

2024 Hospital Workforce Trends Report

Project ID: HB21-1232

Submitted by:

DIRA Partners, LLC

Submitted to: Colorado Division of Insurance

July 26, 2024

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Executive Summary

The 2024 Hospital Workforce Trends Report (“Report”) is the second of three, 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 executive summary are based on the responses of hospital workers contacted through a sample survey and focus groups, as well as secondary data analyses.

Key Conclusions

- Based on the survey and focus group findings of this report, the Colorado Option implementation has not had an impact on the Colorado hospital workforce.
- 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 2023.¹
- Labor costs comprised 46% of Colorado hospital operating costs in 2022. This percentage has only varied slightly since 2014.²
- Since the COVID-19 pandemic, hospital operating costs, including labor, have risen substantially in Colorado.³ Contract labor costs are growing at a faster rate than direct employee costs. Further, the cost of contract labor has grown disproportionately compared to the use of contract labor in recent years. The 2023 Hospital Workforce Trends Report provides benchmark data on hospital operating costs prior to the COVID-19 pandemic and provides context for the updated data in this 2024 Report.
- 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 reflect the Colorado and national hospital workforce, both in the composition of workers and the workforce experiences across wages, benefits, staffing, training, and working conditions. However, due to data limitations, non-clinical workers such as environmental (EVS) and dietary workers were underrepresented among the survey respondents and focus groups participants.

¹ [Occupational Employment and Wage Statistics](#), Bureau of Labor Statistics.

² [2024 Hospital Financial Transparency Report, Table 26](#), Colorado Department of Health Policy and Financing.

³ [2024 Hospital Financial Transparency Report](#), Colorado Department of Health Policy and Financing.

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 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.⁴ 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.⁵

“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 HB 21-1232, 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. 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.

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.⁶ 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 looks similar to the national hospital workforce.

Hospital worker demographics, trends in wages, household poverty, and health uninsurance rates generally show similarities between Colorado's hospital workforce and that of the nation. Specifically, the hospital workforce is predominately White, female, and/or live in urban areas, and workers with all educational levels are represented. Wages and health insurance coverage are also comparable across hospital occupations at the state and national levels, except for Coloradan environmental services (EVS) hospital workers who are more likely to make less and lack health insurance.

⁴ [Colorado Health Care Workforce](#). Colorado Hospital Association | [Colorado State Profile](#). U.S. Census Bureau.

⁵ [2024 Hospital Financial Transparency Report](#). Colorado Department of Health Policy and Financing.

⁶ [2023 Hospital Workforce Trends Report](#). DIRA Partners, LLC for the State of Colorado Division of Insurance.

2. More than 80,000 Coloradans are directly employed by a hospital.

Hospitals directly employ more than 25% of Colorado’s hospital workforce, not including contracted workers. Compared to the overall workforce, hospital workers in Colorado across all racial/ethnic groups generally have higher wages, are less likely to live in a low-income household, and are less likely to be uninsured. The exception is hospital EVS workers who are more likely to live in a low-income household and be uninsured compared to Colorado’s overall workforce.

3. Labor is one of the largest expenses in hospitals’ budgets, consisting of both workers employed directly by hospitals and contract workers employed through staffing agencies.

Labor typically represents the largest share in operating costs, as hospitals are service driven.⁷ Workers are essential to providing the needed care, maintaining facilities, and ensuring overall operations to deliver high-quality, equitable services. Salaries, wages, and benefits of hospital workers represent 44.1% of Colorado hospital operating costs and 42.5% of revenue derived from patient services (net patient revenue).

4. Contracted labor has seen the largest rate of growth among hospital expenses in recent years and puts further pressure on total hospital costs.

Staffing shortages at hospitals — from nurses to physicians to medical laboratory technicians — existed before the pandemic.⁸ Aging in the health care workforce results in increased retirements, and those that could retire during the pandemic often did. At the same time, an aging population at large drives up demand for care, which was also exacerbated by COVID-19.

Hospitals increasingly relied on staffing agencies to fill critical roles during the pandemic. The average pay for some hospital occupations more than doubled compared to pre-pandemic levels due to an increased hospital demand for contract workers compared to salaried workers.⁹ Contracted labor costs grew 115% from 2020 to 2021, in comparison to the next largest increase in hospital expenses of 13.4% for total supplies. Salaries, wages, and benefits rose by 8.4% during that same period.¹⁰

Hospitals pay for both the contracted worker and the staffing agency for placing the worker. For temporary staffing needs, the higher cost may be less of a concern. However, when hospitals must increasingly rely on agencies for staffing due to increased vacancies, high

⁷ [Hospital Cost Structure and the Implications on Cost Management during COVID-19](#). *Journal of General Internal Medicine*.

⁸ [Fact Sheet: Strengthening the Health Care Workforce](#). American Hospital Association.

⁹ [US Hospitals Hit with Nurse Staffing Crisis Amid COVID](#). *AP News*.

¹⁰ [2023 Hospital Expenditure Report](#). Colorado Department of Health Care Policy and Financing.

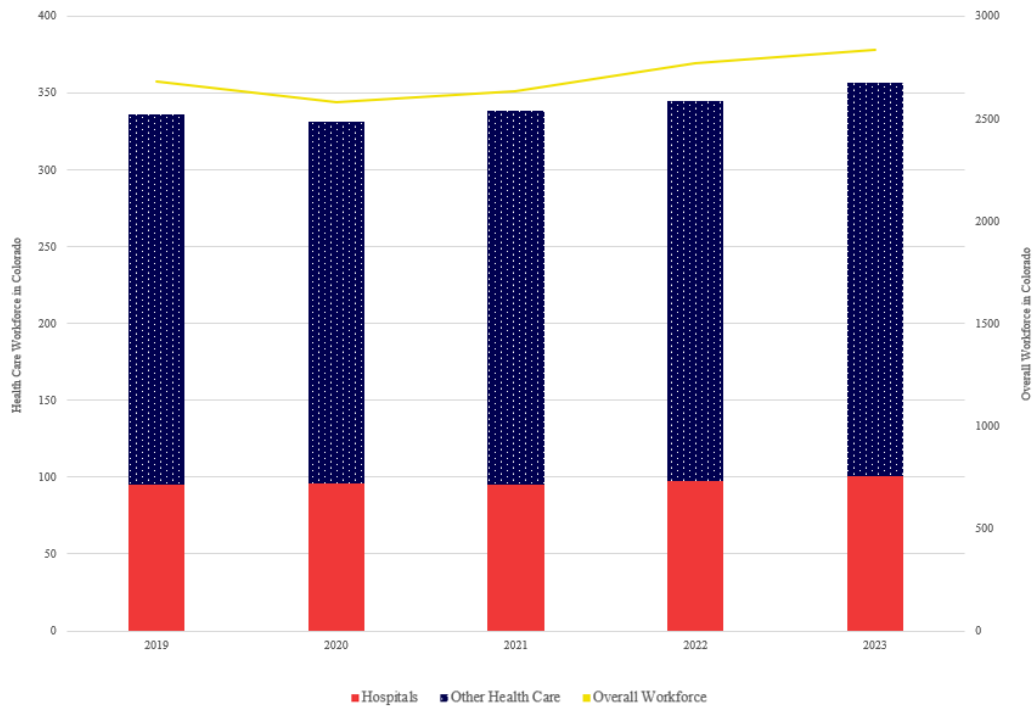
turnover, and recruitment and retention challenges, this reliance results in increased hospital spending.

Overview of Colorado Hospital Workforce and Financial Landscape

The findings discussed in this 2024 Report further illuminate the connection between hospital labor and costs. This section updates the data presented in the 2023 Report.

Hospital Workforce Demographics

Figure 1: Hospital jobs represent 3.6% of the overall Colorado job market and 28% of the Colorado health care workforce.



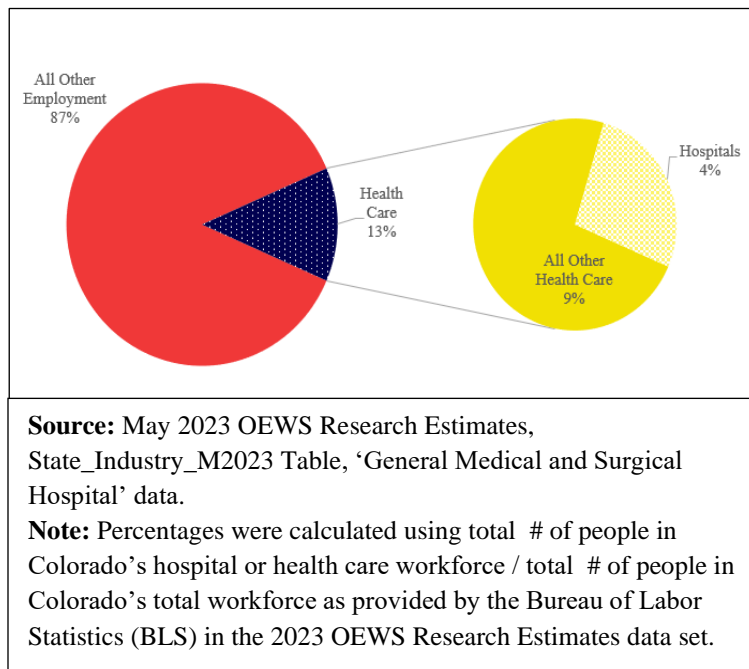
The hospital workforce represented 3.6% of all jobs in Colorado in 2023 and growth in these jobs is slightly higher than its share of jobs.¹¹

Source: May 2023 Bureau of Labor Statistics (BLS) Occupational Employment and Wage Statistics (OEWS) Research Estimates, State_Industry_M2023 Table, ‘General Medical and Surgical Hospital’ data.

Note: Workforce amounts on y-axis are in thousands.

¹¹ [Occupational Employment and Wage Statistics](#). Bureau of Labor Statistics.

Figure 2: Hospital workforce as a share of Colorado’s total workforce and health care workforce.



In 2023, Colorado’s health care workforce was 13% of the state’s total workforce. Those employed by hospitals represent 3.6% of Colorado’s total workforce and 28% of Colorado’s health care workforce.¹²

Hospital jobs are important to Coloradans for several reasons. Hospitals are often the backbone of the health care system caring for those with acute and often severe needs that cannot be treated elsewhere. Hospital jobs generally cannot be automated or sent overseas.

The 2023 Report also presented a comparison of the Colorado hospital workforce and the national hospital workforce by specific factors, including occupation, gender, race/ethnicity, and geography. Please refer to the data presented in the 2023 Report.¹³

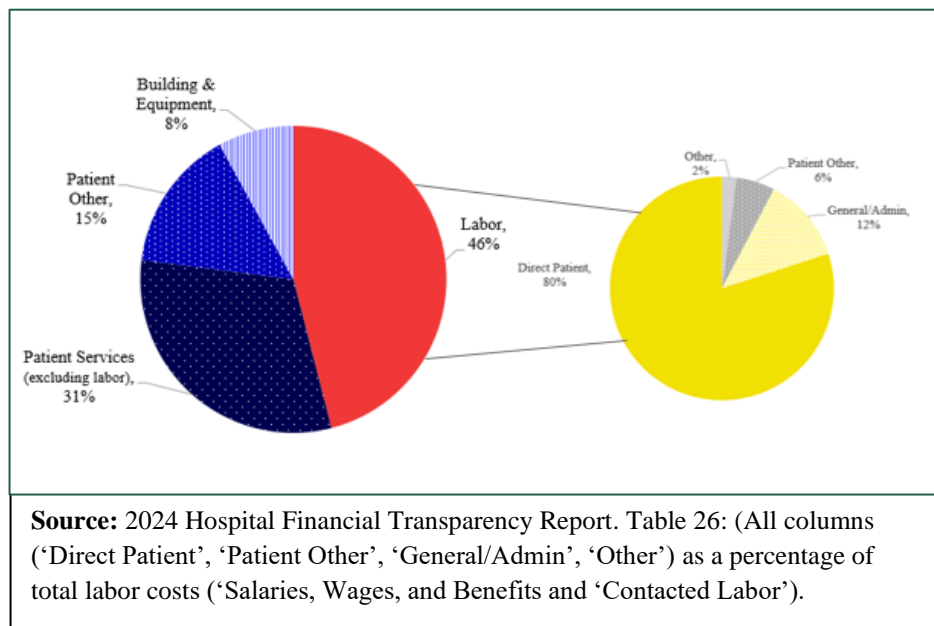
¹² [Occupational Employment and Wage Statistics](#). Bureau of Labor Statistics.

¹³ [2023 Hospital Workforce Trends Report](#). DIRA Partners, LLC for the State of Colorado Division of Insurance.

Colorado Hospital Workforce Wages and Benefits

Labor costs are consistently hospitals' largest operating expenses.¹⁴ As hospital costs represent approximately one-third of health care spending in Colorado, workforce issues have an impact on health care affordability.¹⁵

Figure 3: Labor was nearly half of Colorado hospital operating costs in 2022.



Labor costs are inclusive of the salary, wages, and benefits for directly employed workers as well as the agency fees and wages for contract workers. Labor costs were calculated using Table 26 of the Colorado Department of Health Care Policy and Financing's 2024 Hospital Financial

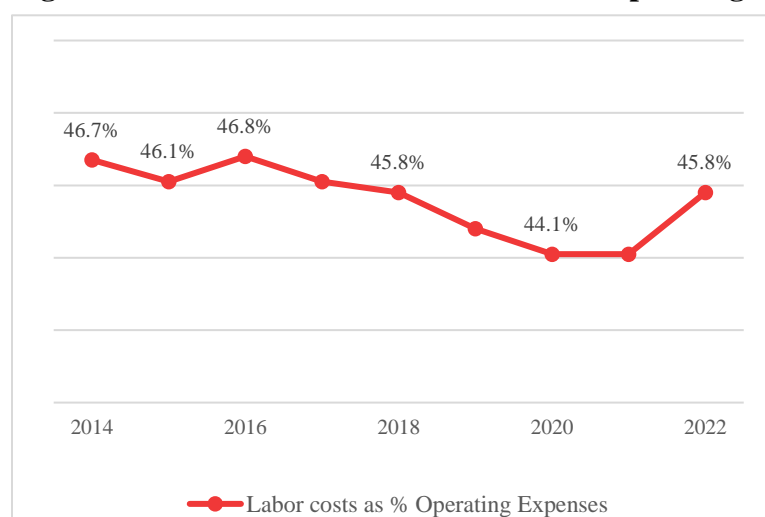
Transparency Report.¹⁶ As Figure 3 shows, the vast majority of Colorado labor costs (80%) were spent on providing patient care, with the remaining 20% spent on administrative and supportive work to maintain and operate the hospital.

