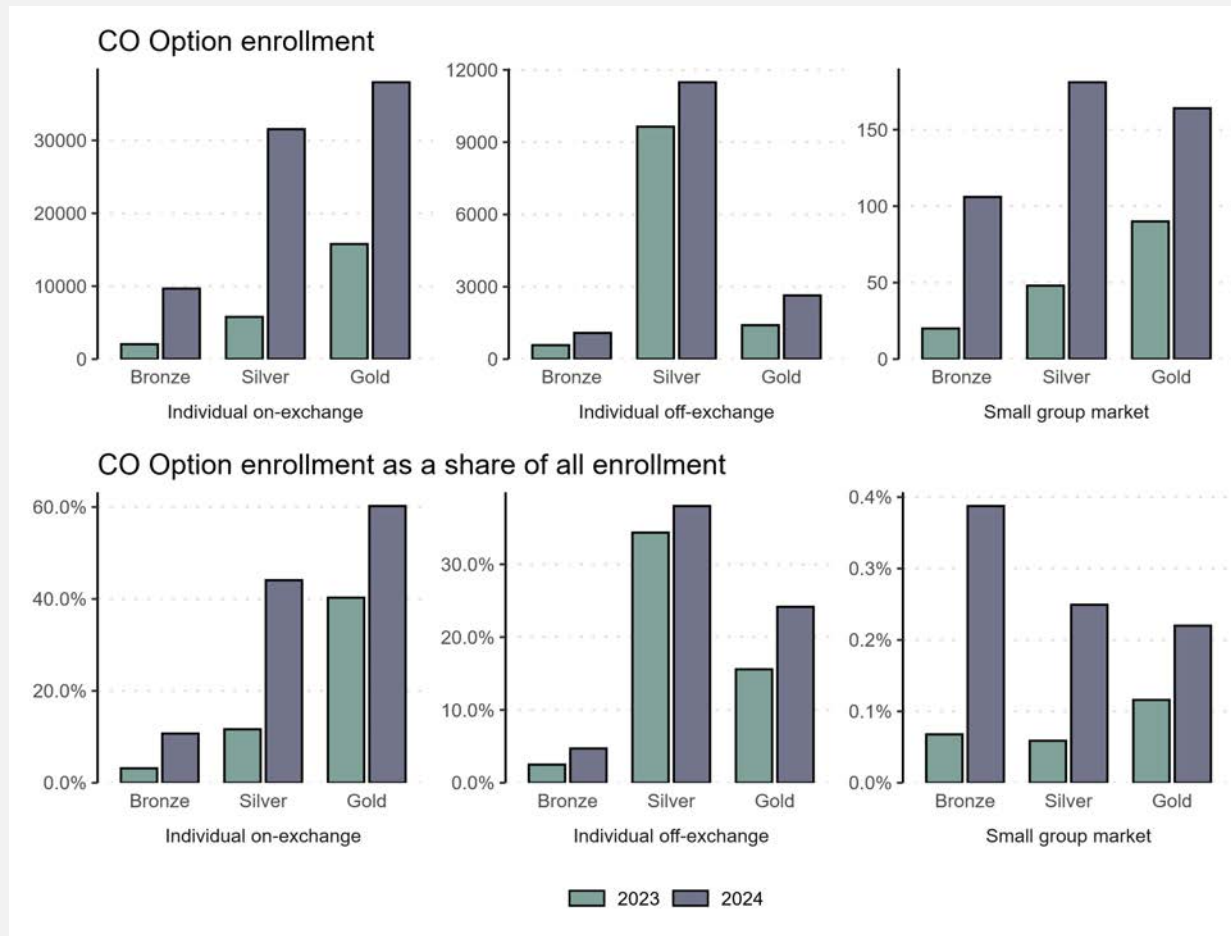
Representatives of the small business community, DOI, and brokers attributed limited uptake in the small-group market to several factors. A representative of the small business community reflected that small businesses were generally unaware of Colorado Option plans and that more outreach is needed

to small businesses. They felt that much of the focus and resources has gone to the individual market. The DOI used small business and broker feedback to undertake a media campaign to promote Colorado Option plans to small businesses in the fall of 2023 and spring of 2024. Accordingly, Colorado Option enrollment in the small-group market increased to 850 in 2025.

Representatives from the small business community reported having to request these plans explicitly from carriers when looking at coverage options, and reported that some brokers were reluctant to offer them. Respondents from DOI and the small business community shared that some insurance companies were limiting brokers' ability to offer Colorado Option plans to employers. This prompted a regulatory response from DOI prohibiting carriers from limiting the number of Colorado Option plans that can be offered to small businesses.

According to a broker representative, small businesses often found Colorado Option plans to include more and richer benefits, which could lead to higher costs than non-Colorado Option plans. This respondent noted that they stopped quoting Colorado Option plans because they were not as popular. Furthermore, a small business representative reported small businesses are increasingly turning to alternative insurance options like individual coverage health reimbursement arrangements, which offer more flexibility. Despite these challenges, the number of Colorado Option plans offered on the small-group market almost doubled between 2023 and 2024 (Exhibit III.2, right panel), potentially indicating growing demand for these plans in the small-group market.

Exhibit III.3. Enrollment in Colorado Option plans in the individual and small-group markets by metal tier, 2023 and 2024



Source: Mathematica analysis of Colorado Division of Insurance filing data.

There was substantial variation in Colorado Option enrollment shares across counties (Exhibit III.4). Colorado Option enrollment as a share of total enrollment in Bronze plans was low across all counties in 2023 and increased in some counties in 2024. This is particularly true for the on-exchange market, where no county had a Colorado Option enrollment share greater than 8 percent in 2023.²² For Silver plans, enrollment in Colorado Option plans as a share of total enrollment was relatively uniform on the individual on-exchange market in both years. On the individual off-exchange market, relative enrollment in Colorado Option Silver plans was higher in the counties in the East and West of the state. Relative enrollment in Colorado Option Gold plans was highest in eastern and southern parts of the state on the individual on-exchange and off-exchange market in both years. However, carriers did not offer Colorado Option Gold plans on the individual off-exchange market in several counties.

Women, younger adults, consumers with low income, and employed consumers were overrepresented among Colorado Option enrollees. Women accounted for 53.5 percent of Colorado

²² Enrollment in the small-group market is not shown due to low overall enrollment.

Option consumers in 2024 but only 51.9 percent of non-Colorado Option consumers (Exhibit III.5).²³ The most notable difference between Colorado Option and non-Colorado Option consumers in terms of their age distribution was in the 55 to 64 age range, who accounted for 26.5 percent of Colorado Option consumers and 30 percent of non-Colorado Option consumers. Conversely, consumers ages 18 to 44 were overrepresented among Colorado Option enrollees. Colorado Option plans seemed to be more attractive to consumers with low income, possibly due to their limited cost sharing and lower premiums. Consumers with income below 250 percent of the FPL accounted for 46 percent of Colorado Option enrollment and 33 percent of non-Colorado Option enrollment. Colorado Option consumers were more likely to be employed than non-Colorado Option consumers (59 versus 55 percent). Differences in race and ethnicity were small, with Hispanic/Latino consumers slightly overrepresented among Colorado Option enrollees (7.1 percent of Colorado Option enrollees and 5.1 percent on non-Colorado Option enrollees were Hispanic). However, about 40 percent of consumers did not indicate their ethnicity when applying for coverage, so this difference should be interpreted with caution. There was no meaningful difference in the racial composition between Colorado Option and non-Colorado Option enrollees. The analysis could not further disaggregate the ethnicity and race data due to the large fractions of unknowns. All differences were highly statistically significant.

²³ Consumer characteristics in 2023 (not shown in this report) were similar to 2024.

Exhibit III.4. Enrollment share in Colorado Option plans in the individual market by metal tier, 2023 and 2024



Source: Mathematica analysis of Colorado Division of Insurance filing data.

Exhibit III.5. Demographic and socioeconomic characteristics of Colorado Option and non-Colorado Option consumers on the individual on-exchange market, 2024

Characteristic	Colorado Option	Non-Colorado Option	<i>p</i> -value ^a
Female	53.5%	51.9%	<0.001
Male	46.5%	48.1%	<0.001
Ages 0–17	11.5%	12.6%	<0.001
Ages 18–25	8.3%	7.5%	<0.001
Ages 26–34	17.8%	13.6%	<0.001

Characteristic	Colorado Option	Non-Colorado Option	p-value ^a
Ages 35–44	17.2%	16.3%	<0.001
Ages 45–54	16.4%	17.5%	<0.001
Ages 55–64	26.5%	30.1%	<0.001
Ages 65+	2.1%	2.2%	<0.001
Unknown age	0.2%	0.2%	<0.001
Household size	2.43	2.58	<0.001
Not employed	41.0%	45.2%	<0.001
Employed	59.0%	54.8%	<0.001
Hispanic/Latino	7.1%	5.1%	<0.001
Not Hispanic/Latino	53.1%	54.6%	<0.001
Unknown ethnicity	39.7%	40.3%	<0.001
White	44.8%	43.5%	<0.001
Black	1.0%	0.8%	<0.001
Asian	4.9%	4.8%	<0.001
American Indian/Alaska Native	0.3%	0.3%	<0.001
English is preferred language	96.8%	98.6%	<0.001
Spanish is preferred language	3.2%	1.4%	<0.001
Income <100% FPL	1.4%	1.1%	<0.001
Income 100–150% FPL	8.2%	5.3%	<0.001
Income 150–200% FPL	19.9%	14.1%	<0.001
Income 200–250% FPL	16.7%	12.2%	<0.001
Income 250–300% FPL	12.3%	13.1%	<0.001
Income 300–350% FPL	9.1%	10.8%	<0.001
Income 350–400% FPL	4.9%	5.9%	<0.001
Income over 400% FPL	16.0%	21.5%	<0.001
Income unknown	11.3%	16.0%	<0.001

Source: Mathematica analysis of Connect for Health Colorado data.

