

COVID-19's Impact on Colorado Hospitals' Finances

2021
August



COLORADO

Department of Health Care
Policy & Financing

Contents

I. Executive Summary	3
II. Purpose	7
III. Overview of the COVID-19 Pandemic and Response in Colorado	7
IV. Hospital Financial Need and the Pandemic	11
V. Hospital Utilization and the Pandemic	22
VI. Conclusion & Opportunities	26
VII. Methodology	28



I. Executive Summary

In this report, the Department of Health Care Policy & Financing (the Department) analyzed publicly available 2020 financial and utilization data, information and reimbursement rates to examine:

- Colorado hospitals' financial preparedness for the pandemic.
- The impact of federal COVID-19 stimulus dollars on Colorado's hospitals.
- The overall financial impact of the pandemic on Colorado's hospitals.

Throughout the COVID-19 pandemic, hospitals have been an essential partner on the frontlines through treating infected patients, collaborating to identify best treatment practices, and stopping the spread of the virus through testing and vaccination. For hospitals, the COVID-19 pandemic significantly disrupted nationwide operations and created considerable financial uncertainty. In response to this uncertainty, hospitals responded with varying business decisions to protect their financial viability, such as furloughs and permanent staffing cuts. This, along with years of raising prices, increasing profits, and stockpiling reserves in the defense of a rainy day, invites discussion on hospital strategic pricing decisions and financial preparedness for sudden market disruption.^{1,2}

Colorado hospitals differed in financial preparedness, with rural hospitals having fewer reserves than urban hospitals, mountain resort and hospital systems. Specifically, the median urban hospital or hospital system had enough cash reserves to operate for **238 days** without revenue, while the median rural hospital could operate for **99 days** without revenue. Colorado's large urban hospitals, major hospital systems and a few rural hospital outliers had significant cash and investments available to mitigate the financial impact of the pandemic.

As of April 21, 2021, Colorado hospitals have accepted an estimated \$1.02 billion in non-repayable federal COVID-19 aid. While federal COVID-19 aid provided a lifeline to many rural hospitals, further analysis is needed to assess

¹ Hospital Cost Price and Profit Report, July 2021 available at <https://hcpf.colorado.gov/hospital-reports-hub>.

² Gooch, K. (2019, February 14). *Deeper dive: Analysis finds Colorado hospitals shifted more costs to commercial insurers.* Becker's Hospital Review.

www.beckershospitalreview.com/finance/colorado-hospitals-have-shifted-more-costs-to-commercial-insurers-state-agency-says.html.



the scale of losses for these hospitals. Rural hospitals received a median of 84 days -- nearly three months -- cash to operate from federal stimulus distribution. Still, some hospitals continued to struggle financially even after receiving a boost from federal COVID-19 aid. At the same time, this initial analysis of financial filings shows that, when including federal COVID-19 aid, **all major hospital systems (organizations that own or operate three or more hospitals) operating in Colorado recorded operating profits in 2020 and did not have to dip into their financial reserves.**

The Department's analysis shows hospital systems that made staffing reductions chose to address the decline in revenue projections by mitigating costs instead of using their reserves. This cost cutting also reflects the findings described in the *Hospital Cost, Price and Profit Review* report also released in August 2021. That report describes how large system and urban Colorado hospitals are high cost, charge high prices to sustain those high costs, and continue to grow profits, which presents an opportunity for continued conversation with these hospitals to reduce prices and better manage their costs.

Concurrent with this financial reality, COVID-19 related market disruption and uncertainty spurred industry innovation. Increased usage of telehealth, COVID-19 care delivery and treatment advances, as well as testing and vaccine care innovations helped continue safe delivery of services. Telehealth, which evolved immensely during the pandemic, offered a unique opportunity to favorably impact the cost curve while the dynamics of market change provided the opportunity to drive a [new, more efficient, effective and innovative “new normal”](#) in care delivery with the goals of improving health outcomes and saving Coloradans money on health care.

Key Report Findings

- ✓ Hospitals had various starting points in financial preparedness before the pandemic.
- ✓ Some hospital systems' pre-pandemic reserves were large enough to continue operations for more than ten months with no incoming revenue.
- ✓ Other hospitals, the majority of which are in rural areas, were struggling before the pandemic.