¹⁴ 2024 Hospital Financial Transparency Report. Colorado Department of Health Policy and Financing. [Costs of Caring 2023 Report](#). American Hospital Association.

¹⁵ [Affordability in Colorado](#). Colorado Hospital Association.

¹⁶ 2024 Hospital Financial Transparency Report, Table 26. Colorado Department of Health Policy and Financing.

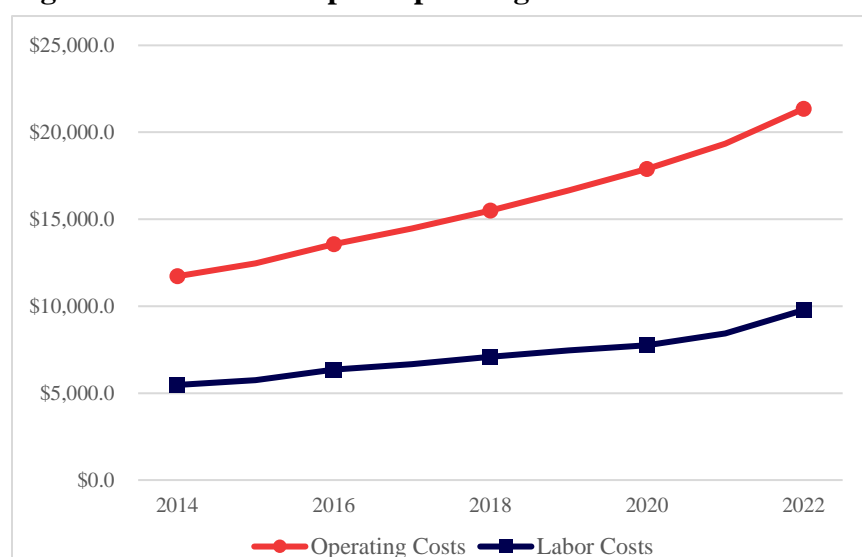
Figure 4: Colorado labor costs as a share of operating costs have changed little since 2014.



Source: 2024 Hospital Financial Transparency Report. Graph 4: Total Payroll (FTE), Benefits, and Contracted Labor Expenses as a percentage of Graph 3: Total Operating Expense.

However, labor costs as a share of overall operating costs have changed little in Colorado hospitals over the past decade. Labor costs are calculated as salary, wages, and benefits as a percentage of hospitals' operating expenses. In fact, labor costs comprised a smaller share of operating costs in 2022 (45.8%) than in 2014 (46.7%).¹⁷ Between 2014 and 2022, total labor costs averaged 45.6% of all hospital operating expenses.

Figure 5: Colorado hospital operating costs have risen since 2014.



Source: 2024 Hospital Financial Transparency Report. Graph 3: Total Operating Expense & Graph 4: Total Payroll (FTE), Benefits, and Contracted Labor Expenses.

Note: Y-axis is U.S dollars in millions.

Colorado hospital expenses increased by an average of 7.8% per year since 2014, but the growth in operating expenses between 2021 and 2022 was 10.4%.¹⁸ Yet, hospital operating costs are growing at a faster rate than labor costs.

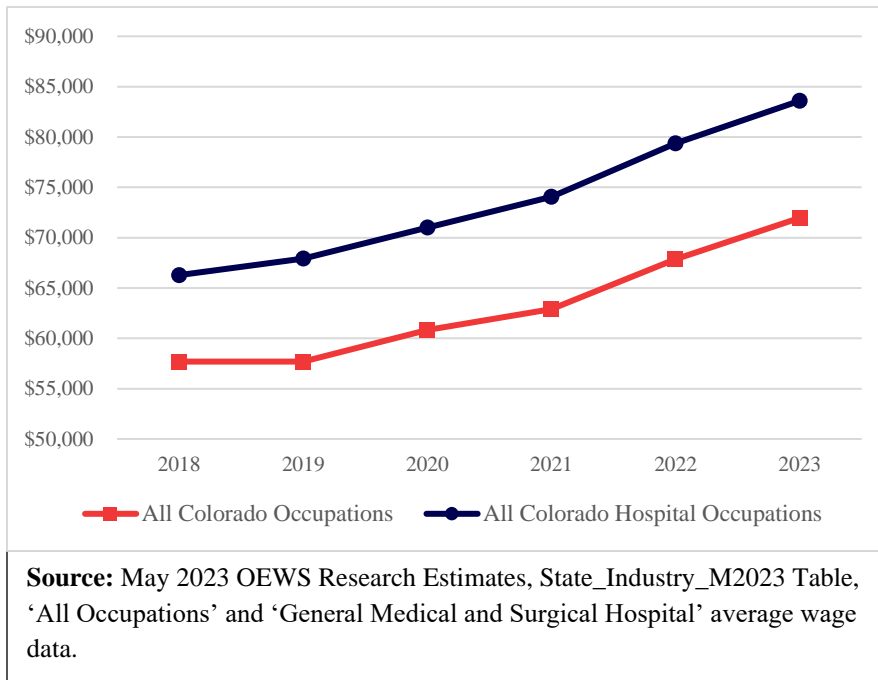
Consistent with Figures 3-4, labor costs in Figure 5 are consistently calculated as salary, wages, benefits, and fees of directly employed and contract workers.¹⁹ Operating costs are the total expenses of hospitals.

¹⁷ 2024 Hospital Financial Transparency Report, Table 26. Colorado Department of Health Policy and Financing.

¹⁸ 2024 Hospital Financial Transparency Report, Graph 3, Graph 4, Page 15. Colorado Department of Health Policy and Financing.

¹⁹ 2024 Hospital Financial Transparency Report. Colorado Department of Health Policy and Financing.

Figure 6: Colorado hospital wages are generally higher than the average job in the state and are increasing at approximately the same rate as overall wages.



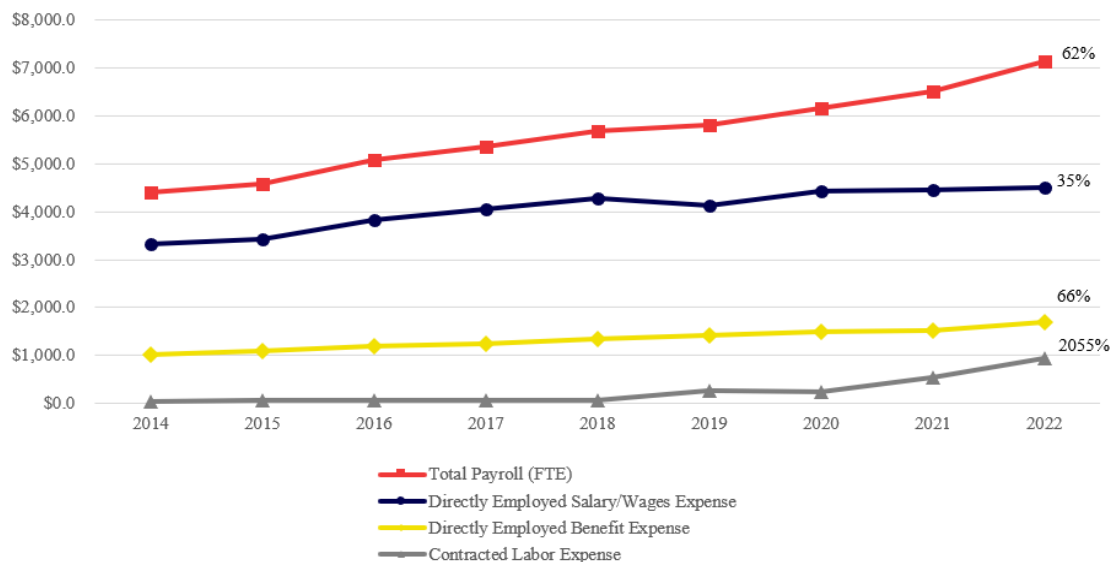
As noted in the 2023 Report, hospital workers in Colorado generally have higher wages compared to the overall workforce and this has remained consistent over the past year, with Colorado hospital workers earning about 15% more than the average worker in the state.²⁰ Please see the Methodology section for more information on Bureau of Labor Statistics (BLS) data.

²⁰ [2023 Hospital Workforce Trends Report](#). DIRA Partners, LLC for the State of Colorado Division of Insurance. This includes all people who work in a hospital, whether directly employed or contracted. | [Occupational Employment and Wage Statistics](#). Bureau of Labor Statistics.

Contract labor is a key driver of increasing labor costs.

The pandemic accelerated the use of contract labor to provide support during the surges.²¹ The increased utilization of contract labor drives up labor costs directly through agency fees and higher wages for contract workers.²²

Figure 7: Contract labor costs are growing at a faster rate than directly employed wages and benefits in Colorado hospitals.



Source: 2024 Hospital Financial Transparency Report. Graph 4: Total Payroll (FTE), Benefits, and Contracted Labor Expenses.

Note: Y-axis is U.S. dollars in millions. The percent change is over time, from 2014 to 2022. Directly Employed Salary/Wages Expense was calculated by subtracting Contracted Labor Expense and Directly Employed Benefit Expense from Total Payroll (FTE).

While total payroll costs (inclusive of salaries, wages, and benefits for directly employed as well as contract labor wages and agency fees) have consistently risen over time, it appears that recent increases in total payroll costs have been driven by increases in contract labor. Compared to 2023, contract labor has increased by 73.5% (\$395.8 million) since 2021, 247.6% since 2019 (\$665.7 million), and 2055% (\$891.2 million) since 2014.²³ In contrast, total payroll costs rose by 62.2% (\$2.7 billion), benefits rose by 66% (\$676.9 million), and directly employed wages rose by 35% (\$1.2 billion) since 2014, as also demonstrated in Graph 4 of the 2024 Colorado Department of Health Care Policy & Financing's (HCPF) Financial Transparency Report.²⁴

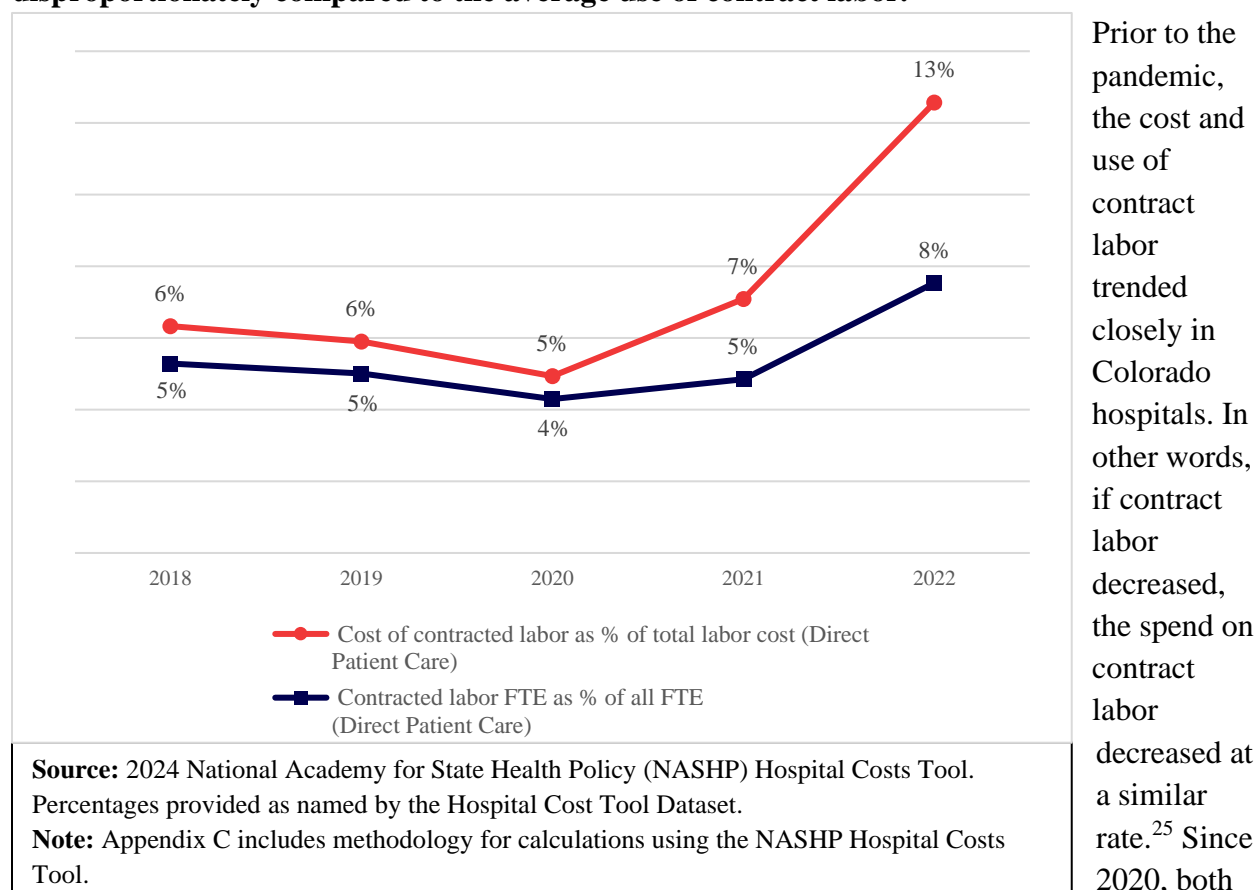
²¹ [Costs of Caring 2023 Report](#). American Hospital Association.