^a p-value for null hypothesis that characteristic is equal for Colorado Option and non-Colorado Option consumers.

FPL = federal poverty level.

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IV. Affordability

This chapter assesses whether the Colorado Option improved health insurance affordability in the individual and small-group markets, including examining its effects on (1) monthly premiums; (2) total and out-of-pocket spending; (3) use of high-value services with first-dollar, predeductible coverage; and (4) hospital reimbursement. This analysis compares health insurance affordability before and after the implementation of the Colorado Option in 2023. Findings are based on an analysis of carrier filing data with the DOI; premium data from C4HCO; and Colorado’s APCD, document review, interviews with key informants, and consumer focus groups.

Key takeaways for affordability

- Colorado Option plans were associated with lower premiums, suggesting early signs of progress toward making health insurance more affordable.
- The Colorado Option reduced annual out-of-pocket spending by about \$220 (15 percent), which further suggests improvements in affordability and highlights that affordability extends beyond monthly premiums.
- Although the Colorado Option had no major effect on the use of high-value services with first-dollar, predeductible coverage overall, it increased the use of prenatal and postpartum services, pointing to targeted gains in access.
- Consumers perceived increasing potential out-of-pocket costs and unpredictable costs for some types of services.▲

A. Premiums

The Colorado Option program was designed to improve health insurance affordability by lowering monthly premiums for health plans in the individual and small-group markets. The Colorado Option legislation established PRR targets for carriers, with the goal of reducing premium costs over time (see Chapter II). Stakeholders that participated in key informant interviews generally agreed Colorado Option plans had some of the lowest premiums in the market. This section assesses premium affordability using DOI filing data, individual premium data from the Marketplace, and findings from interviews and consumer focus groups.

1. Trends in aggregate premiums on the individual and small-group markets

Average premiums on the individual and small-group markets grew between 2021 and 2024, consistent with national trends in health insurance costs.²⁴ We examined whether the introduction of Colorado Option plans slowed overall premium growth after 2023. In general, average premiums for Colorado Option and non-Colorado Option plans combined rose steadily from 2021 to 2024 in the on-exchange and off-exchange individual markets and small-group market (Exhibit IV.1).²⁵ Some of the largest increases in premiums occurred in 2023 or 2024. For example, Silver plan premiums in the

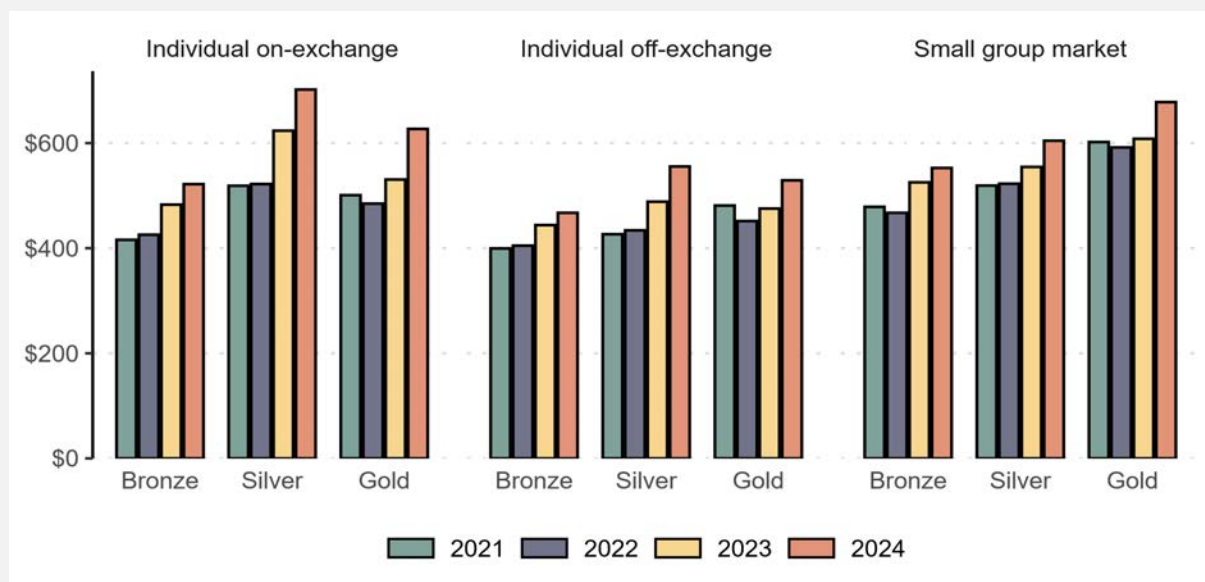
²⁴ The findings in Sections IV.A.1 and IV.A.2 are based on DOI plan filing data, which include the mean premium for each plan, county, and age group as of April 1 of each plan year. We aggregated these premiums to the metal tier level (and separately for Colorado Option and non-Colorado Option plans in Section 2) by calculating weighted mean premiums, where the weights were enrollment in each plan-county-age group cell.

²⁵ In some markets and metal tiers, premiums fell slightly from 2021 to 2022.

individual on-exchange market increased by 19 percent in 2023 and by 13 percent in 2024, after rising by only 0.6 percent in 2022. Similarly, Gold plans increased by 9 percent in 2023 and 18 percent in 2024, whereas premiums fell in 2022 by 3 percent relative to 2021.

Several market dynamics may have contributed to these premium increases. One key factor is Medicaid unwinding,²⁶ which led to coverage transitions and shifts in Marketplace risk pools as Medicaid disenrollments increased. At the same time, the end of the public health emergency brought a rebound in healthcare use, potentially leading to increases in premiums. Finally, expanded federal premium subsidies during this time may have made consumers less sensitive to premium increases, creating less price pressure on carriers.

Exhibit IV.1. Mean premiums in the individual and small-group markets by metal tier, 2021–2024



Source: Mathematica analysis of Colorado Division of Insurance filing data.

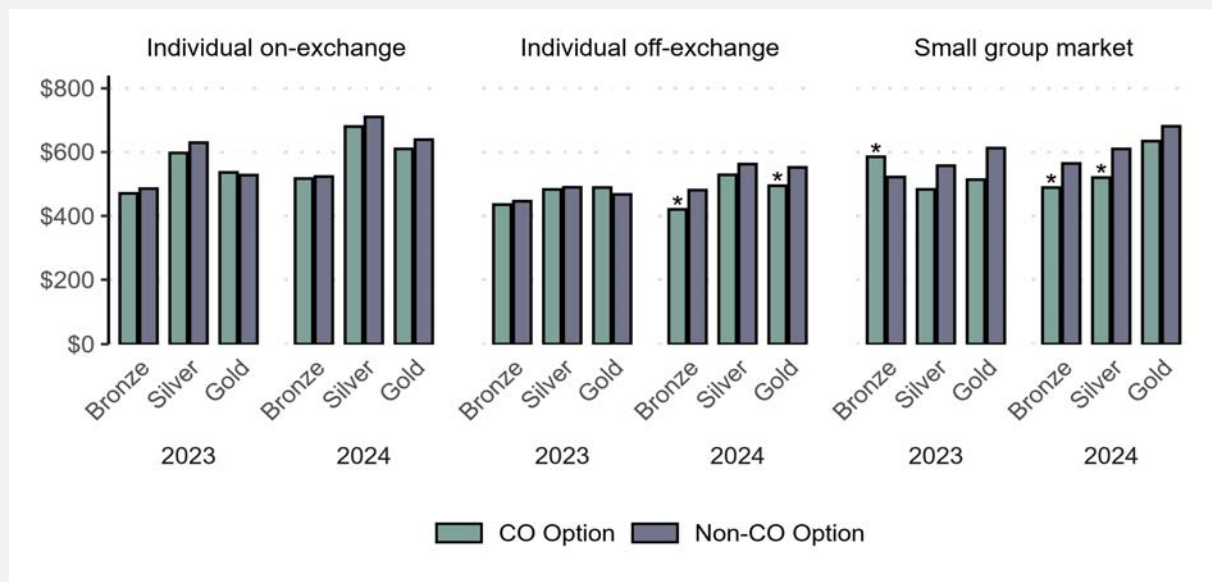
Note: Average premiums represent means weighted by plan enrollment by county and age group.