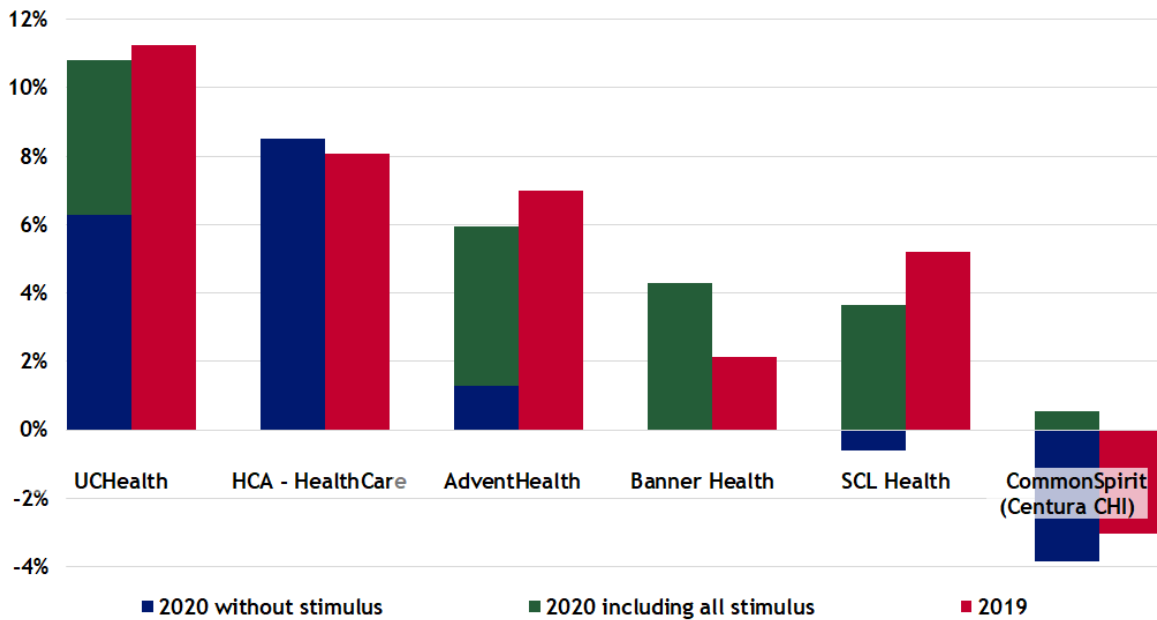


- ✓ As of April 21, 2021, Colorado hospitals have accepted an estimated \$1.02 billion in non-repayable federal COVID-19 aid.
- ✓ Hospitals' existing financial resources were not considered by the federal government when calculating and distributing federal COVID-19 aid to hospitals.
- ✓ The chart below illustrates pre-pandemic profits (red), pandemic profits without (blue) and with (green) federal stimulus for major hospital systems operating in Colorado. This chart shows that:
 - ✓ With federal stimulus, major hospital systems operating in Colorado all recorded operating profits in 2020 with no need to dip into reserves.
 - ✓ UCHHealth (a major hospital system operating in Colorado alone) recorded an operating margin comparable to pre-pandemic levels with federal stimulus (11.2% and 10.8% for 2019 and 2020 respectively), and despite the pandemic recorded an operating margin of 6.3% without federal stimulus.
 - ✓ UCHHealth had no need to draw upon their rainy day reserves, which were enough to cover 340 days without any incoming cash/revenue.
 - ✓ HCA Healthcare exceeded their 2019 profits and does not show profits with federal stimulus because the major system committed to returning all federal COVID-19 aid stating, *"We believe returning these taxpayer dollars is appropriate and the socially responsible thing to do."*³

³ HCA Healthcare. (2020, October 8). *HCA Healthcare Previews 2020 Third Quarter Results*. www.investor.hcahealthcare.com/news/news-details/2020/HCA-Healthcare-Previews-2020-Third-Quarter-Results/default.aspx.



National Operating Margin for Major Hospital Systems (Three or more hospitals in Colorado) in 2020 and 2019



- HCA-HealthCare does not include stimulus monies due to their returning of all stimulus
- Data from financial statements available through Electronic Municipal Market Access or system websites
- HCA-HealthCare, UHealth, and AdventHealth had positive operating margins *before stimulus*

- ✓ Federal COVID-19 aid had greater significance for rural hospitals in covering short-term costs.
 - ✓ Federal COVID-19 aid gave rural hospitals around three months of additional cash to cover their short-term costs.
 - ✓ Federal COVID-19 aid gave urban hospitals less than one month of additional cash to cover their short-term costs.