²² [Association Between Hospital Labor Costs and the Quality of Care](#). Risk Management and Healthcare Policy. | [2024 Hospital Financial Transparency Report](#). Colorado Department of Health Policy and Financing.

²³ [2024 Hospital Financial Transparency Report](#). Colorado Department of Health Policy and Financing.

²⁴ [2024 Hospital Financial Transparency Report, Graph 4](#). Colorado Department of Health Policy and Financing.

Figure 8: Across Colorado hospitals, the average cost of contract labor has grown disproportionately compared to the average use of contract labor.



the cost and use of contract labor among Colorado hospitals have increased. However, cost is now increasing at a faster rate than use.²⁶

As shown in Figure 8, contract labor workers represented 8% of Colorado’s full-time hospital employees in 2022, compared to 5% in 2018. In contrast, the cost of contract labor (agency fees and wages) represented 13% of direct patient care costs in 2022, compared to 6% in 2018.²⁷ The use of contract labor increased by 3 percentage points, but the cost has more than doubled.²⁸ The reason for this dramatic increase is attributed to the use of overtime and agency staff to fill critically needed positions.²⁹ These two options have long been noted as the most expensive labor choices for hospitals – typically adding 50% or more to a typical employee’s hourly rate.³⁰

²⁵ [Hospital Costs Tool](#). The National Academy for State Health Policy.

²⁶ [Hospital Costs Tool](#). The National Academy for State Health Policy.

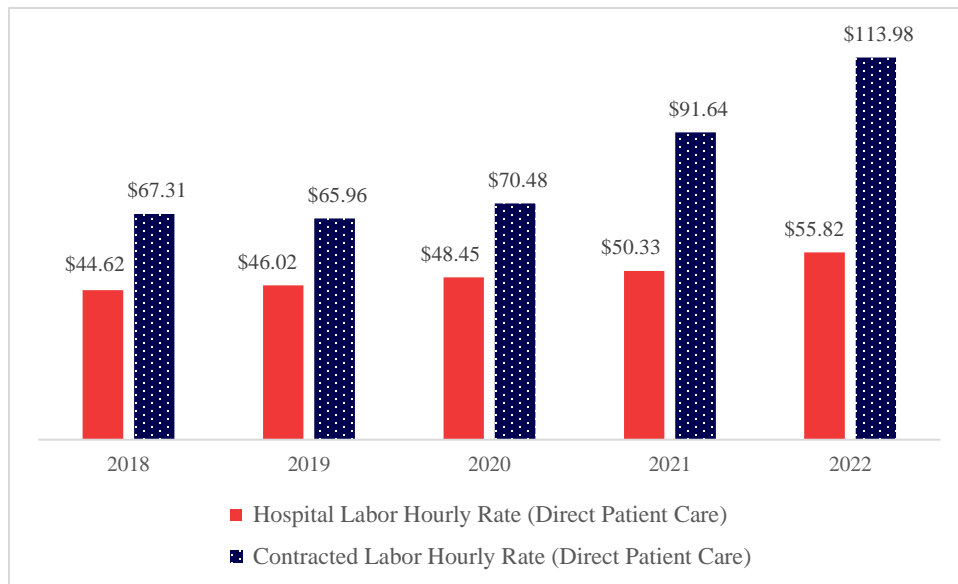
²⁷ [Hospital Costs Tool](#). The National Academy for State Health Policy.

²⁸ [Hospital Costs Tool](#). The National Academy for State Health Policy.

²⁹ [Association Between Hospital Labor Costs and the Quality of Care](#). Risk Management and Health Care Policy.

³⁰ [Association Between Hospital Labor Costs and the Quality of Care](#). Risk Management and Health Care Policy.

Figure 9: Average contract labor wages are higher and growing faster than average directly employed wages for Colorado hospital workers.



Source: 2024 National Academy for State Health Policy (NASHP) Hospital Costs Tool.

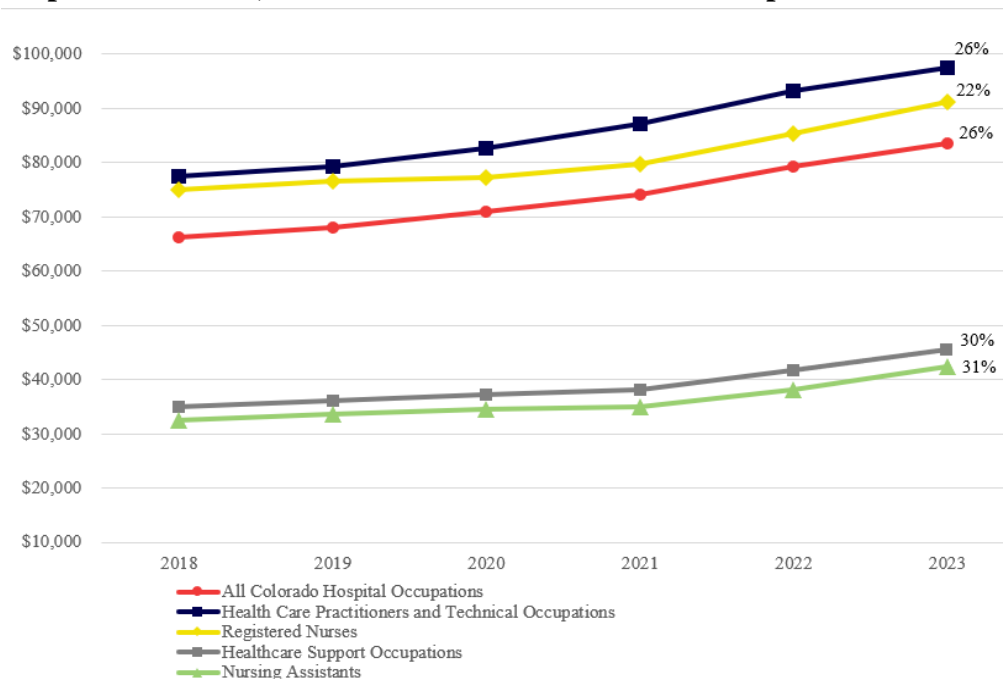
Note: Hospital workers included in this data are characterized by direct patient care employees. The hourly cost for directly employed hospital workers is inclusive of all costs, including benefits. The hourly cost for contract workers is inclusive of all costs, including agency fees.

Nationally, hospitals spend 1.9 times more on hourly rates for travel RNs (contract labor) (\$102.33/hour) than they do for directly employed staff RNs (\$53.61/hour).³¹ In Colorado, hospitals spend 2.04 times more on hourly rates for contract workers (\$113.98) than on directly employed workers (\$55.82), compared to 1.5 times more in 2018.³²

³¹ 2024 NSI National Health Care Retention & RN Staffing Report. NSI Nursing Solutions, Inc.

³² Hospital Costs Tool. The National Academy for State Health Policy.

Figure 10: Nursing assistants continue to see the greatest wage gains across Colorado’s hospital workforce, which is consistent with the U.S. hospital workforce.



Source: May 2023 OEWS Research Estimates, State_Industry_M2023 Table, ‘All Occupations’ and ‘General Medical and Surgical Hospital’ average wage data.

Note: The percent change indicates percent change over time from 2018 to 2023. A comparison of annual wage increase in the hospital workforce to all other CO occupations is shown in Figure 6.

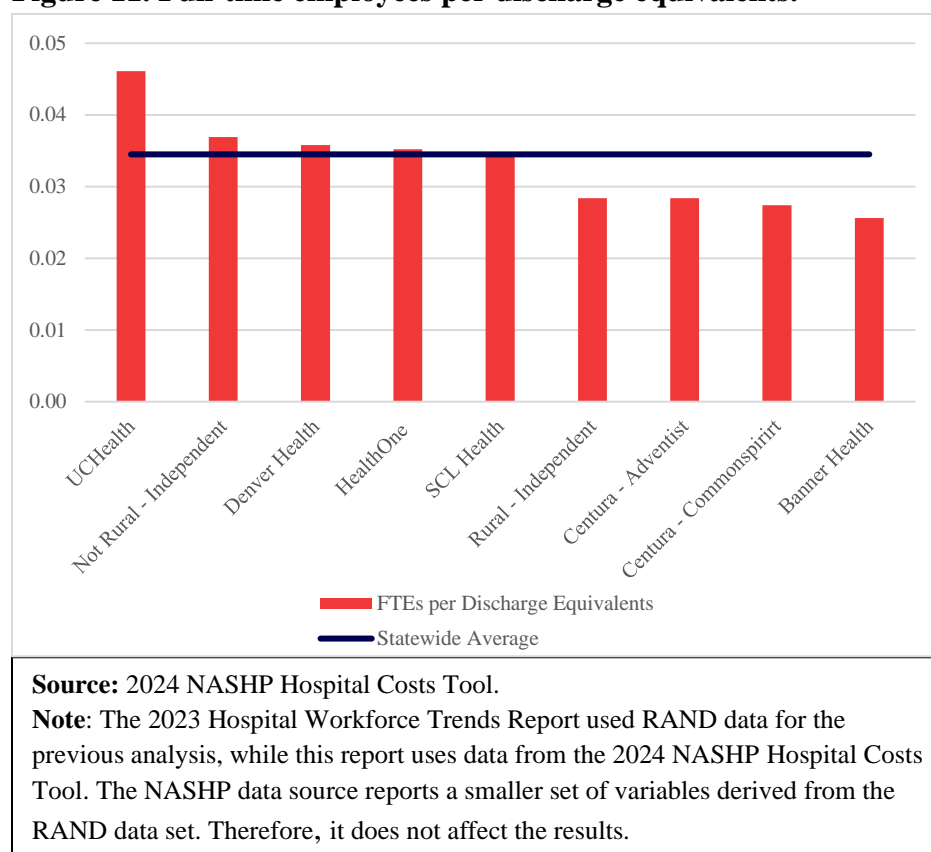
The average annual wages of all Colorado hospital occupations increased 5% from 2022 to 2023. In Figure 10, “healthcare practitioners and technical occupations” are inclusive of medical and dental providers, physicians, nurse practitioners, licensed practical and

vocational nurses, health technologists and health technicians.³³ The highest annual wage increase was for nursing assistants, whose annual wages increased 11% from 2022 to 2023. This 2022 to 2023 increase mirrors national trends, with nursing assistants generally experiencing the largest wage gains across hospital occupations.³⁴ In contrast, RNs experienced the lowest wage growth of all professions analyzed with an increase of 7% from 2022 to 2023.

³³ [Occupational Employment and Wage Statistics: Healthcare Practitioners and Technical Occupations](#). Bureau of Labor Statistics.

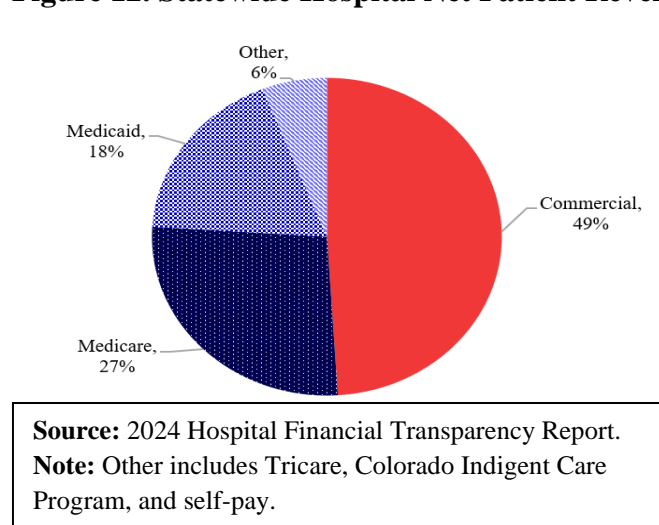
³⁴ [Occupational Employment and Wage Statistics](#). Bureau of Labor Statistics.

Figure 11. Full-time employees per discharge equivalents.



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.³⁵ In 2022, UCHealth had the most FTEs per discharge equivalents, and Banner Health had the least.³⁶

Figure 12. Statewide Hospital Net Patient Revenue Payer Mix.



Hospitals are paid through a mix of private and public programs. Figure 12 shows Colorado's overall payer mix based on net patient revenue (NPR; defined as revenue from patient services).

In 2022, the overall payer mix largely stayed the same. There was a one percentage point decrease in the commercial share of the payer mix and a one percentage point Medicaid increase compared to 2021. More background information is available in the 2023

Workforce Trends Report.

³⁵ [2023 Hospital Workforce Trends Report](#). DIRA Partners, LLC for the State of Colorado Division of Insurance.

³⁶ [Hospital Costs Tool](#). The National Academy for State Health Policy.

Primary Data: Workforce Survey and Focus Groups

The workforce survey and focus group data described in this Report are intended to deepen and provide nuance to the secondary data analyses completed in the 2023 Report and updated in the hospital financial trends section above in 2024. The secondary datasets used in the 2023 and 2024 Reports, are gathered from hospital data, primarily payroll information, Medicare Cost Reports, and data submitted to the Colorado HCPF. Secondary data also frequently contain a time lag due to collection methods. In contrast, the primary data generated by survey and focus group is directly from the workforce, not available elsewhere, and has been collected in real time.

As part of the 2024 Hospital Workforce Report, DIRA Partners developed a survey to understand the impact, if any, of the Colorado Option implementation on the working conditions, training, staffing, wages, and benefits of the Colorado hospital workforce. This voluntary survey was distributed throughout October and November 2023 to licensed health care workers via registry information from the Colorado Department of Public Health and Environment (CDPHE) and the Colorado Department of Regulatory Agencies (DORA).³⁷ Over 2,800 workers took the survey. Nearly 2,000 (2% of Colorado hospital workers) respondents, including former workers, were included in the analyses described in this section.