2. Trends in Colorado Option and non-Colorado Option premiums

Colorado Option plan premiums were generally lower than those of non-Colorado Option plans, and the difference was statistically significant for some market–metal tier combinations. Across all metal tiers, Colorado Option plans had lower average premiums than their non-Colorado Option counterparts in 2024; this also applied for most markets and metal tiers in 2023 (Exhibit IV.2). Although Colorado Option premiums were lower than non-Colorado Option premiums in the on-exchange market in both years (with the exception of Gold premiums in 2023), these differences were not statistically significant.

²⁶ Medicaid unwinding is the process of redetermining eligibility for Medicaid enrollees after the COVID-19 public health emergency continuous coverage requirement ended.

Exhibit IV.2. Colorado Option and non-Colorado Option premiums in the individual and small-group markets by metal tier, 2023–2024



Source: Mathematica analysis of Colorado Division of Insurance filing data.

Notes: Average premiums represent averages weighted by enrollment. Asterisks indicate Colorado Option and non-Colorado Option premiums were significantly different at the 5 percent level.

3. Effects on premiums in the individual on-exchange market

Marketplace consumers who selected Colorado Option plans paid lower premiums than consumers in non-Colorado Option plans.²⁷ We compared mean monthly gross premiums between 2019 and 2025 for individuals who selected Colorado Option plans in 2023 or later to those who did not enroll in a Colorado Option plan during this period. Before the implementation of Colorado Option in 2023, average premiums paid by consumers who eventually enrolled in a Colorado Option plan were slightly lower than that of consumers who never enrolled in a Colorado Option plan, across all three metal tiers (Exhibit IV.3). For example, the average Bronze premium paid between 2019 and 2022 by consumers who later enrolled in a Colorado Option was \$426, compared to \$452 among consumers who never enrolled into a Colorado Option. Consumers who eventually enrolled in a Colorado Option plan may be more price sensitive or may have different characteristics than those who do not enroll in Colorado Option plans (for example, age or location within the state).

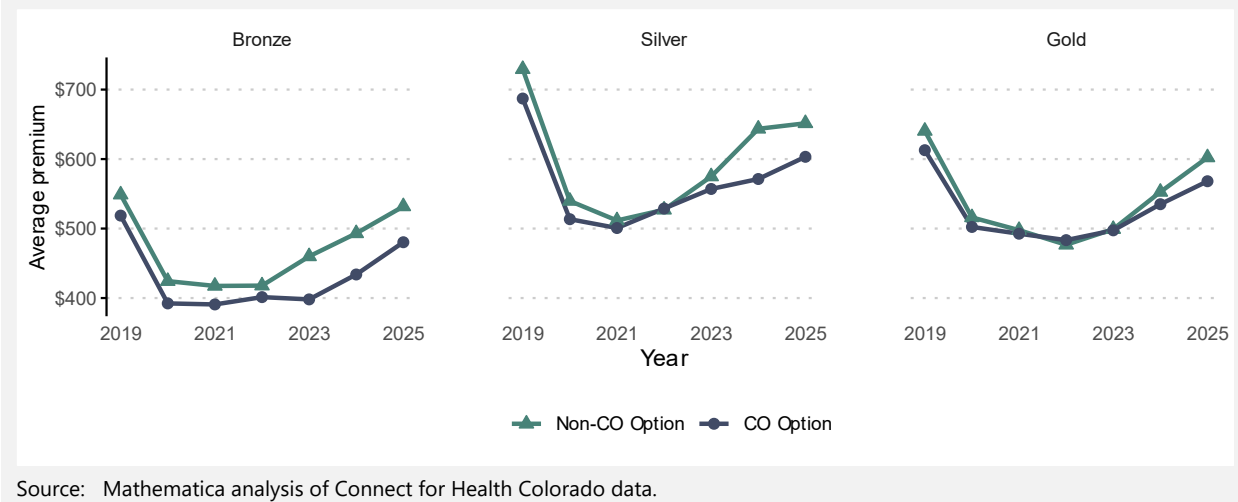
Across both groups, average premiums declined sharply in 2020. This was likely due to the introduction of the Colorado Reinsurance Program in January 2020. Created by HB 19-1168, the goal of the reinsurance

²⁷ The analyses in Section IV.A.3 are based on individual-level data on plan choice and premiums of consumers enrolled in Colorado Option or non-Colorado Option plans in the individual on-exchange market (Connect for Health Colorado). Premiums are gross premiums—that is, before federal and state subsidies are applied.

program was to reduce premiums and geographic variability in health insurance costs by increasing health insurance market stability.²⁸

After the introduction of the Colorado Option in Plan Year 2023, the difference in average premiums paid by the two groups grew, providing suggestive evidence that Colorado Option plans offered a lower-cost alternative to other Marketplace plans. This difference is most pronounced for Bronze and Silver plans. For example, the difference in Bronze premiums in 2022 was \$17; this difference increased to \$52 by 2025. Similarly, the difference in Silver premiums in 2022 was \$2 and increased to \$48 in 2025. For consumers with Gold plans, the difference between those enrolled in Colorado Option plans and non-Colorado Option plans is smaller but increasing over time. The lower premiums paid by consumers enrolled in Colorado Option plans, particularly those with Bronze and Silver plans, aligns with the Colorado Option’s intended goal of increasing affordability through standardized plans subject to PRR targets.

Exhibit IV.3. Trends in mean monthly gross premiums among Marketplace consumers who enrolled in Colorado Option plans post-2023 implementation versus non-Colorado Option consumers, 2019–2025



Source: Mathematica analysis of Connect for Health Colorado data.

²⁸ The reinsurance program reimburses carriers for a portion of high-cost claims above a specified attachment point, which allows carriers to lower premiums because they shoulder less risk. After all claims have been submitted at the end of the calendar year, annual reinsurance amounts are calculated and paid to each carrier in the individual market.

The difference-in-differences analysis showed that consumers who chose Colorado Option plans experienced a small but meaningful decrease in average monthly premiums relative to a comparison group who did not enroll in Colorado Option plans. Using the methodology described in Exhibit IV.4, we estimated that premium reductions varied by metal tier, with the largest decrease observed among consumers in Bronze plans (Exhibit IV.5). Specifically, consumers who selected Colorado Option plans paid, on average, \$33 less per month for Bronze plans, \$18 less for Silver plans, and \$14 less for Gold plans compared to their matched counterparts who did not enroll in Colorado Option plans. Relative to average premiums for non-Colorado Option consumers in 2022, these effects correspond to a decrease of 3.4 to 7.8 percent.

Exhibit IV.4. Difference-in-difference analysis

Because consumers who enrolled in Colorado Option plans may have different characteristics than consumers who never enrolled in a Colorado Option plan, the differences in premiums shown in Exhibit IV.5 could be due to those differences. To isolate the Colorado Option program’s impact on premiums, we combined propensity score weighting with a difference-in-differences approach (see Appendix D for methodological details). This controls for underlying differences in consumer characteristics and time-invariant factors that might affect premiums.

Exhibit IV.5. Difference-in-differences estimates for the effect of the Colorado Option on Marketplace monthly gross premiums by metal tier, 2019–2025

	Bronze	Silver	Gold
Difference-in-differences treatment effect	-\$32.85*** (\$1.13)	-\$18.01*** (\$1.60)	-\$14.34*** (\$2.60)
Plan Year 2022 mean for non-Colorado Option consumers	\$421.16	\$530.14	\$475.83

Source: Mathematica analysis of Connect for Health Colorado data.

Note: Standard errors clustered on the consumer level are in parentheses.

***Significantly different from zero at the .01 level, two-tailed test.

4. Consumer perceptions of premiums

Some consumers described lower premiums and improved affordability under Colorado Option plans. One focus group participant reported that their monthly premium dropped significantly after transitioning from employer-sponsored insurance (due to job loss) to a Colorado Option plan with premium subsidy support. This consumer noted that their current plan was substantially more affordable than what they had previously paid through their employer. Another consumer who transitioned out of their parents’ health insurance plan said, “I’m paying way less than I originally was [through my parents plan].”

Given consumers’ focus on affordability when selecting a plan (as described in Section III.B), consumers who select Colorado Option plans may find these plans to be more affordable than other plans. However, consumers did not perceive healthcare to become more affordable over time, which is consistent with the overall increasing cost of healthcare independent of the Colorado Option.