Short-Term Liquidity of Colorado Hospitals Before and During COVID-19

Cash Measure	Rural	Urban
Days Cash on Hand - Median	99	238
Days Cash from Stimulus - Median	84	19
Days Cash in Total - Median	192	259

- ✓ Hospitals took steps to mitigate cash outflow, such as furloughing employees, forcing time off, and reducing staff hours.
- ✓ Hospital utilization declined during the height of the pandemic and has since mostly recovered, though not uniformly.
- ✓ The pandemic has revealed opportunities to increase health care innovations and drive a [more effective and efficient new normal](#).

II. Purpose of this Report

Analyzing 2020 specifically, the Department reviewed publicly available financial and utilization data, information and reimbursement rates to examine:

- Colorado hospitals' financial preparedness for the pandemic.
- The impact of federal COVID-19 stimulus dollars on Colorado's hospitals.
- The overall financial impact of the pandemic on Colorado's hospitals.

This report also identifies financial lessons learned from the pandemic and opportunities to leverage the learnings from the pandemic in order to create a new normal in health care that better serves Coloradans.

This examination and analysis is not unique to Colorado as hospital finances and the impact of the federal COVID-19 aid they received has been of growing interest to national news outlets, other state governments and federal legislative bodies.^{4,5,6,7} This report includes discussion on the seriousness of short-term financial distress across Colorado hospitals compared to their federal COVID-19 aid distribution in order to enable insightful discussions with hospitals on prices, related profits, reserves and preparedness for sudden market disruption.

This report presents an initial review of available financial data. Full analysis of 2020 Colorado hospital financials will continue as hospitals submit financial data to the Department for analysis.

III. Overview of the COVID-19 Pandemic and Hospital Financial Situation in Colorado

The unprecedented circumstances of the pandemic revealed the benefits of understanding Colorado hospitals' financial position and solvency in a current, rather than retrospective, economic crisis and to identify which hospitals need

⁴ Rau, Jordan. (2020, April 28). *Amid Coronavirus Distress, Wealthy Hospitals Hoard Millions*. Kaiser Health News. www.khn.org/news/amid-coronavirus-distress-wealthy-hospitals-hoard-millions.

⁵ Drucker, J., Silver-Greenberg, J., & Kliff, S. (2020, May 25). *Wealthiest Hospitals Got Billions in Bailout for Struggling Health Providers*. The New York Times. www.nytimes.com/2020/05/25/business/coronavirus-hospitals-bailout.html.

⁶ Liss, S. (2020, June 23). *Nonprofit health systems — despite huge cash reserves — get billions in CARES funding*. Healthcare Dive. www.healthcaredive.com/news/nonprofit-health-systems-despite-huge-cash-reserves-get-billions-in-car/.

⁷ Jordan Rau, C. S. (2021, April 2). *Some of America's wealthiest hospital systems ended up even richer, thanks to federal bailouts*. The Washington Post. <https://www.washingtonpost.com/us-policy/2021/04/01/hospital-systems-cares-act-bailout/>.



the most aid during a potential crisis to withstand economic shocks and remain open for their community. To ensure affordable, accessible and quality care, **it is imperative our hospitals remain solvent and available to treat Coloradans in communities across the state.**

Key Findings: Overview of the COVID-19 Pandemic

- ✓ Colorado hospitals have accepted an estimated \$1.02 billion in non-repayable federal COVID-19 aid as of April 21, 2020 (Previous figures released by the Department reflected \$1.2 billion in COVID-19 aid; however, HCA has committed to return stimulus which has lowered the figure to \$1.02 billion).
- ✓ Colorado hospitals have reported reduced revenues due to the pandemic. The following policy responses were intended to slow the pandemic's spread and provide aid to the hospitals to mitigate the financial impacts and improve sustainability.

A. Federal Government Policy Response to Financially Support Hospitals

At the beginning of the COVID-19 pandemic, the federal government quickly responded with financial support for hospitals. Since the beginning of the COVID-19 pandemic, several pieces of federal legislation have been approved by Congress to mitigate the financial impacts to the national health care system:

- On March 6, 2020, Congress passed the Coronavirus Preparedness and Response Supplemental Appropriations Act, providing an initial \$8.3 billion in emergency funding.⁸
- On March 18, 2020, Congress passed the Families First Coronavirus Response Act which raised the federal medical assistance percentage by 6.2% allowing states to increase hospital reimbursement rates and various types of supplemental payments.⁹
- On March 27, 2020, the Coronavirus Aid, Relief and Economic Security (CARES) Act was passed, delaying cuts to supplemental payments and creating a Provider Relief Fund of \$100 billion to help health care providers across the country.¹⁰

⁸ Coronavirus Preparedness and Response Supplemental Appropriations Act, H.R. 6074, 116th Cong. (2020).

www.congress.gov/bills/116/congressional-legislation/6074/all-actions.