As the survey was sent to all licensed workers without previous knowledge of whether they worked in hospitals, the first question asked if the respondents were current Colorado hospital workers. Those who answered yes received the full survey. Those who answered no were asked if they previously worked in a Colorado hospital. Those who answered yes to the second question received a subset of questions. The survey was complete for those that answered no to the second question.

Former workers received a different set of questions than current workers. Former hospital workers were included to further gather data on factors that caused them to leave hospital work. Not all respondents completed every question.

The survey methodology and question logic followed standard survey procedures. All questions were optional. Skip logic was used so that respondents were only asked relevant follow up questions to increase response rates and omit irrelevant responses. Respondents that did not complete a majority of responses were excluded from analysis.

Nearly one in four survey respondents indicated they were willing to be contacted to share more information about their experience. Each of these were contacted to participate in focus groups organized into four virtual groups and three asynchronous groups.

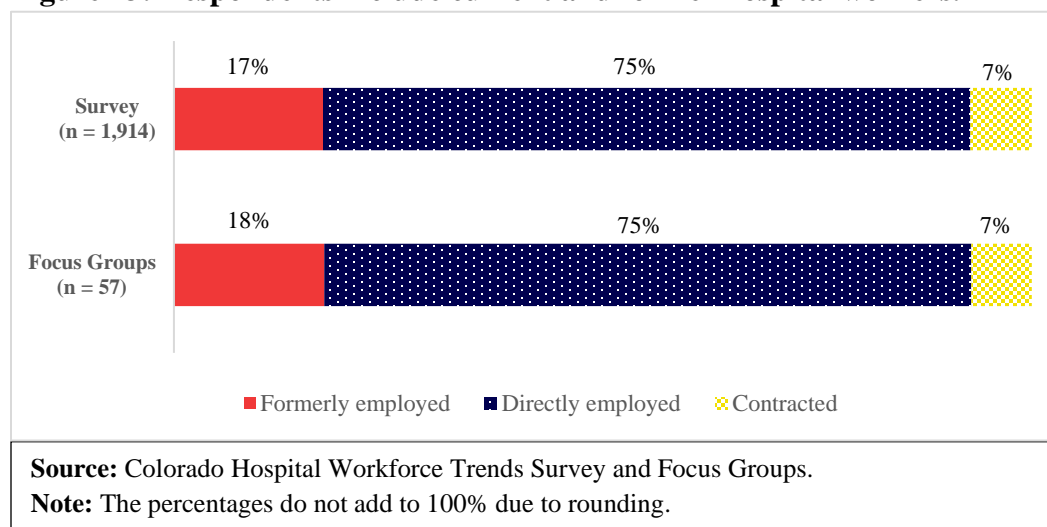
³⁷ [Requested Licensed Health Care Worker Registry](#). Colorado Department of Public Health and Environment. | [Requested Licensed Health Care Worker Public Records](#). Colorado Department of Regulatory Agencies.

See Appendix B for more information regarding the survey and focus group methodologies, including the full survey instrument.

Demographics of the Survey and Focus Group Respondents

The survey and focus group respondents reflect Colorado’s hospital workforce, including current and former employees. While the majority of respondents are registered nurses (RNs), as are the majority of hospital workers in Colorado, respondents include workers in every major clinical and non-clinical occupation. All the state’s hospital systems are represented, as are significant numbers of workers from rural and urban hospitals as detailed in the charts below.

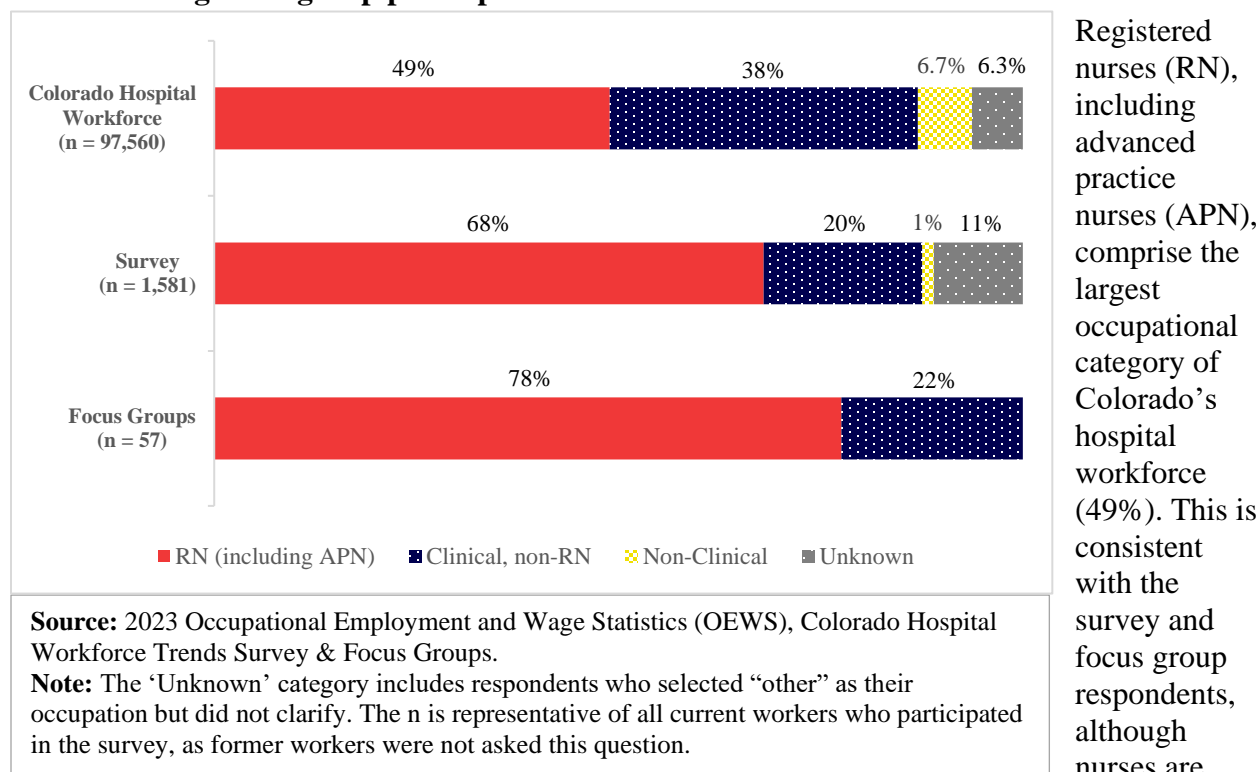
Figure 13: Respondents include current and former hospital workers.



The majority of survey and focus group respondents were directly employed by their hospital and 7% were employed as contractors. An additional

17% of survey and focus group respondents were former hospital workers. Importantly, former workers received a subset of questions in the survey and are not included in most survey analyses, unless otherwise noted. Former workers participated in their own focus group separate from current workers.

Figure 14: All hospital occupation categories are represented among survey respondents, but not among focus group participants.



Registered nurses (RN), including advanced practice nurses (APN), comprise the largest occupational category of Colorado’s hospital workforce (49%). This is consistent with the survey and focus group respondents, although nurses are

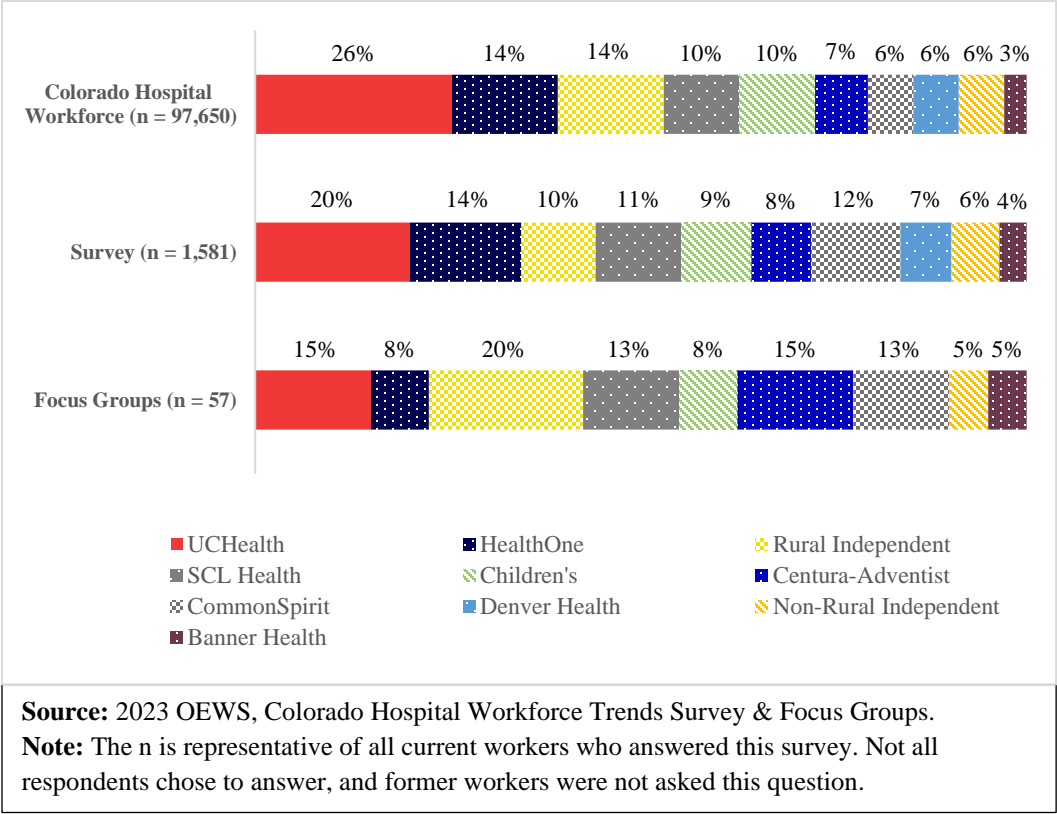
overrepresented (68% and 78%, respectively).

The remaining 51% of Colorado’s hospital workforce includes other clinical, non-RN workers (e.g., physicians, technicians, social workers) and non-clinical workers (e.g., administrative, dietary, environmental services).³⁸

Due to the difficulty in identifying non-clinical workers from the available data sources and registries, these occupations are underrepresented in the survey respondents and not represented in the focus group respondents. Non-clinical workers represent nearly 7% of the Colorado Hospital workforce but only represented 1% of the survey respondents. No non-clinical workers participated in the focus groups. Therefore, any findings from this survey and the focus groups may not be applicable to these occupations to the same extent those findings apply to well-represented occupations such as RNs.

³⁸ Occupation category breakdown details are included in Appendix A, along with demographic details.

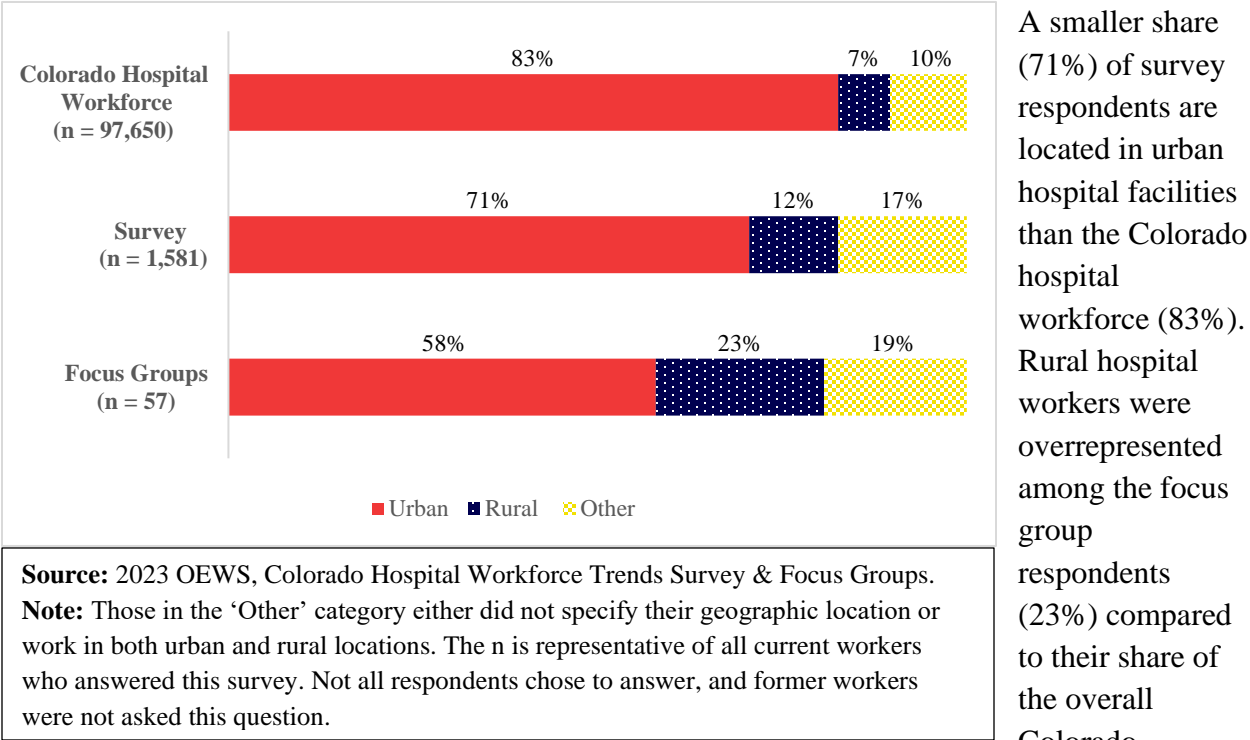
Figure 15: Respondents generally reflect Colorado’s hospital system distribution, with some differences.