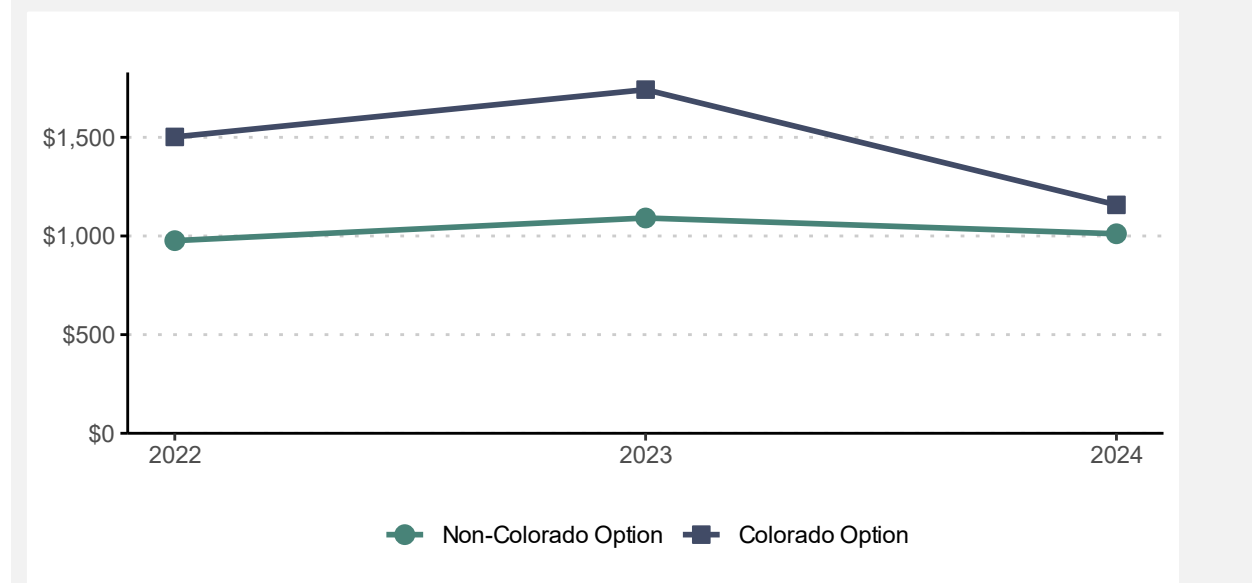
B. Out-of-pocket spending

Aside from improving affordability by lowering premiums, the Colorado Option is also intended to make healthcare more affordable by lowering out-of-pocket spending. We used data from Colorado’s APCD to quantitatively assess how the introduction of the Colorado Option affected out-of-pocket spending and analyzed qualitative data from focus groups on consumers’ perception of out-of-pocket spending.

1. Effects on out-of-pocket spending

In 2024, out-of-pocket spending declined more for consumers enrolled in Colorado Option plans than for non-Colorado Option enrollees. We compared out-of-pocket spending between 2022 and 2024 of consumers who enrolled into a Colorado Option plan after its introduction in 2023 to those who never enrolled in a Colorado Option plan.²⁹ Prior to the introduction of the Colorado Option, Colorado Option enrollees had higher out-of-pocket spending; their mean spending was about \$1,500 compared to \$980 for non-Colorado Option consumers (Exhibit IV.6). Upon introduction of the Colorado Option in 2023, out-of-pocket spending increased for both groups, to \$1,740 for Colorado Option enrollees and \$1,090 for non-Colorado Option enrollees in 2023. There was a marked decline in out-of-pocket spending for Colorado Option enrollees in 2024, to \$1,160, while non-Colorado Option spending was stable. This relative decline in out-of-pocket spending is suggestive of the Colorado Option successfully reducing enrollee out-of-pocket costs.

Exhibit IV.6. Mean out-of-pocket spending for Colorado Option and non-Colorado Option enrollees, 2022–2024



Source: Mathematica analysis of data from the Colorado all-payer claims database.

²⁹ We defined out-of-pocket spending as the total amount consumers paid for their healthcare across all of their claims in a calendar year.

The introduction of the Colorado Option resulted in a 15 percent decline in out-of-pocket spending per year relative to 2022 (Exhibit IV.7). Using the difference-in-differences approach described in Exhibit IV.4 comparing Colorado Option and non-Colorado Option consumers, we estimated that consumers who enrolled in Colorado Option plans spent about \$222 less per year on out-of-pocket costs in 2023 and 2024 compared to similar non-Colorado Option enrollees. The estimated decline persisted after adjusting for differences in enrollee characteristics, suggesting that the Colorado Option contributed to lower out-of-pocket costs and improved affordability.

Exhibit IV.7. Difference-in-differences estimate for the effect of the Colorado Option on out-of-pocket spending, 2022–2024

	Out-of-pocket spending
Difference-in-differences treatment effect	-\$222.49*** (\$29.77)
Baseline (2022) mean	\$1,502.10

Source: Mathematica analysis of data from the Colorado all-payer claims database.

Note: Standard errors clustered on the consumer level are in parentheses.

***Significantly different from zero at the .01 level, two-tailed test.

2. Consumer perceptions of out-of-pocket costs

When consumers with Colorado Option plans thought about health care affordability, they considered potential out-of-pocket spending rather than their actual out-of-pocket costs. In addition to premiums (Section IV.A.4), consumers considered potential out-of-pocket spending (deductibles, copays, coinsurance, and out-of-pocket maximums) when thinking about healthcare affordability. Although a few consumers (particularly those transitioning from employer-sponsored insurance to subsidized Marketplace coverage or those transitioning out of their parents' health plan) reported lower overall spending since enrolling in their Colorado Option plan, most consumers perceived increases in their out-of-pocket spending over time. However, this is because when assessing their out-of-pocket spending, these consumers focused on potential out-of-pocket spending based on changes in their deductible and out-of-pocket maximum over time, but most did not reflect on the change in actual out-of-pocket spending from one year to the next as they transitioned from a non-Colorado Option plan to a Colorado Option plan.

Consumers expressed more confidence in accessing healthcare when their out-of-pocket responsibility was clearly defined. Most focus group participants felt comfortable accessing services with \$0 copays (such as the high-value services covered under the Colorado Option; Section IV.C) or fixed copay amounts because they knew what they would be expected to pay. However, most Colorado Option consumers reported uncertainty about the costs of services not fully covered, particularly for services subject to coinsurance or when using services before they reached their deductible. These concerns are not unique to the Colorado Option and reflect issues that any consumer has when they are enrolled in a health insurance plan that requires a deductible or coinsurance. These sentiments about the unpredictability of costs were similar across consumers with and without Colorado Option plans.

Laboratory services were a frequent source of unpredictability in out-of-pocket spending. Focus group participants, in both the Colorado Option and non-Colorado Option groups, shared numerous examples

of inconsistent lab charges, often dependent on how providers coded the service. Several consumers said they had ongoing billing disputes with carriers or providers over lab services and that these experiences led them to delay or avoid future lab services.

C. Use of high-value services with first-dollar coverage

As part of the Colorado Option's effort to make healthcare more affordable, Colorado Option plans must cover certain high-value healthcare services at no cost to consumers, even before reaching their deductible (see list of services in Exhibit II.2). To assess the impact of this policy, we analyzed APCD data on service use and asked focus group participants enrolled in Colorado Option plans whether they were aware of the zero-dollar, predeductible coverage.

1. Effects on the use of zero-dollar services

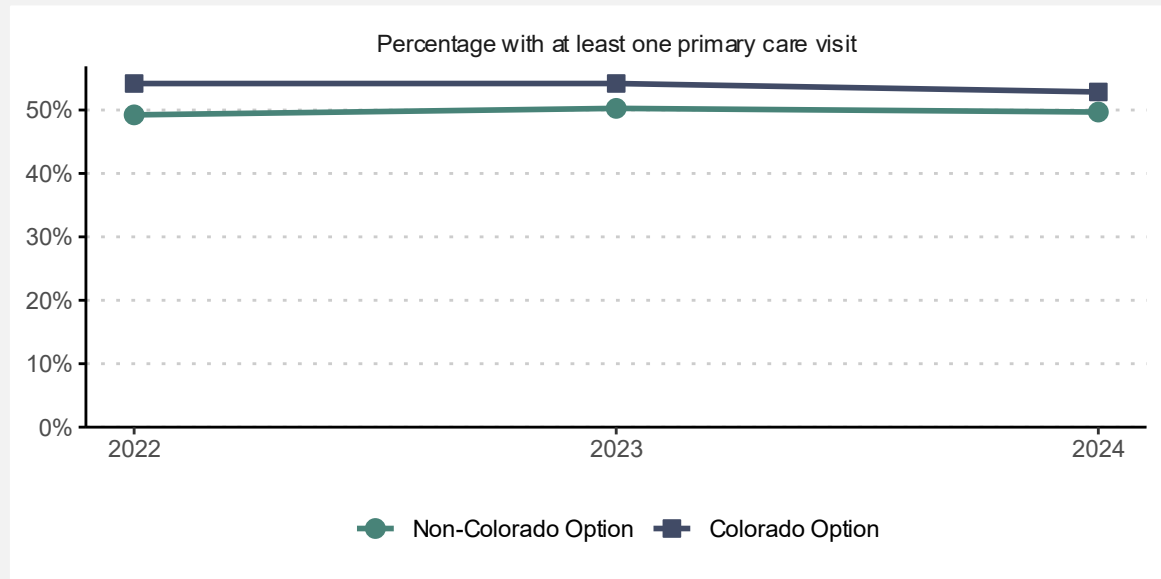
Although the differences were not statistically significant, Colorado Option enrollees were more likely to use most high-value services with first-dollar, predeductible coverage; these consumers also had higher rates of service use before the introduction of the Colorado Option. We compared service use between 2022 and 2024 for consumers enrolled in Colorado Option plans after 2023 and those who never enrolled in a Colorado Option plan.³⁰ Colorado Option and non-Colorado Option enrollees had similar levels of primary care and preventive care prior to the introduction of the Colorado Option. In 2022, 54 percent of future Colorado Option enrollees had a primary care visit, compared to 49 percent among consumers who did not enroll in a Colorado Option plan. These rates stayed about the same after the introduction of the Colorado Option, with a slight decline among Colorado Option enrollees in 2024 (Exhibit IV.8). Rates of preventive care use were similar among both groups of consumers before and after the Colorado Option was introduced, with 70 to 72 percent having at least one visit in this category (Exhibit IV.9). All ACA-compliant plans (both Colorado Option and non-Colorado Option plans) cover preventive services at \$0 and before the deductible, which could explain the similar rates of preventive care use.

Rates of prenatal and postpartum visits showed a different pattern.³¹ Both groups had low use in 2022, at about 1 percent, but Colorado Option enrollees' rates increased by about 30 percent in 2023, before converging with non-enrollees again in 2024 (Exhibit IV.10). Rates of at least one behavioral health visit, which includes services for mental health and substance use disorder, were also similar between the two groups in 2022 and 2023, at about 10 percent, with a small relative increase in 2024 to 13 percent among Colorado Option consumers and 12 percent among non-Colorado Option consumers (Exhibit IV.11).

³⁰ Because there is no official list of procedures that fall under each category of services with first-dollar, predeductible coverage, we defined these categories using Healthcare Common Procedure Coding System codes that reflect primary, preventive, prenatal and postpartum, mental health and substance use disorder services.

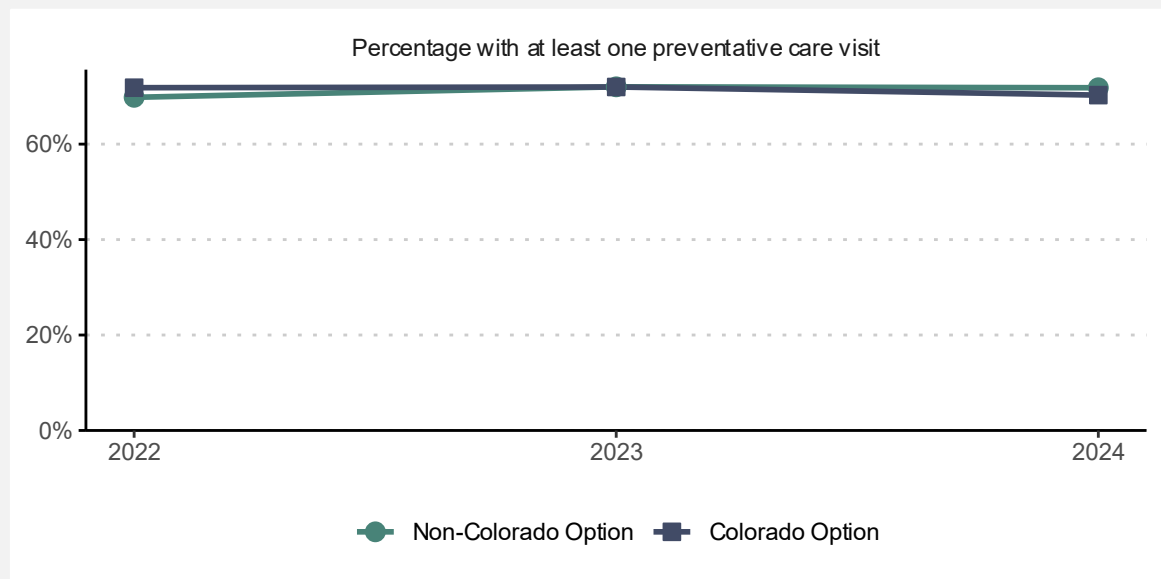
³¹ We did not restrict the sample of consumers to those who were pregnant in a calendar year.

Exhibit IV.8. Use of primary care services by Colorado Option and non-Colorado Option enrollees, 2022–2024



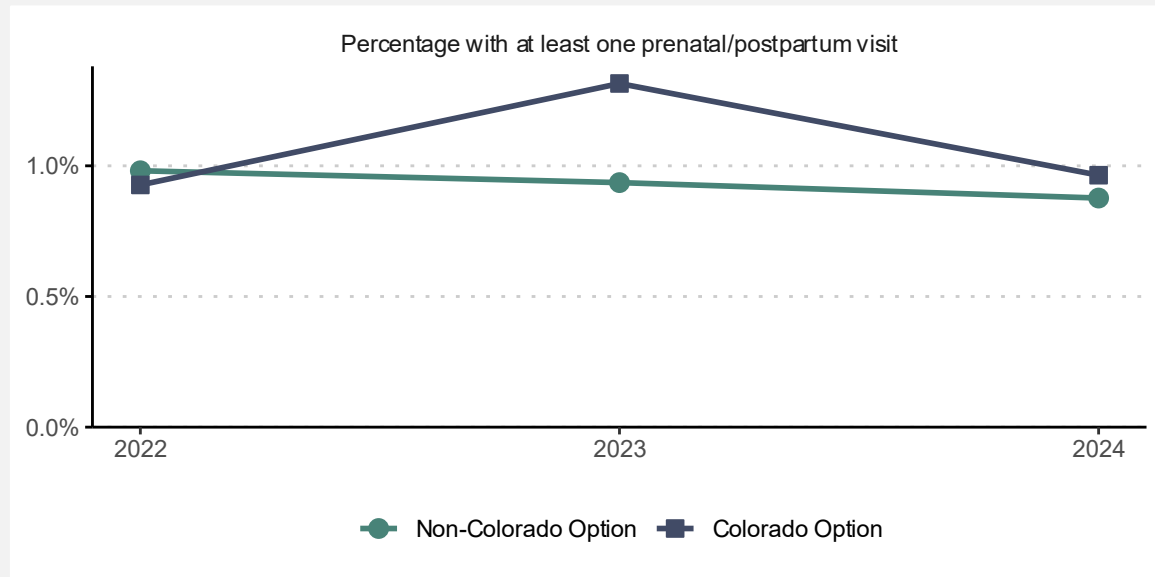
Source: Mathematica analysis of data from the Colorado all-payer claims database.

Exhibit IV.9. Use of preventive care services by Colorado Option and non-Colorado Option enrollees, 2022–2024



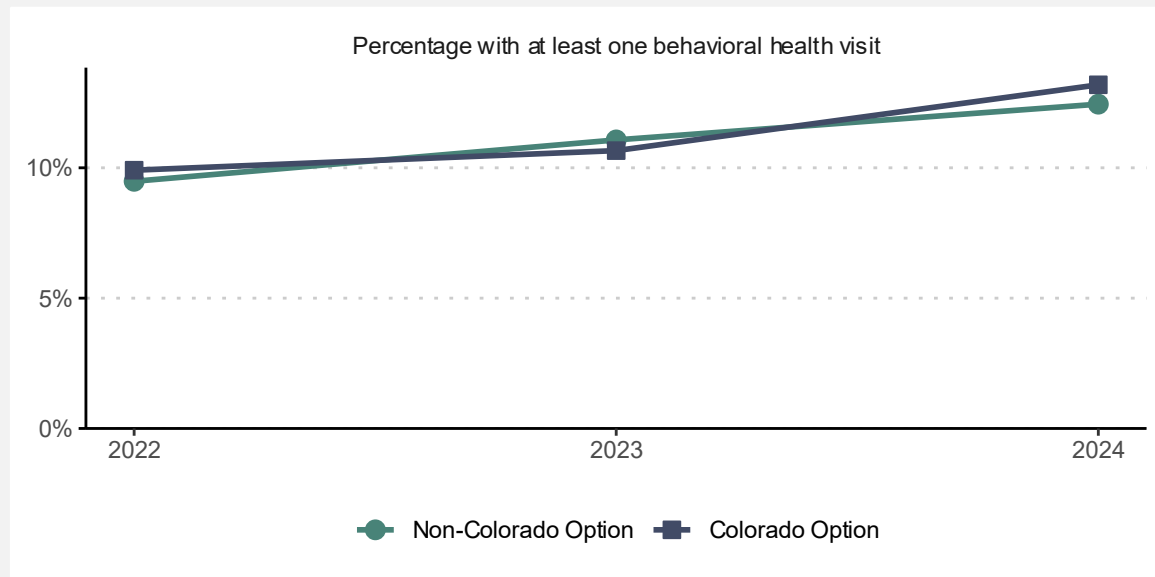
Source: Mathematica analysis of data from the Colorado all-payer claims database.

Exhibit IV.10. Use of prenatal and postpartum care services by Colorado Option and non-Colorado Option enrollees, 2022–2024



Source: Mathematica analysis of data from the Colorado all-payer claims database.

Exhibit IV.11. Use of behavioral healthcare services by Colorado Option and non-Colorado Option enrollees, 2022–2024



Source: Mathematica analysis of data from the Colorado all-payer claims database.

The Colorado Option had small and mixed effects on the use of high-value services with zero-dollar, predeductible coverage. Using the approach described in Exhibit IV.4 to account for differences in consumer characteristics, we estimated the effect of the Colorado Option on the use of services covered at zero-dollar predeductible. These estimated effects were small and negative for having any primary and preventive visits and positive for any prenatal and postpartum and behavioral health visits

(although the latter effect was not statistically significant) (Exhibit IV.12). While the zero-dollar coverage under the Colorado Option is expected to increase use of these services, the negative effects could be due to the fact that this analysis had to approximate the list of services included in each category, in the absence of an official code list.