When examining the survey and focus group respondents by hospital system, the respondent mix largely reflects the broader Colorado hospital market. However, rural independent hospitals were

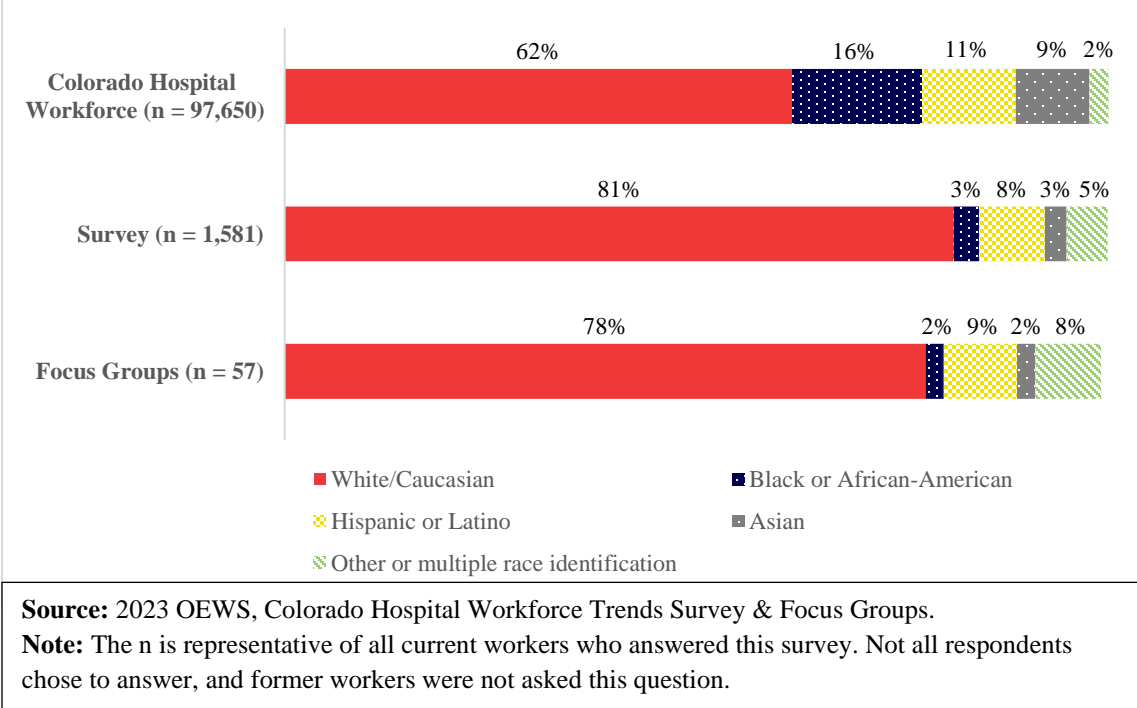
overrepresented in the focus groups (20%) compared to the Colorado hospital market (14%).

Figure 16: Survey and Focus Group Respondents differ from the Colorado hospital workforce in the types of Colorado hospital facilities.



Hospital workforce (7%).

Figure 17: Respondents were inclusive of all races and ethnicities, but White workers were overrepresented.



Both the survey and focus groups respondents were representative of all racial and ethnic identities identified in the Colorado hospital workforce. Respondents who identify as White were overrepresented in the survey (81%) and the focus groups (78%) as were those who identified as other or multiple races. The percentage of survey or focus group respondents identifying as Hispanic or Latino were nearly the same as the Colorado hospital workforce in general. Hospital workers identifying as Black (3% of survey respondents, 2% of focus group participants, 16% of the Colorado hospital workforce) or Asian (3% of survey respondents, 2% of focus group participants, 9% of the Colorado hospital workforce) were underrepresented in the survey and focus groups.

Figure 18: Respondents reflect Colorado’s hospital workforce gender distribution.

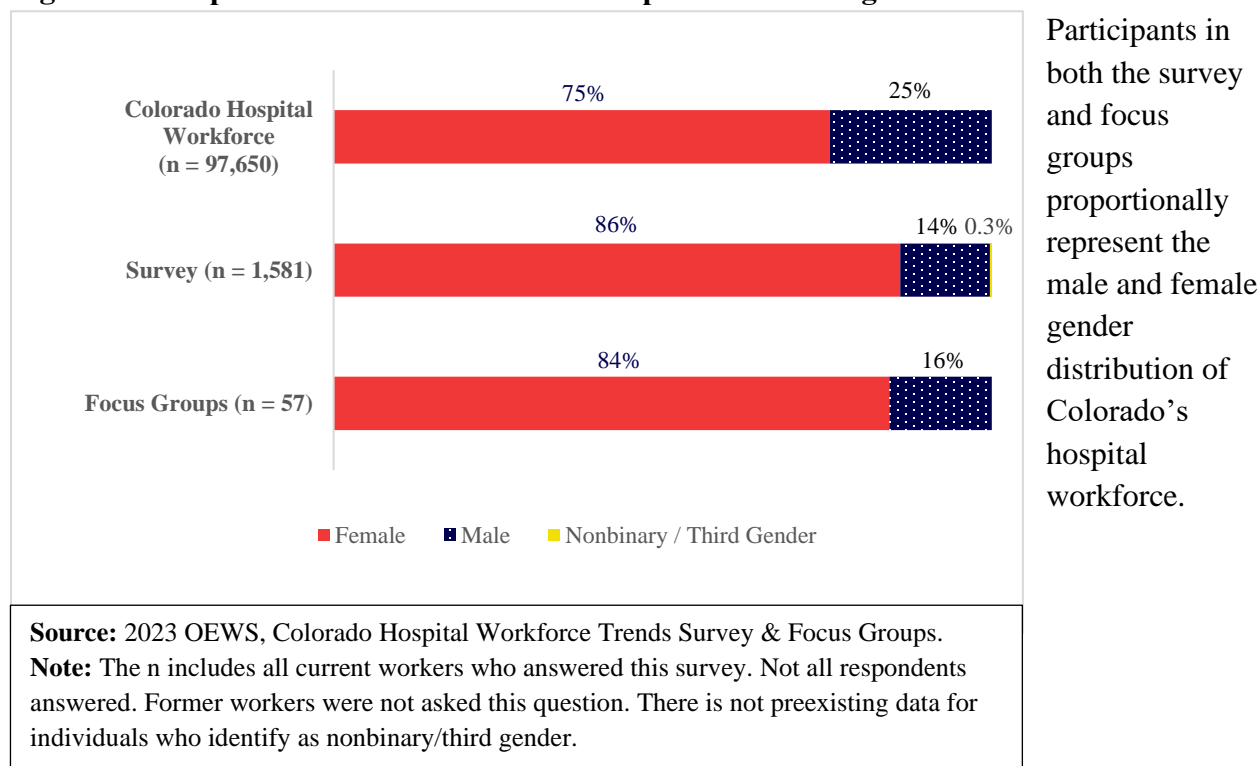
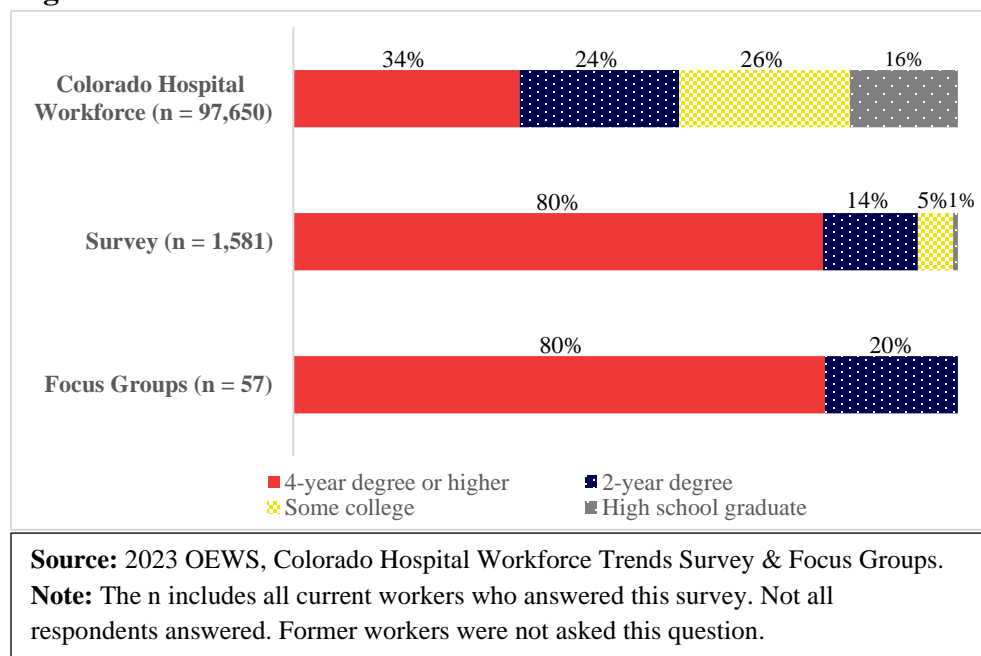


Figure 19: Respondents were overrepresented by hospital workers with 4-year and 2-year degrees.



Colorado’s hospital workforce is inclusive of workers with a variety of educational backgrounds. These same backgrounds are represented in the survey, however there is an overrepresentation of workers with 4-year degrees or higher (80%)

compared to the Colorado hospital workforce (34%). The same overrepresentation of workers with 4-year degrees or higher was also present in the focus groups. This may be correlated with the underrepresentation among survey respondents of non-clinical workers, such as environmental service workers, who may be less likely to have degrees.

Summary of Workforce Survey and Focus Group Responses

The survey instrument was designed to (1) capture as many hospital worker experiences as possible and (2) collect high-quality responses. The instrument used pre-existing surveys which were reviewed and refined by state partners, academic and labor experts, and current hospital workers located in other states. The Workforce Trends survey included 4-7 questions across each of these categories, though not every category is completely distinct. For instance, training can overlap with benefits, such as tuition reimbursement or loan repayment. The focus groups, comprised of a subset of survey respondents who volunteered to participate, were participant driven. In other words, the facilitator asked broad questions regarding wages, benefits, staffing, training, and working conditions, enabling respondents to direct the conversation to the issues that were of most importance to them. Focus groups were categorized by occupational group, including RNs, clinical workers other than RNs, and former hospital workers. Further information, the full survey instrument, and focus group questions are included in Appendix B.

Notably, data on working conditions and training are not generally available via secondary data sources due to data availability limitations. Training, while measurable in terms of activities, costs, and outcomes, is not available in public datasets. Working conditions, entailing the work environment and psychological or physical impact on workers, is an inherently qualitative

measure. Thus, the workforce survey and focus groups conducted as a part of the 2024 Report present the only opportunity to examine the Colorado hospital workforce training and working conditions.

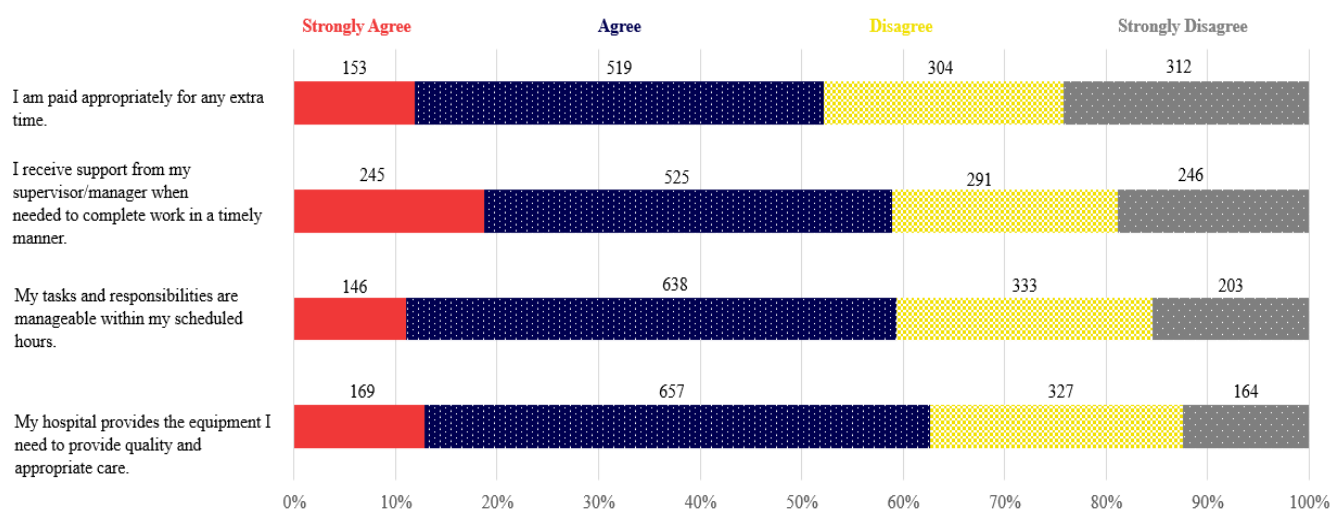
Survey respondents were asked if they were familiar with the Colorado Option. Ninety-four percent (94%) were not at all familiar, 5% were somewhat familiar, and 1% were very familiar. The survey and focus group findings of this report did not point to the Colorado Option implementation as having any impact on the Colorado hospital workforce.

Staffing and Working Conditions

Respondents were asked several questions regarding staffing and working conditions. Staffing adequacy emerged as a key issue facing hospital workers. As noted earlier, working conditions include the environment, psychological toll, and/or physical impact on the worker. Current hospital workers were asked a variety of survey questions that begin to illustrate these experiences, as depicted below in Figure 20.