Exhibit IV.12. Difference-in-differences estimates for the effect of the Colorado Option on use of any zero-dollar, predeductible services

	Primary care	Preventive care	Prenatal/ postpartum	Behavioral health
Difference-in-differences effect	-0.015*** (0.005)	-0.026*** (0.005)	0.002** (0.001)	0.002 (0.003)
Baseline (2022) mean	0.54	0.72	0.01	0.10

Source: Mathematica analysis of data from the Colorado all-payer claims database.

Note: Standard errors clustered on the consumer level are in parentheses.

** Significantly different from zero at the .05 level, two-tailed test.

*** Significantly different from zero at the .01 level, two-tailed test.

2. Consumer awareness and use of zero-dollar services

Most consumers enrolled in Colorado Option plans reported knowing where to find benefit information and were aware of which services had a \$0 copay.

All focus group participants who were enrolled in a Colorado Option plan reported that they were aware of which services were covered with a \$0 copay. Consumers often pointed to the plan website, broker-provided PDF documents, and carrier customer services phone lines as their main source to confirm benefit information. Most consumers also reported using the \$0 copay benefits, such as primary care and preventive services. One Colorado Option consumer specifically mentioned that diabetic supplies previously not covered under their old plan were now available at no cost under their current Colorado Option plan. Consumers remained cautious about using services not included under the first-dollar, predeductible coverage.

D. Hospital reimbursement

To achieve the Colorado Option’s PRR requirements, carriers must negotiate with healthcare providers and hospitals to lower reimbursement rates. If negotiations do not yield sufficient premium reductions, carriers and providers may enter a public hearing process during which the Commissioner of Insurance can set reimbursement rates between a carrier and a hospital/healthcare provider for Colorado Option plans. This section assesses the effectiveness of the public hearing process by analyzing qualitative data from key informant interviews and hospital claims from Colorado’s APCD.

1. Perceptions of the public hearing process

The potential for public hearings has been an effective tool for bringing carriers and providers to the negotiating table to lower reimbursement rates.

As described in Section II.C, if carriers do not demonstrate compliance with the Colorado Option PRR targets, this could trigger the public hearing process. The public hearings as an accountability mechanism began for Plan Year 2024 with carriers submitting Premium Rate Reduction data for the DOI’s review on March 1, 2023. Stakeholders view public

hearings as an effective accountability mechanism, ensuring that carriers and providers work together to lower reimbursement rates.

Although no public hearings have been conducted to date, the potential of being called into a public hearing has motivated hospitals and carriers to work together to reduce reimbursement rates. After the March 1 filing date, DOI also worked with carriers and hospitals to negotiate lower reimbursement rates prior to scheduling a public hearing. One respondent noted that the possibility of a public hearing, and the actions taken to avoid it, helped save resources, limit administrative burden, and still achieve the intended outcome of lowering costs.

2. Hospital reimbursement analysis

As described in Section II.C, the Commissioner has vacated all the adjudicatory public hearings so far, but DOI has still initiated the process with some carriers and hospitals to lower reimbursement rates. DOI initiated the public hearing process for Plan Year 2024, leading to negotiated rates for 26 carrier–hospital pairs.³² To assess how the public hearing process affected hospital rates, we used inpatient claims data from the Colorado APCD for Colorado Option and non-Colorado Option enrollees to compare the daily rates for inpatient stays in 2023 and 2024 in carrier–hospital pairs that went through the public hearing process for Plan Year 2024 versus carrier–hospital pairs that did not go through the public hearing process.³³ We used 2023 as the baseline year because DOI did not have the authority to initiate a public hearing process for that plan year. Specifically, we calculated the median daily rate for inpatient stays in both groups and separately for the two years.

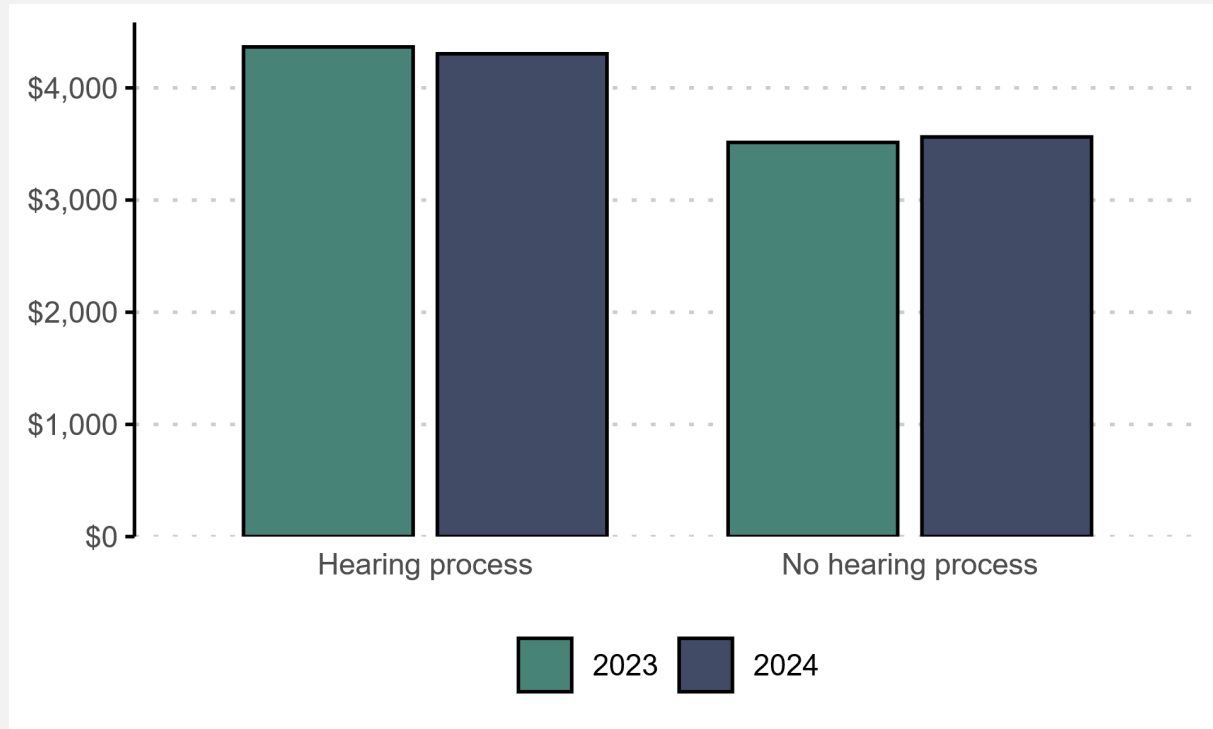
The public hearing process for Plan Year 2024 may have had a small favorable effect on daily hospital rates. From 2023 to 2024, the median daily rate declined from \$4,365 to \$4,304 for carrier–hospital pairs that went through the public hearing process for Plan Year 2024, and the median daily rate increased from \$3,514 to \$3,563 for carrier–hospital pairs that did not (Exhibit IV.13). The differences equal about 1.4 percent of the respective baseline rate, so they are not economically significant and could be due to noise. However, this result suggests that the hospital reimbursement process may have had its intended effect of lowering hospital reimbursement rates.

The average daily rate was higher for carrier–hospital pairs that went through the public hearing process both before (2023) and after (2024) the public hearing process, indicating that these hospitals provided more costly care. Because the purpose of the public hearing process is to reduce healthcare costs to allow carriers to meet PRR requirements, this finding aligns with Colorado Option’s intention. Finally, the fact that carrier–hospital pairs that did not go through the public hearing process had lower daily rates supports the qualitative evidence discussed above—namely that the public hearing process provided an incentive to negotiate lower rates before the filing deadline.

³² For five of these pairings, the negotiated rates varied across provider networks. However, we did not observe networks in claims data, so we included all claims from the corresponding carrier–hospital pairs.

³³ We calculated daily rates by dividing the allowed amount for each inpatient stay by the length of stay, which we calculated from dates of admission and discharge.

Exhibit IV.13. Median daily reimbursement rates for inpatient stays by participation in the hearing process for plan year 2023, 2023 and 2024



Source: Mathematica analysis of data from the Colorado all-payer claims database.

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Appendix

Data Collection and Analysis

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A. Independent review board and study materials

On February 7, 2025, Health Media Lab Independent Review Board (IRB) Research & Ethics approved our qualitative study materials, including recruitment emails, informed consent language, and protocol questions. Once we received IRB approval, we created distinct interview and focus group protocols for each respondent group to ensure focused data collection.

B. Qualitative data collection

1. Document review

To inform our understanding of Colorado Option implementation, we reviewed materials that were publicly available or provided by the Colorado Division of Insurance (DOI). This included regulations and bulletins related to the Colorado Option, premium rate reduction filing materials, advisory board meeting materials, stakeholder meeting materials, materials on the Connect for Health Colorado (C4HCO) website, and other publicly available reports and informational materials. We developed an Excel database to organize relevant findings from the document review. The findings from this review helped to answer implementation research questions and inform our qualitative data collection and analysis activities.

2. Key informant interviews

a. Key informant selection

From February through March 2025, we conducted 19 60-minute virtual semi-structured telephone interviews with 24 key informants from across the state of Colorado. We worked collaboratively with DOI staff to develop the initial list of key informants for interviews and to identify replacements when needed. Exhibit A.1 describes the types of respondents with whom we spoke.

Exhibit A.1. Key informant interviews by respondent type

Respondent type	Number of interviews	Number of respondents
DOI staff	6	6
Advocates	2	2
Connect for Health Colorado	1	1
State legislators	2	2
Insurance carriers	3	8
Brokers and assisters	2	2
Health care providers	3	3
Total	19	24

DOI = Division of Insurance

b. Key informant recruitment

We began recruiting respondents via email on February 24. We used two distinct recruiting methods based on our relationships with potential key informants.

1. We recruited several participants we already knew and for whom we had contact information. We scheduled interviews with these participants directly. For organizations and individuals not affiliated with the government, we offered a \$75 gift card incentive to encourage participation.
2. For respondents with whom DOI staff had a relationship but Mathematica did not, we utilized a “warm handoff” approach, which involved a DOI staff member introducing Mathematica staff to respondents via email. We provided recruitment language for DOI staff to use that requested the individual’s participation in the study. Within 24 hours of DOI staff’s initial email, Mathematica staff followed up to schedule an interview with the respondent. We leveraged DOI staff’s existing relationships with these colleagues to get their buy-in on the study and encourage them to participate in interviews. We offered a \$75 gift card incentive to individuals not affiliated with the government.

Recruitment emails for both groups included a description of the study and asked for the participant’s availability. Once a respondent agreed to participate and shared their availability, we scheduled the interview and sent an email invitation that included the confirmed date, time, WebEx log-in information, and a copy of the informed consent that we later reviewed at the start of each call. If a respondent did not reply to an initial email and a follow-up, we reached out a third time by phone, if a number was available, otherwise by email. If a respondent was unreachable after these three attempts, we moved on to alternate respondents as appropriate.

c. Key informant data collection

An experienced interviewer conducted each interview and took high-level notes throughout. Before interviews began, we ensured that all team members understood the interview protocols, the topics to cover, the research questions, and the purpose of the data collection.

Prior to each interview, the interviewer customized a protocol for the respondent. Interview questions were organized according to four topics: (1) program design and processes, (2) outreach and enrollment activities, (3) consumer awareness and experiences, and (4) lessons learned. Interviewers followed the structure of the interview guide closely to ensure we obtained the most important content from all respondents within the time allotted.

The qualitative team met regularly while fielding interviews to discuss issues and comments as they arose. These procedures helped ensure the data collected from interviews were as consistent as possible across interviewers. After each call, the interview recordings were professionally transcribed by an external firm and securely delivered to Mathematica. A team member reviewed all transcripts for accuracy and clarity.

3. Consumer focus groups

a. Overview

We conducted two 90-minute virtual focus groups with 16 consumers from across Colorado in June 2025. These consumers had all purchased health insurance through the individual Marketplace for Plan Years 2023 to 2025 or 2024 to 2025.

To identify and recruit focus group participants, Mathematica worked with C4HCO to obtain a list of consumers who had indicated in a recent C4HCO-fielded survey that they were interested in participating

in a focus group. The list identified whether consumers had enrolled in a Colorado Option plan in 2023, 2024, and/or 2025, along with their contact information.

Consumers were assigned to one of the two consumer categories: (1) enrolled in a Colorado Option plan from Plan Year 2023-2025 or 2024-2025 or (2) eligible for a Colorado Option plan (that is, they lived in Colorado and purchased health insurance on the Marketplace) but never enrolled in 2023, 2024, or 2025.

Exhibit A.2. Focus groups by respondent type

Consumer category	Total number of consumers
Enrolled in a Colorado Option plan 2023–2025 or 2024–2025	9
Not enrolled in a Colorado Option plan 2023–2025 (but enrolled through the Marketplace)	7
Total	16

b. Consumer recruitment

Mathematica’s Survey Operations Center (SOC) staff was trained to help with recruitment, including screening and scheduling participants for a focus group. Recruitment calls were conducted using a recruitment protocol that included the following topics: (1) study background, including information on the \$100 gift card incentive and (2) focus group scheduling. Once a consumer agreed to participate, they were scheduled for a focus group based on their Colorado Option plan enrollment status and availability. Immediately after the screening call, participants received an email or text message, based on their preference, confirming focus group date and time information. Additionally, participants received a reminder prior to the scheduled interview. Recruitment communications, including emails, text messages, phone calls, and calendar reminders, were conducted in English.

c. Focus group data collection

Each focus group was staffed by three qualitative team members: one primary facilitator, one note-taker, and one to help troubleshoot technology challenges. As with key informant interviews, the qualitative team ensured all team members understood the focus group protocols and the topics to cover, the research questions, and the purpose of the data collection. Two separate focus group protocols were customized to meet the experiences of the consumer categories described above. Interview questions for each of the two consumer groups were organized according to the following five topics: (1) health insurance plan awareness, (2) enrollment, (3) selecting a health plan, (4) understanding benefits, and (5) using coverage. Facilitators closely followed the structure of the appropriate focus group protocol for the given consumer group. Protocols were designed to ensure the facilitators obtained the most important content from all respondents within the time allotted for each focus group. The qualitative team met regularly while fielding focus groups to discuss issues and comments as they arose. These procedures helped to ensure the data collected from these focus groups were as consistent as possible across groups. After each call, the focus group recordings were professionally transcribed by an external firm and securely delivered to Mathematica. A team member reviewed all transcriptions for accuracy and clarity.

4. Qualitative coding and data analysis

Mathematica used insights from the interviews and focus groups to develop a coding framework that captured the main topics and themes that emerged during data collection. For each code, we developed

definitions and examples of what data to categorize in that code. Using NVivo (for the interviews) and Excel (for the focus groups), we applied the coding framework to the transcripts to organize the data by code. Members of the Mathematica team who had experience with qualitative data analysis were trained on the coding framework to ensure they systematically and consistently applied the codes. We then pulled queries for each code that included relevant data across all transcripts so we could identify themes and findings for each topic area. Using these queries, we created analytic statements to summarize the findings.

C. Quantitative data sources

1. Connect for Health Colorado enrollment and premium data

Connect for Health Colorado (C4HCO) was the source of enrollment and premium information on people who apply for and enroll in individual marketplace (on-exchange) coverage. We identified consumers who enrolled in Colorado Option plans versus other plans using a list of Health Insurance Oversight System (HIOS) plan IDs provided by DOI. We also obtained premium data from C4HCO. Furthermore, we assessed the health equity implications of the Colorado Option by examining enrollment and premiums by gender, race/ethnicity, and language spoken. Exhibit A.3 shows the variables in the C4HCO data we used.

Exhibit A.3. Description of C4HCO enrollment and premium data

Data variable	Data definition
Plan year	12-month period during which a health plan provides coverage for health benefits
Gender	Male, female, or unknown
Age category	Calculated based on January 1 of the plan year: birth–17, 18–25, 26–34, 35–44, 45–54, 55–64, 65+
Race	Race data from eligibility application
Ethnicity	Ethnicity data from eligibility application
Preferred language	Preferred language as indicated by member
Household size	Number of people from the eligibility application who are in the same household
Rating county	Rating county based on a member's enrollment; this is not based on the member's eligibility application
Rating area	Region of the state used for rating rules
Employment flag	Yes (Y) or no (N); if Y, member indicated they were employed on the eligibility application
Federal poverty level category	Categories: <100%, ≥100% to ≤150%, >150% to ≤200%, >200% to ≤250%, >250% to ≤300%, >300% to ≤350%, >350% to ≤400%, >400%, unknown
Qualified health plan eligible	Yes (Y) or no (N); reflects whether the eligibility determination allows the member to shop for a qualified health plan on C4HCO
Member submission date	Submission date at the member level; defines when the member submitted application for coverage
Date of last eligibility determination	Last date a member was determined eligible for the advance premium tax credit (APTC)
Policy start date	Coverage start date at the member level; defines the span of coverage

Data variable	Data definition
Policy end date	Coverage end date at the member level; defines the span of coverage
Financial start date	The financial start date at the member level; this might result in additional rows for the member because there are different financial periods under the same policy if the member's eligibility changed midyear
Financial end date	The financial end date at the member level; this might result in additional rows for the member because there are different financial periods under the same policy if the member's eligibility changed midyear
Enrollment flag	Yes (Y) or no (N); reflects whether the member is enrolled in a plan
Effectuated flag	Yes (Y) or no (N); reflects whether the coverage span was ever effectuated
Broker assisted	Yes (Y) or no (N); reflects whether the account authorized a broker to help them complete eligibility and enroll
Assistance site	Yes (Y) or no (N); reflects whether the account authorized someone at an assistance site to help them complete eligibility and enroll
Issuer ID	Five-digit unique issuer ID
Issuer name	Name of issuer
HIOS plan ID	Unique ID for the medical plan; format will be 17 digits, with the last two after the dash indicating the cost-sharing reduction level (for example, 31070CO0010066-03)
Plan type	Health maintenance organization, preferred provider organization, exclusive provider organization
Level of coverage	Catastrophic, bronze, silver, gold, platinum
Member premium amount	Gross monthly premium for each member during the plan year
Eligible APTC amount	Amount of APTC the household was awarded based on the application
Member applied APTC amount	Amount of APTC applied monthly at the member level toward the premium
Net premium amount	Monthly amount the member is responsible for paying the issuer for the premium (the premium amount minus the applied APTC amount)
Tobacco usage	Yes (Y) or no (N); reflects whether the member uses tobacco

APTC = advance premium tax credit; HIOS = Health Insurance Oversight System.