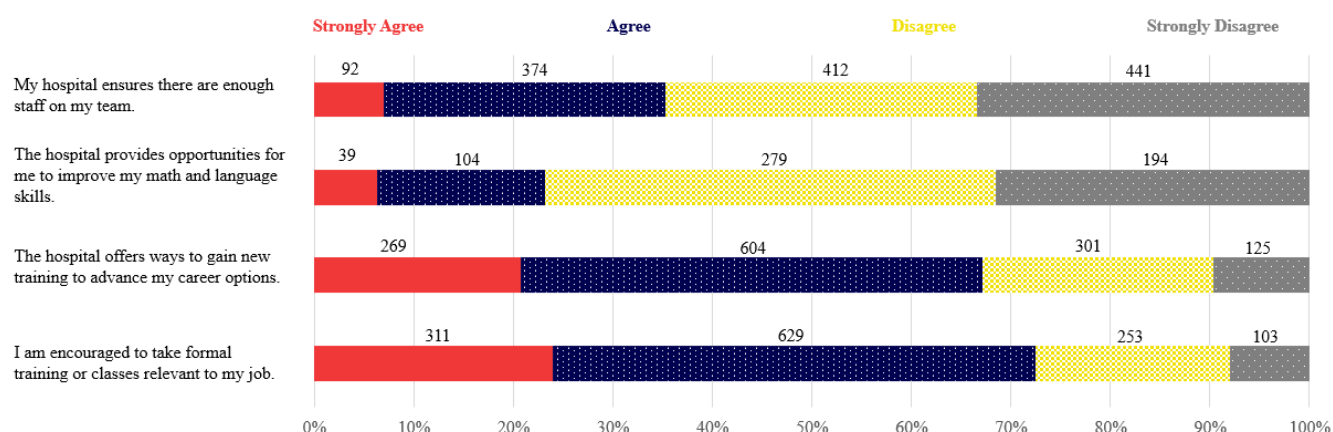
Over 60% of survey respondents agree that “my tasks and responsibilities are manageable within my scheduled hours”. Just under 60% agree that they receive the needed support to complete their work as well as have manageable duties for their scheduled work time. Just over 60% agree that their hospitals provide the needed equipment for their jobs.

Figure 20. Roughly 50-60% of respondents agreed that they received adequate support, time, and resources in their hospital job.



Source: Colorado Hospital Workforce Trends Survey.

Figure 21: Hospital workers identified staffing as a key issue facing the workforce.



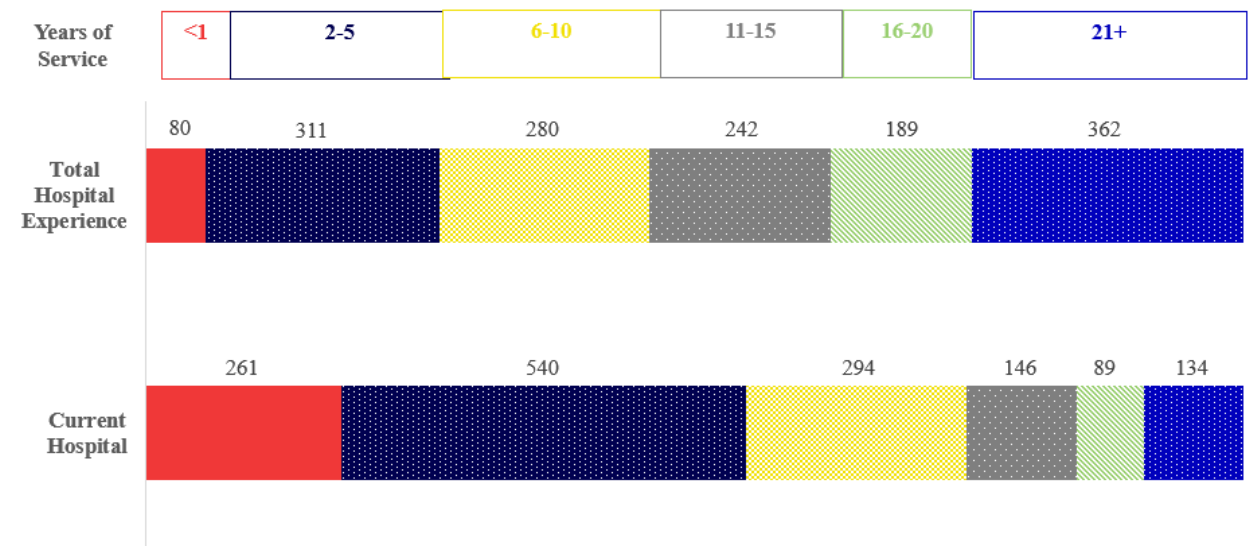
Source: Colorado Hospital Workforce Trends Survey.

Approximately 65% of survey respondents indicated that they did not have enough staff on their team. However, as demonstrated in Figure 21 above, staffing issues are not monolithic. Approximately 55% of survey respondents believe that "staffing levels in my unit are adjusted from shift to shift when needs change" or "I receive sufficient support to spend adequate time doing my job". All focus groups discussed staffing issues and 80% of participants discussed the staffing ratios on their teams. Forty out of 57 focus group participants (70%) stated that they believe that their hospital jobs are understaffed.

One staffing challenge that was noted in the focus groups but was not an option on the survey relates to the composition of staff, not just the total number of staff. Five out of eight focus groups discussed the difficulty their teams face when integrating new staff members, temporary contract workers, and staff who have many years of experience at their hospital. Having clinical experience is invaluable, but as focus groups noted, institutional knowledge (e.g., familiarity with facility processes, systems, and preferences) is also critical to team functioning.

This distinction – clinical experience versus facility experience – may illuminate some of the challenges in solving staffing challenges. Several survey and focus group respondents noted that their units typically had safe staffing levels, yet headcount is not always sufficient to prevent a feeling of being short staffed. Respondents explained that a care team at the hospital may be forced to slow down to explain processes or preferences to staff that are new to the facility, whether contract or directly employed.

Figure 22: Colorado hospital workers are experienced in their career, but relatively new to their current employer.



Source: Colorado Hospital Workforce Trends Survey.

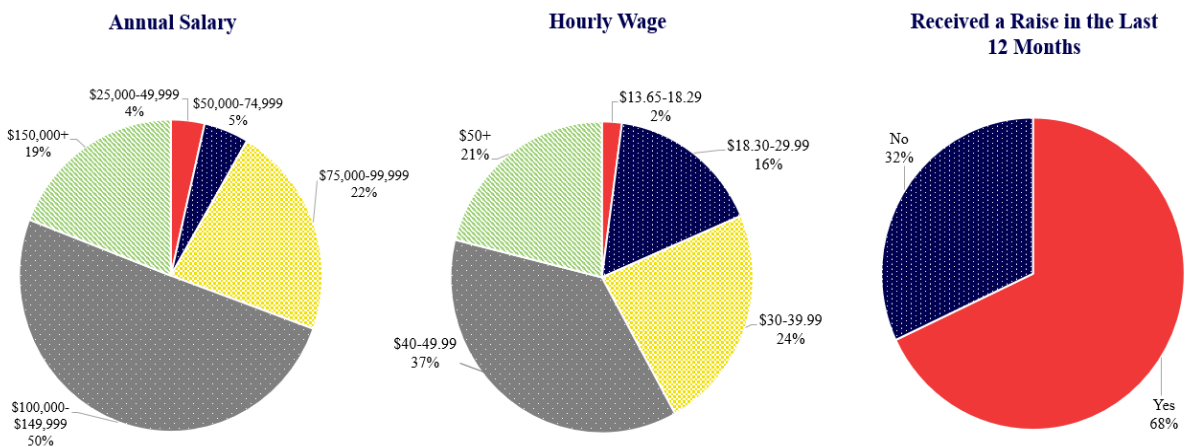
As Figure 22 shows, Colorado hospital workers are generally experienced; over 50% of survey respondents have a decade or more of experience in their hospital careers. At the same time, most Colorado hospital workers have short tenure with their employer; over 50% of survey respondents have five years or less of work experience at their current hospital.

Salaries and Wages

Current workers were also asked about salaries and wages. A majority of survey respondents (87%) earn an hourly wage compared to those who earn an annual salary (13%). Among the hourly wage earners, the largest share (37%) earns between \$40 and \$49.99/hour. This is trailed by those earning between \$30 and \$39.99/hour (24%) and those earning over \$50/hour (21%). Just under one-fifth (18%) of hourly wage earners are paid \$29.22/hour or below.

Of the survey respondents who are paid by annual salary, half earn between \$100,000 and \$149,999. Roughly equal shares of these survey respondents earn between \$75,000 and \$99,999 (22%) or \$150,000 or more (19%). The remaining (9%) earn less than \$75,000 a year. All survey respondents, regardless of if they earn salary or hourly wage, roughly two-thirds received a raise in the past year.

Figure 23: Survey respondents generally earn higher wages than other Colorado jobs.



Source: Colorado Hospital Workforce Trends Survey.

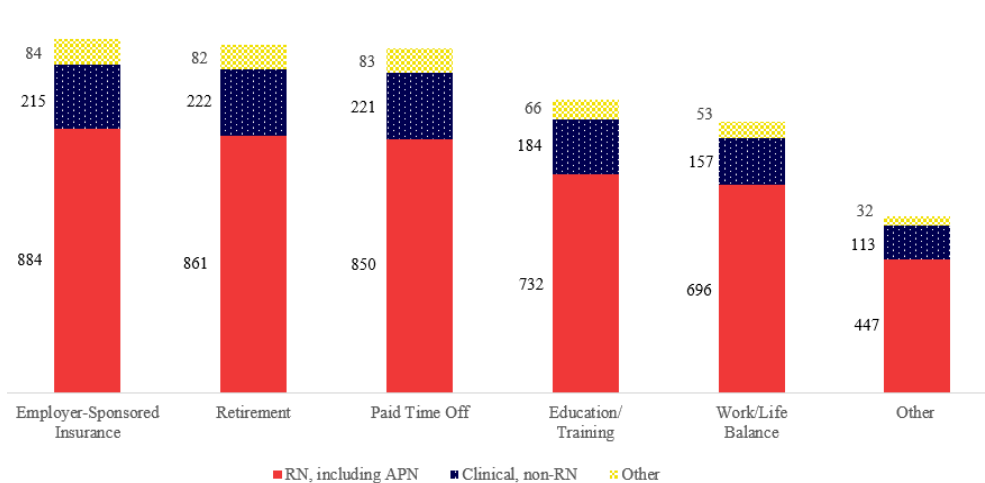
Note: Respondents include current workers only.

Several themes emerged when focus groups discussed wages including cost of living, shift differentials, and contract worker wages. Seven out of eight focus groups discussed wages and benefits. The focus groups did not identify any correlations between salaries/wages and the Colorado Option.

Benefits and Training

Colorado hospitals provide numerous benefits and training opportunities for their employees, which was reflected in the survey and focus group data.

Figure 24: Hospital workers receive a variety of employer-sponsored benefits, including health insurance.



Respondents noted several benefits and training opportunities they receive through their employer. This includes health insurance, retirement, paid time off, wellness benefits, flexible schedules, and bonuses.

Source: Colorado Hospital Workforce Trends Survey.

Note: Current workers were able to select multiple answers to the survey questions, therefore many chose multiple available benefits.

While fewer focus group participants spoke about their training and benefit opportunities during the focus groups (seven out of 57), half of the focus groups discussed tuition reimbursement and training programs at their hospitals. Five participants discussed that these programs are available but often difficult to access.

Conclusion

Labor costs are a large share of hospital operating expenses, and recent data suggests that contract labor is making up an increasingly large share of hospital labor costs.³⁹ Survey respondents were asked if they were familiar with the Colorado Option. Ninety-four percent (94%) were not at all familiar, 5% were somewhat familiar, and 1% were very familiar.

The survey and focus group findings of this report did not point to the Colorado Option implementation as having any impact on the Colorado hospital workforce.

³⁹ [2024 Hospital Financial Transparency Report](#). Colorado Department of Health Policy and Financing.

Acknowledgements

The authors gratefully acknowledge guidance and feedback throughout this project from the Colorado Division of Insurance and the Colorado Department of Public Health and Environment – Health Access.

The 2024 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. For more information, please see Appendix B.

Appendices

Appendix A: Respondent Demographics

Demographics	Colorado Hospital Workforce ⁴⁰	Survey Respondents (n = 1,914)	Focus Group Participants (n = 57)
<i>Age</i>			
18-29		11.1%	4.4%
30-39		25.3%	28.9%
40-49		31.2%	22.2%
50-64		27.9%	31.1%
65 or older		4.5%	13.3%
<i>Gender Identity</i>			
Female	75.4%	86.1%	84.4%
Male	24.6%	13.6%	15.6%
Nonbinary / Third Gender		0.3%	
<i>Race/Ethnicity</i>			
NH White	61.5%	81.2%	77.8%
NH Black	15.8%	3.1%	2.2%
Hispanic or Latino	11.4%	8.0%	8.9%
Asian	8.9%	2.6%	2.2%
Native American/Indigenous		0.7%	2.2%
Mixed race	2.3%	3.3%	2.2%
Other		1.2%	4.4%
<i>Education</i>			
High school graduate	16.2%	7.1%	
Some college	25.7%	5.3%	
Certificate program	--	3.6%	2.2%
2-year degree	24.0%	14.3%	20.0%
4-year degree or higher	34.0%	76.1%	77.8%
<i>Primary Language</i>			
English		97.6%	100.0%
Spanish		1.3%	
Other		1.0%	

⁴⁰ [American Community Survey Data](#). U.S. Census Bureau.

Job Overview

Occupation Overview	Colorado Hospital Workforce ⁴¹	Survey Respondents (n = 1,914)	Focus Group Participants (n = 57)
<i>Hospital Systems</i>			
Banner Health	3.0%	2.8%	4.4%
Centura-Adventist	7.0%	6.1%	13.3%
Children's	10.0%	7.1%	6.7%
CommonSpirit	6.0%	9.2%	11.1%
Denver Health	6.0%	5.2%	
HealthOne	14.0%	11.4%	6.7%
Non-Rural Independent	6.0%	4.9%	4.4%
Rural Independent	14.0%	7.6%	17.8%
SCL Health/Intermountain	10.0%	8.8%	11.1%
UCHealth	26.0%	15.8%	13.3%
Other/Unknown		21.1%	11.1%
<i>Geographic Location</i>			
Urban	82.6%	82.6%	57.9%
Rural	10.4%	12.1%	22.8%
Other/Both	7.0%	5.3%	19.3%
<i>Occupation</i>			
Administration		1.1%	
Advanced Practitioners	8.0%	1.1%	3.5%
Community Based Workers	7.0%		
Dietary	2.0%	0.1%	
EVS	4.0%	2.0%	
Former Workers		17.4%	14.0%
LPNs/Aides/Assistants	17.0%	9.9%	7.0%
Other		9.6%	5.3%
Physicians	8.0%	0.01%	
RNs (including NPs)	45.0%	52.1%	63.2%
Techs & Technicians	7.0%	1.1%	3.5%
Therapists	3.0%	2.9%	3.5%

⁴¹ [American Community Survey Data](#). U.S. Census Bureau.

Appendix B: Survey and Focus Group Methodology

Workforce Trends Survey

The survey instrument was designed to (1) capture as many hospital worker experiences as possible and (2) collect high-quality responses. The instrument was built using pre-existing surveys and was reviewed and refined by state partners, academic and labor experts, as well as current workers located in other states.

This voluntary survey was distributed in waves throughout October and November 2023 to licensed health care workers via registry information from Colorado Department of Public Health and Environment (CDPHE) and Colorado Department of Regulatory Agencies (DORA).⁴² As workers completed the surveys, DIRA tracked responses to assess if any modifications were needed to ensure goals were met.

Survey recipients were notified of the survey via email and text, with reminders sent to nonrespondents only. All emails included an option to opt out of future messages and all text messages included “stop” language in compliance with the Telephone Consumer Protection Act (TCPA). Additionally, all phone numbers were cross-referenced with the National Do Not Call Registry and were removed if registered.

Survey Instrument

1. Do you work at a hospital in Colorado?

- ☐ Yes (*skip to “Introduction and Purpose of Survey”*)
- ☐ No

2. (If “No” to Q1) Have you ever worked at a hospital in Colorado?

- ☐ Yes
- ☐ No (*message pops up: “Thank you for your time. This effort is specifically to survey Colorado’s hospital workforce. If you know someone who works in a Colorado hospital, please send them this link:*

https://umn.qualtrics.com/jfe/form/SV_71CNiFU90rAvBT8”)

3. When did you last work in a Colorado hospital?

- ☐ Less than 1 year ago
- ☐ 1 to 3 years ago
- ☐ More than 3 years ago

4. Why did you leave your hospital job? Select all that apply.

- ☐ Low pay
- ☐ Inadequate benefits (e.g., 401k, health insurance, etc.)

⁴² [Requested Licensed Health Care Worker Registry](#). Colorado Department of Public Health and Environment. | [Requested Licensed Health Care Worker Public Records](#). Colorado Department of Regulatory Agencies.

- ☐ Not feeling valued, respected
- ☐ Low staffing levels
- ☐ Unsafe working conditions/unsafe assignments
- ☐ Not enough hours
- ☐ Too many hours
- ☐ Lack scheduling flexibility
- ☐ Burnout, too stressful
- ☐ Offered better pay somewhere else
- ☐ Not enough experienced staff to work with
- ☐ Going back to school
- ☐ Retiring
- ☐ Other: (fill in blank)

5. Are you willing to be contacted for follow-up questions and discussion about your experience at the hospital?

- ☐ Yes
- ☐ No (*skip to "Is there anything else..."*)

6. (If "Yes" to Q5) Please share your contact information.

- ☐ Name:
- ☐ Cell phone number:
- ☐ Email:

7. Is there anything else you feel the researchers should know about your employment at the hospital?

(short answer)

Introduction and Purpose of Survey

The following survey is designed to understand your experience as a hospital worker, specifically regarding staffing, wages, benefits, training and working conditions.

These surveys are confidential. Your employer will not see individual responses. Your anonymous response will be processed by the investigators and the data (*not individual responses*) will be compiled for a report to the Division of Insurance.

If you would like more information about the purpose of this survey, click [here](#).

(Information at hyperlink):

HB21-1232 Colorado Option Workforce Trends 2024 Survey Background

In 2021, Colorado's General Assembly passed House Bill 21-1232 (HB21-1233), establishing the Colorado Standardized Health Benefit Plan ("Colorado Option") in the individual and small group markets. Coverage for Colorado Option plans first went into

effect on January 1, 2023.

HB21-1232 also requires three annual hospital workforce studies (Hospital Workforce Trends Reports) conducted by an independent third-party (DIRA Partners) to monitor the impact of the implementation of the Colorado Option on the staffing, wages, benefits, training, and working conditions of Colorado's hospital workforce to the extent such information is available.

The first of these reports, the 2023 Hospital Workforce Trends Report, was submitted to the Colorado Insurance Commissioner in June 2023. This report utilized secondary data analysis to establish the baseline for wages, benefits, staffing, training, and working conditions of the Colorado hospital workforce in the years leading up to implementation of the Colorado Option. If you would like a copy of the 2023 Report, you can access it [here](https://drive.google.com/file/d/1djRyFZOYFNHCdRwFZOuOphuKdMEowF21/view). (If hyperlink is not working, copy and paste the following into your browser: <https://drive.google.com/file/d/1djRyFZOYFNHCdRwFZOuOphuKdMEowF21/view>).

The primary goal for the 2024 Hospital Workforce Trends Report is to incorporate hospital workers' experiences related to staffing, wages, benefits, training, and working conditions directly from Colorado's workers. To do so, DIRA Partners is conducting the 2024 Hospital Workforce Trends Survey. This survey is a unique opportunity to further understand Colorado hospital workers' experiences across jobs, facilities, and geographies and how that may relate to the Colorado Option. We appreciate your time to share your perspective.

These surveys are confidential. Your anonymous responses to this survey will be processed by the investigators. Your employer has no access to these surveys or data. The State may only see deidentified data.

Your Job

8. Which hospital(s) do you currently work at?

(Drop down option; able to select multiple)

- ☐ (All gen/med surg hospitals will be included to be consistent with the 2023 Report data analysis; full list is available at the end of this document)
- ☐ Other
- ☐ Prefer not to say

9. Are you employed directly by the hospital or a contracted agency?

- ☐ Directly by a hospital. My pay and benefits come from the hospital I work at. (*skip to "Note: If you have multiple..."*)
- ☐ By a contractor. I work in a hospital setting, but my pay is from a contracting, staffing, placement, or app-based agency.
- ☐ Both. I have multiple hospital jobs that include being employed by a contracted agency and directly by a hospital.
- ☐ I am not sure.

10. (if “I am employed through a contracted...” or “Both. I have multiple...” to Q9) Which contract agency(s) do you work for? Select all that apply.

- ☐ Colorado Medical Staffing, Inc.
- ☐ Favorite Healthcare Staffing
- ☐ HealthTrust Workforce Solutions
- ☐ Ingenovis Health
- ☐ Integrated Support Solutions
- ☐ Maxim Healthcare
- ☐ Nextaff
- ☐ Snapnurse
- ☐ Sodexo
- ☐ SOS Healthcare Staffing
- ☐ Staff-Smart Medical
- ☐ Triad Service Solutions
- ☐ WSi Healthcare Personnel
- ☐ Other: (Fill in)

Note: If you have multiple hospital employers, please answer all questions going forward based on your primary hospital (e.g., where you work the majority of your hours) unless otherwise specified.

11. How long have you worked at your primary hospital?

- ☐ 1 year or less
- ☐ 2-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ 16-20 years
- ☐ 21 or more years

12. How long have you worked in hospitals in total, not just with your primary hospital employer?

- ☐ 1 year or less
- ☐ 2-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ 16-20 years
- ☐ 21 or more years

13. Which best describes your current occupation or job title?

(drop down option)

- ☐ Addiction Counselor
- ☐ Addiction Specialist
- ☐ Administration
- ☐ Advanced Practice Nurse
- ☐ Anesthesiologist Assistant

- ☐ Certified Nurse Aide/Aide
- ☐ Dietary Aide/Worker
- ☐ Environmental Services (EVS)
- ☐ Intravenous Certification Nurse
- ☐ Licensed Practical Nurse
- ☐ Medication Aide
- ☐ Pharmacist
- ☐ Physical Therapist
- ☐ Physician
- ☐ Physician Assistant
- ☐ Registered Nurse
- ☐ Respiratory Therapist
- ☐ Social Worker
- ☐ Surgical Assistant
- ☐ Surgical Technologist
- ☐ Other
- ☐ Prefer not to answer

14. Are you considered a full-time employee at your primary hospital?

- ☐ Yes
- ☐ No

15. About how many hours do you usually work per week at your primary hospital?

- ☐ 0-19 hours per week
- ☐ 20-29 hours per week
- ☐ 30-39 hours per week
- ☐ 40-49 hours per week
- ☐ 50 or more hours per week

16. Do you work a second job at another hospital?

- ☐ Yes
- ☐ No > (*skip to “This section provides statements about how your skills...”*)

17. (if “Yes” to Q16) How many hours do you work in a typical week at other hospitals?

- ☐ 0-19 hours per week
- ☐ 20-29 hours per week
- ☐ 30-39 hours per week
- ☐ 40-49 hours per week
- ☐ 50 or more hours per week

Training

This section provides statements about how your skills, training, and education match your work duties, tasks, and responsibilities. Please select whether you strongly agree, agree, disagree, strongly disagree, or not applicable for each statement.

18. I have opportunities at the hospital I work at to develop and apply the skills, training,

and education I need to enhance my career.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

19. The majority of my job duties and responsibilities match my skills, training, and education.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

20. I am rarely asked to complete tasks or duties below my skills, training, and educational level.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

21. I am never asked to complete tasks or duties above my skills, training, and education level.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

22. I am encouraged to take formal training or classes relevant to my job.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

23. The hospital I work at offers ways to gain new skills, training and/or education to advance my career options.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

24. The hospital I work at provides opportunities for me to improve my math, reading, or English as a second language skills.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

Working Conditions

Complete the following section regarding your current work and work situation. Please select whether you strongly agree, agree, disagree, or strongly disagree with each statement.

25. My hospital ensures there are enough staff on my team to care for patients/get work completed appropriately.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

26. My hospital provides the equipment I need to provide quality care for my patients/complete my work appropriately.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

27. My tasks and responsibilities are manageable within my scheduled hours.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

28. I receive support from my supervisor/manager when needed to care for my patients/get my work completed in a timely manner.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

29. I am paid appropriately for any extra time I spend at work.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

Job Satisfaction

30. On a scale of 1 to 10, with 1 being very dissatisfied and 10 being very satisfied, how satisfied are you with your current position? Select the appropriate number.

1 - 2	3 - 4	5 - 6	7-8	9 - 10
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Very DissatisfiedVery Satisfied

31. Do you expect to leave your current employer in the coming year?

- ☐ Definitely not (*skip to “What is motivating you...”*)
- ☐ Probably not (*skip to “What is motivating you...”*)
- ☐ Might or might not (*skip to “Do you expect to leave your profession...”*)
- ☐ Probably yes
- ☐ Definitely yes

32. (if “Probably yes” or “Definitely yes” to 31) Why are you considering leaving your employer? Select all that apply.

- ☐ Low pay
- ☐ Inadequate benefits (e.g., 401k, health insurance, etc.)
- ☐ Not feeling valued, respected
- ☐ Low staffing levels
- ☐ Unsafe working conditions/unsafe assignments
- ☐ Not enough hours
- ☐ Too many hours
- ☐ Lack scheduling flexibility
- ☐ Burnout, too stressful
- ☐ Offered better pay somewhere else
- ☐ Not enough experienced staff to work with
- ☐ Going back to school
- ☐ Retiring
- ☐ Other: (fill in blank)

33. (if “Probably yes” or “Definitely yes” to 31) What would convince you to stay with your employer? Select all that apply. (*skip to “Do you expect to leave your profession...”*)

- ☐ Better wages or salary
- ☐ Better benefits (401k, health insurance, etc.)
- ☐ Help with educational loan repayment
- ☐ More respect and appreciation

- ☐ Safer staffing
- ☐ Safer working conditions
- ☐ More experienced staff hired by the hospital
- ☐ Retention bonus
- ☐ Better training opportunities
- ☐ More promotion opportunities
- ☐ Better schedule
- ☐ More hours
- ☐ Less hours
- ☐ Other: (fill in blank)

34. (if “Definitely no” or “Probably no” to 31) What is motivating you to stay with your employer? Select all that apply.

- ☐ Wages or salary
- ☐ Benefits (e.g., 401k, health insurance, etc.)
- ☐ Help with education loan repayment
- ☐ Working with my coworkers
- ☐ Caring for patients
- ☐ Best for my family
- ☐ Working near where I live
- ☐ Schedule
- ☐ Hours
- ☐ Seniority
- ☐ Opportunities for promotion
- ☐ I feel valued and respected.
- ☐ Organizational culture (e.g., I feel like I fit in)
- ☐ Organizational mission (e.g., I believe in the work my organization does and how the work is accomplished)
- ☐ Other: (fill in blank)

35. Do you expect to leave your profession in the coming year?

- ☐ Definitely not (*skip to “Are you paid...”*)
- ☐ Probably not (*skip to “Are you paid...”*)
- ☐ Might or might not (*skip to “Are you paid...”*)
- ☐ Probably yes
- ☐ Definitely yes

36. (if “Probably yes” or “Definitely yes” to 35) Why are you considering leaving your profession? Select all that apply.