2. DOI enrollment and premium data for off-exchange and small-group plans

DOI rate filing data were our source of information on the number of CO Option plans in each market: individual on-exchange, individual off-exchange, and small-group plans. We also used this data source to obtain data on enrollment and premiums for people enrolled in off-exchange and small-group plans. We identified people who enroll in Colorado Option plans versus in other plans, using data for Plan Years 2021–2025. Exhibit A.4 shows the variables we used.

Exhibit A.4. Description of DOI enrollment and premium data

Data variable	Data definition
HIOS issuer ID	Five-digit unique issuer ID
Geographic rating area	Region of the state used for rating rules
County	County name
HIOS plan ID	Unique ID for the medical plan

Data variable	Data definition
CO Option	Yes or no; reflects whether the plan is a CO Option plan (flag available starting in 2023 data)
Metal tier	Catastrophic, bronze, silver, gold
Plan status	Continuing or discontinued; reflects whether the plan is being continued
On-/off-exchange	On or off; reflects whether the plan is offered on or off the exchange
Age	Categorical value for age; used for the purposes of enrollment and premium breakdowns
Tobacco status	Yes (Y) or no (N); reflects whether the member uses tobacco and used for the purposes of enrollment and premium breakdowns
Enrollment as of 4/1/YYYY	Number of enrollees as of April 1 of the plan year
Current rate	Premium for the current plan year
Next year's rate	Premium for the following plan year
Rate change	Percentage change between the current year's rate and the next year's rate

3. Colorado APCD

We used the data from Colorado's APCD, which were collected by the Center for Improving Value in Health Care, for analyses of total healthcare spending, out-of-pocket spending, and use of high-value healthcare services. We used data for Plan Years 2022–2024. Exhibit A.5 contains a sample of the key variables from the APCD we used.

Exhibit A.5. Description of APCD data

Table	Data element	Data definition	Data category
Claims-related tables^a			
Medical_Claims_Header	Admit_Dt	Date of patient admission	Date
Medical_Claims_[Header / Line]	Allowed_Amt	The sum of the member liability and the plan-covered amounts	Spending
Medical_Claims_[Header / Line]	Billing_Provider_Composite_ID	A unique billing provider identifier	Unique ID
Medical_Claims_[Header / Line]	Claim ID	A unique medical claim identifier	Unique ID
Medical_Claims_[Header / Line]	Coinsurance_Amt	The dollar amount a person is responsible for	Spending
Medical_Claims_[Header / Line]	Copay_Amt	The preset, fixed dollar amount for which the person is responsible	Spending
Medical_Claims_[Header / Line]	Deductible_Amt	The amount a person pays for covered health services before an insurance plan begins to pay	Spending
Medical_Claims_Header	Discharge_Dt	Date of patient discharge	Date
Medical_Claims_Dx	DX_Cd	ICD diagnosis code	Service
Medical_Claims_[Header / Line]	Member_Composite_ID	A unique identifier that consolidates member IDs from various payers and is assigned to all eligibility and claims records associated with a person	Unique ID

Table	Data element	Data definition	Data category
Medical_Claims_Line	Place_of_Service_Cd	The type of location where the service was performed	Service
Medical_Claims_[Header / Line]	Plan_Paid_Amt	The dollar amount the plan paid, including any withhold amounts	Spending
Medical_Claims_Line	Revenue_Cd	National Uniform Billing Committee Codes	Service
Medical_Claims_Procedures	Procedure_Cd	ICD procedure code	Service
Medical_Claims_[Header / Line]	Service_End_Dt	Date services ended for patient	Date
Medical_Claims_[Header / Line]	Service_Start_Dt	Date services rendered for patient	Date
Provider table			
Provider_Composite	National_Provider_ID	National Provider Identifier from the National Plan and Provider Enumeration System	Unique ID
Provider_Composite	Provider_Composite_ID	A unique identifier that ties together all claims records associated with a provider	Unique ID
Provider_Composite	Provider_Type	Type of provider	Service
Provider_Composite	Taxonomy_Cd_1-5	Code that indicates provider specialty of taxonomy	Service
Member tables			
Member_Eligibility	Colorado_Option_Indicator	Y or N; indication of whether a plan is associated with a standardized Colorado Option plan under C.R.S. 10-15-1304	Plan
Member_Eligibility	HIOS_Plan_ID	A 14-digit alphanumeric value that includes a health insurance and product component	Unique ID
Member, Member_Composite	Hispanic_Ind	A yes/no/unknown flag indicating whether the member is Hispanic/Latino/Spanish	Demographic
Member_Composite, Member_to_Member_Composite_Crosswalk	Member_Composite_ID	Colorado APCD-generated code that consolidates the Member_ID element from various payers and is assigned to all eligibility and claims records associated with a person	Unique ID
Member_Eligibility	Metallic_Value	Code indicating the metallic tier designation of the member's health plan code	Plan
Member, Member_Composite	Member_Gender_Cd	Flag indicating the member's gender: F = female, M = male, X = nonbinary, U = unknown	Demographic
Member, Member_Eligibility, Member_to_Member_Composite_Crosswalk	Member_ID	Payer-generated alphanumeric unique ID code	Unique ID
Member, Member_Composite	Member_Zip_Cd	Zip code of member	Demographic

Table	Data element	Data definition	Data category
Member_Eligibility	Plan_Effective_Dt	Full date of the start of the member's insurance plan coverage	Date
Member_Eligibility	Plan_Term_Dt	Full date of the end of the member's insurance plan coverage	Date
Member, Member_Composite	Race_1_Cd	A flag indicating the member's race: R1 = American Indian/Alaska Native, R2 = Asian, R3 = Black/African American, R4 = Native Hawaiian/Other Pacific Islander, R5 = White, R9 = other, UNKNOW = unknown / not specified	Demographic

^a For efficiency, the pharmacy claims tables are not listed, but we will use similar data elements as we do for the medical claims tables.

D. Quantitative analysis methods

1. Descriptive analysis methods

Our descriptive analyses involved calculating summary statistics for the outcomes of interest, such as the number of Colorado Option plans offered, the number of enrollees in Colorado Option plans, and premiums paid. We computed these statistics by plan year and report changes over time. Depending on the data source, we computed the statistics over counties or counties and plans (for individual and small-group markets) or over individual consumers (for the individual on-exchange market only).

2. Quasi-experimental analyses

Compared with descriptive analyses, quasi-experimental approaches try to control for confounding factors (factors that might be correlated with the introduction of the Colorado Option or enrollment in individual Colorado Option plans and outcomes of interest). As a result, quasi-experimental analysis can provide estimates of the causal effects of the Colorado Option on affordability and equity. We used difference-in-differences analysis to estimate the causal effects of enrolling in Colorado Option plans. This type of analysis requires a comparison group (consumers not enrolled in Colorado Option plans) and pre-implementation data.

We applied difference-in-differences analysis to APCD and on-exchange premium data to assess the hypothesis that the Colorado Option increases insurance affordability in the individual and small-group markets (Chapter IV). This required defining treatment and comparison groups. We used the following approach: The treatment group consisted of consumers enrolled in a Colorado Option plan in any year between 2023 and 2025. Because the treatment group might include consumers who were enrolled in non-Colorado Option plans or noncommercial plans or were uninsured at some in 2023 or later, we excluded any observations that correspond to years when members of the treatment group were not enrolled in a Colorado Option plan. This approach captured all consumers ever touched by the Colorado Option.

The comparison group consisted of consumers who never enrolled in a Colorado Option plan. Using a comparison group enabled us to disentangle the effect of the Colorado Option from other confounding factors, such as lingering effects of the COVID-19 pandemic or Medicaid unwinding. However, consumers

who chose to enroll in Colorado Option plans might be different from those who did not, leading to biased impact estimates. For example, enrollees choosing the Colorado Option might have higher health literacy, which could also affect their use of health services. We used inverse propensity-score weighting to identify a comparison group that represents an appropriate counterfactual. Matching variables included age, sex, and income range. Specifically, we estimated a logit regression with a binary variable representing enrollment in a Colorado Option plan between 2023 and 2025 as the dependent variable and gender, age category, household size, employment status, ethnicity, race, preferred language (English or Spanish), income category, eligibility for a qualified health plan, and a flag for broker assistance as independent variables. We then calculated predicted probabilities of enrolling in a Colorado Option plan between 2023 and 2025 from the logit estimates. The inverse propensity score weight is then defined as $\frac{1}{\hat{p}}$ for Colorado Option enrollees (treatment group) and $\frac{1}{(1-\hat{p})}$ for non-Colorado Option enrollees (comparison group).

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