- ☐ Not paid enough
- ☐ Inadequate benefits (401k, health insurance, etc.)
- ☐ Not feeling valued
- ☐ Low staffing levels/unsafe assignments
- ☐ Unsafe working conditions
- ☐ Burnout
- ☐ Offered better pay somewhere else

- ☐ Not enough experienced staff to work with
- ☐ Offered better advancement opportunities elsewhere
- ☐ Lack upward mobility
- ☐ Going back to school
- ☐ Retiring
- ☐ Other: (fill in blank)

Wages and Benefits

37. Are you paid an annual salary or hourly wage?

- ☐ Annual salary
- ☐ Hourly wage (*skip to “What is your hourly wage?”*)

38. (if “Annual salary” to Q37) What is your base salary? (skip to “Have you received...”)

- ☐ \$0-\$9,999/year
- ☐ \$10,000-\$24,999/year
- ☐ \$25,000-\$49,999/year
- ☐ \$50,000-\$74,999/year
- ☐ \$75,000-\$99,999/year
- ☐ \$100,000-\$149,999/year
- ☐ \$150,000/year or more

39. (if “Hourly wage” to Q37) What is your hourly wage?

- ☐ Less than \$13.65/hour
- ☐ \$13.65-\$18.29/hour
- ☐ \$18.30-\$29.99/hour
- ☐ \$30.00-\$39.99/hour
- ☐ \$40.00-\$49.99/hour
- ☐ \$50.00/hour or more

40. Have you received a pay increase in the last 12 months?

- ☐ Yes
- ☐ No

41. Do you have health insurance?

- ☐ Yes
- ☐ No (*skip to “Select all the benefits...”*)

42. (If “Yes” to Q41) Do you get health insurance through your employer?

- ☐ Yes
- ☐ No (*skip to “Why are you not enrolled...”*)

43. (If “Yes” to Q42) Who does your health insurance cover?

- ☐ Myself only
- ☐ Myself + Spouse/Partner
- ☐ Myself + Dependents
- ☐ Myself + Spouse/Partner + Dependents

44. (If “Yes” to Q42) About how much does your health coverage cost each month? (Include monthly premiums which may be deducted from your paycheck, out of pocket costs, doctor visits, etc.)

- ☐ Less than \$100 per month
- ☐ About \$100 - \$250 per month
- ☐ About \$250 - \$500 per month
- ☐ About \$500 - \$750 per month
- ☐ About \$750 - \$1000 per month
- ☐ More than \$1,000 per month
- ☐ I don’t know

45. (If “Yes” to Q42) Do you believe your health insurance is affordable or unaffordable based on your income and needs? (Skip to “Select all the benefits...”)

- ☐ Affordable
- ☐ Unaffordable
- ☐ I don’t know

46. (If “No” to Q42) Why don’t you get health insurance through your employer?

- ☐ Not eligible (e.g., My employer offers health insurance only to full-time employees and I work part-time, I don’t have enough hours to qualify, etc.).
- ☐ My employer doesn’t offer health insurance.
- ☐ It’s too expensive.
- ☐ I get health insurance through my parents.
- ☐ I get health insurance through my spouse/domestic partner.
- ☐ I get health insurance through Medicare.
- ☐ I get health insurance through Medicaid.
- ☐ I get health insurance through the state marketplace.
- ☐ I get health insurance through the state for undocumented residents.
- ☐ Other: (fill in blank)

47. Select all the benefits below that your employer provides.

- ☐ Paid time off
- ☐ Retirement benefits (pension, 401K, deferred compensation)
- ☐ Incentive or bonus pay (retention, sign-on, performance-based, etc.)
- ☐ Flexible work arrangements (self-scheduling, telework, etc.)
- ☐ Paid time for training and/or education
- ☐ Education loan repayment
- ☐ Paid tuition for credit-bearing coursework (e.g., community college classes)
- ☐ Reimbursement for education/training expenses (e.g., professional coursework or continuing education, books, travel expenses, workshop fees)
- ☐ Discounts for or provision of childcare
- ☐ Wellness/non-health insurance benefits (Employee Assistance Programs, etc.)
- ☐ Other: (fill in blank)

48. Has your employer made any changes to your benefits in the last 12 months?

- ☐ Yes
- ☐ No (*skip to “Please complete the following...”*)
- ☐ I don’t know (*skip to “Please complete the following...”*)

49. (If “Yes” to Q48) What changes has your employer made to your benefits? Select all that apply.

- ☐ Increase in incentive or bonus pay
- ☐ Decrease in incentive or bonus pay
- ☐ Changed health insurance options
- ☐ Changed training options
- ☐ Changed childcare options
- ☐ Other: (fill in blank)

Staffing

Please complete the following section referring to your own work or work environment. Select whether you strongly agree, agree, disagree, strongly disagree, or not applicable for each statement.

50. I receive sufficient support from my team to allow me to spend adequate time doing my job/spend time needed with patients.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

51. I have enough time and opportunity to appropriately discuss work problems/patient care with my team.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

52. My patient care assignment(s)/workload is appropriate, considering both the number of patients and the care I am qualified to provide.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

53. Staffing levels/workloads in my unit are adjusted from shift to shift when needs change.

- ☐ Strongly agree
- ☐ Agree
- ☐ Disagree
- ☐ Strongly disagree
- ☐ Not applicable

Colorado Option

54. How familiar are you with the Colorado Option Program?

- ☐ Very familiar
- ☐ Somewhat familiar
- ☐ Not at all familiar (*skip to “What is your age?”*)

55. (If “Very familiar” or “Somewhat familiar” for Q54) How did you first hear about the Colorado Option Program?

- ☐ My employer
- ☐ My doctor or health care provider
- ☐ My friends or family
- ☐ Connect for Health Colorado (Colorado Marketplace for individual health insurance plans)
- ☐ The Colorado Division of Insurance website
- ☐ News media
- ☐ Other: (fill in blank)

56. (If “Very familiar” or “Somewhat familiar” for Q54) Do you believe there have been changes at your hospital due to the Colorado Option?

- ☐ Yes
- ☐ No (*skip to “What is your age?”*)
- ☐ I don’t know (*skip to “What is your age?”*)

57. (If “Yes” to Q56) Please describe the changes you believe are related to the Colorado Option.

(text box: short answer)

About You

58. What is your current age?

- ☐ 18 - 29
- ☐ 30 - 39
- ☐ 40 - 49
- ☐ 50 – 64
- ☐ 65 or older
- ☐ Prefer not to answer

59. How do you identify?

- ☐ Male

- Female
- Non-binary/third gender
- Prefer not to say

60. Do you identify as a member of the LGBTQIA+ Community?

- Yes
- No
- Prefer not to say

61. What is your primary language spoken at home?

- English
- Spanish
- Other: (fill in blank)
- Prefer not to say

62. Which best describes your racial or ethnic identity?

- Black or African-American
- Hispanic or Latino
- Asian
- White/Caucasian
- Native American/Indigenous
- Mixed race
- Other: (fill in blank)
- Prefer not to say

63. What is the highest level of education you have completed?

- Less than high school
- High school graduate
- Certificate program
- Some college
- 2 year degree
- 4 year degree
- Professional degree
- Doctorate
- Prefer not to say

64. Are you willing to be contacted for follow-up questions and discussion about your experience at the hospital?

- Yes
- No (*skip to "Is there anything else..."*)

65. (if "Yes" to Q64) Please share your contact information.

Name: (fill in blank)

Cell phone number: (fill in blank)

Email: (fill in blank)

66. Is there anything else you feel the researchers should know about your employment at the hospital?

(text box: short answer)

Thank you for your time and sharing your experiences as a Colorado hospital worker.

If you know other hospital workers in Colorado, please share this link with them to complete the survey:

{Survey URL}

Focus Groups

Over 500 survey respondents who indicated interest in follow-up discussion on the survey were invited to participate in focus groups, requesting both interest and availability. A total of 57 individuals participated in the focus groups. Five synchronous focus groups and four asynchronous bulletin boards were formed based on the provided availability and worker occupations:

- Former hospital workers,
- RNs in large systems,
- RNs in independent or small systems, and
- Clinical workers, excluding RNs.

Synchronous groups were hosted via Zoom and asynchronous groups were hosted via the bulletin board platform Quallie. The groups were designed to uphold two primary goals: (1) ensure a diverse set of employment experiences are represented and (2) solicit rich nuance and detail to complement the survey findings. Across all modalities of groups, these four questions were central to the conversation with Colorado hospital workers:

1. What are some things you like about your hospital job?
2. What are some challenges in your hospital job?
3. What do you think your organization could do to address the challenges you've faced in the workplace?
4. What else should we know about your experience working in a hospital?

Data Analysis

When the survey was closed, a total of 2,859 surveys were submitted. A total of 1,914 completed surveys remained after responses were filtered and removed based on three categories:

1. Test surveys (e.g., surveys completed by team members to test functionality),

2. People who selected “no” to currently working in a Colorado hospital or previously working in a Colorado hospital,
3. Surveys that had three or fewer questions answered.

In Microsoft Excel, the pivot table function and cross tabs filters were utilized to analyze the survey responses across occupation, employment status, and a variety of demographics (see Appendix A).

For the focus groups, qualitative data was de-identified and analyzed through a thematic analysis which characterized themes of the focus groups into the categories of wages and benefits, staffing, training, and working conditions. Each focus group transcript was included in the thematic analysis, except for one synchronous focus group with former workers in which a transcript was not produced.

For each of the four thematic categories, the number of participants and focus groups were counted to provide quantitative data for the focus group findings. For each theme, key words were searched and utilized to quantify the number of participants who made a statement in the focus groups that fell under the respective theme.

Caveats and Limitations

In the survey, all workers (former and current) were invited to participate. As shown in the survey instrument, former workers were asked a separate set of questions than workers who currently worked in Colorado hospitals. Demographics were not captured for former workers. Not all current workers chose to answer demographic questions, as it was not a requirement.

Additionally, the survey and focus groups participants underrepresented non-clinical workers such as environmental (EVS) and dietary workers. As explained in the methodology, surveys were distributed via email and text. A limitation to this method is the barrier of technology for some workers. Non-clinical workers are vital to the hospital workforce and their experience was minimally captured in the survey responses. Due to the difficulty in identifying non-clinical workers from the available data sources and registries, any findings from this survey may not be applicable to these occupations to the same extent those findings apply to other occupations that are well represented.

For the focus groups, it is important to note that not all focus groups were asked the same questions. However, all focus group questions aimed to capture information on the themes of wages, benefits, staffing, working conditions, and training and were adjusted during the synchronous groups based on the flow of conversation with hospital workers. Asynchronous focus groups were all asked the same four questions to prompt the discussion, which were open to the respondents’ interpretation. Follow-up questions were asked by focus group moderators as appropriate for engagement with the participants.

Report Accessibility

The 2024 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.

The colors included in this Report achieve the 4.5 minimum color contrast required by the WCAG 2.2 to appropriately contrast for individuals with color blindness. The color contrast was checked using the [color contrast checker](#) developed by Contrast-Finder and recommended by DORA.⁴³ The use of patterns in the Report were utilized to attain the required contrast in figures with multiple colors. Alternative text is available for all figures in this Report when screen readers are in use.

⁴³ [Color Contrast Finder](#). *Contrast-Finder*.

Appendix C: Secondary Data Methodology

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 2022.

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.

Bureau of Labor Statistics (BLS) Occupational Employment and Wage Statistics (OEWS) Data

Data

Employment and occupational analysis were conducted utilizing the Occupational Employment and Wage Statistics (OEWS) program data. The OEWS survey is a federal-state cooperative program between the Bureau of Labor Statistics (BLS) and State Workforce Agencies. OEWS produces employment and wage estimates for approximately 830 occupations based on a survey of employers. This data is published annually, and data includes cross-industry occupational employment and wage estimates for the nation, with estimates being constructed from a sample of about 1.1 million establishments collected over a 3-year period. Data from all fifty states and the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands are included in the survey. The OEWS survey sample is drawn from the database of businesses reporting to the state unemployment insurance programs.

The 2024 Workforce Trends Report uses the OEWS Research Estimates by State and Industry – a subset of the OEWS data that has been reported by BLS since 2012. The Research Estimate reports data by state (Colorado), industry (Health and Social Assistance 4-digit code - General Medical & Surgical Hospitals), and occupation (6-digit code: for example, RNs 29-2241).

The OEWS program uses the Office of Management and Budget's Standard Occupational Classification (SOC) system to classify jobs into occupations based on their job duties, and the May 2023 OEWS estimates are based solely on survey data collected using the 2018 SOC. May

2023 estimates also use the 2023 North American Industry Classification System (NAICS) to classify establishments into industries based on the employer’s primary activity.

Measurement

To describe the Colorado health care workforce and general medical and surgical hospital workforce, employment totals and percentages from the 2023 OEWS survey state and industry data was used. The health care workforce was defined as “health care practitioners and technical occupations” and “healthcare support occupations”. This data was used to describe Colorado’s health care workforce as a share of Colorado’s total workforce in addition to Colorado’s hospital (defined as general and surgical medical hospitals) workforce as a share of Colorado’s health care workforce.

For the purposes of this report, DIRA defines hospitals as “general medical and surgical hospitals”, as these hospitals exclude specialty hospitals such as long term, rehabilitation, and psychiatric hospitals that have unique workforce characteristics and financial trends. Additionally, most hospitals in the state are classified as general medical and surgical hospitals.⁴⁴

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) 2024 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 2024 HCPF Financial Transparency Report provided data to describe and analyze labor costs, including contract labor, as a share of operating expense. 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.

⁴⁴ [Definition of Code 6221101: General Medical and Surgical Hospitals](#). U.S. Census Bureau. | [Colorado Hospital Directory and Service Type](#). Colorado Hospital Association.

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