⁹ Families First Coronavirus Response Act, H.R. 6201, 116th Cong. (2020). www.congress.gov/bills/116/congressional-legislation/6201/all-actions.

¹⁰ Coronavirus Aid, Relief and Economic Security Act, H.R. 748, 116th Cong. (2020). www.congress.gov/bills/116/congressional-legislation/748/all-actions.



- On April 24, 2020, the Payment Protection Program and Health Care Enhancement Act allotted an additional \$75 billion to health care providers and \$825 million to rural health centers and clinics. Additional legislation has been proposed to assist the health care industry with fluctuations in revenue streams.¹¹
- On Dec. 27, 2020, the Consolidated Appropriations Act provided \$900 billion for various COVID-19 related stimulus and funding.¹²
- On March 6, 2021, the American Rescue Plan Act included \$8.5 billion in funds for rural health care providers, and many billions more for other vaccine and health care related items.¹³

As a result of the above federal and state legislation, **Colorado hospitals have accepted an estimated \$1.02 billion in non-repayable federal COVID-19 aid as of April 21, 2020.**¹⁴

B. Anticipated impact to utilization and response

The COVID-19 pandemic created uncertainty for hospitals around capacity and utilization.¹⁵ In the effort to collect real-time data, phone interviews were conducted by the Department's Chief Financial Officer (CFO) and other members of the Finance team to multiple hospital and health system representatives in April 2020. During these surveys, hospitals shared seeing declines in revenue; in particular, they emphasized that the delay in elective surgeries and procedures created substantial financial losses.²⁴ As revenues declined, hospitals incurred additional costs for personal protective equipment (PPE), medication and labor as well as soaring costs of PPE due to worldwide shortages.¹⁶ Hospitals expressed financial pressure from declining revenue and increasing costs.^{17,18}

¹¹ Paycheck Protection Program and Health Care Enhancement Act 2020, H.R. 266, 116th Cong. (2020). www.congress.gov/bills/116/congressional-legislation/2020/house-bills/266.

¹² Consolidated Appropriations Act, 2021, H.R. 133, 116th Cong. (2020) <https://www.congress.gov/bills/116/congressional-legislation/2020/house-bills/133>.

¹³ American Rescue Plan Act, 2021, H.R. 1319, 117th Cong. (2021) <https://www.congress.gov/bills/117/congressional-legislation/2021/house-bills/1319>.

¹⁴ Methodology for department tracking of federal COVID-19 aid is in Appendix under "Days Cash from Stimulus"

¹⁵ John (Xuefeng) Jiang, Ge Bai, Lovisa Gustafsson, & Gerard Anderson. (2020, June 25). *Canary in a Coal Mine? A Look at Initial Data on COVID-19's Impact on U.S. Hospitals*. Commonwealth Fund, www.commonwealthfund.org/publications/issue-briefs/2020/jun/canary-in-a-coal-mine-initial-data-covid-19-impact-hospitals.

¹⁶ Kaufman, Hall & Associates, LLC. (2021). *National Flash Survey Report*. www.kaufmanhall.com/ideas-resources/research-report/national-hospital-flash-report-summary-march-2021.

¹⁷ Colorado Hospital Association. (2020, April 17). CHA COVID Update, April 17, 2020. Presentation shared with the Department of Health Care Policy & Financing.

¹⁸ Kaufman, Hall & Associates, LLC. (2021). COVID-19 in 2021: Pressure Continues on Hospital Margins. <https://www.aha.org/guidesreports/2021-03-22-covid-19-2021-pressure-continues-hospital-margins-report>.



Hospital responses to financial pressures are not fully known or understood, and likely varied. Notable publicized responses by hospitals included temporarily reducing pay for executives and hours for health care workers. For example, the UHealth hospital system and Penrose-St. Francis Health Center (owned by the Catholic Health Initiatives system) required full-time staff to use vacation days.¹⁹ The Banner Health hospital system furloughed five to seven percent of staff across the hospital system and reduced executive pay.²⁰ Independent hospitals not part of a system also reduced staff, as demonstrated by Melissa Memorial Hospital, Parkview Medical Center and Valley View Hospital.^{21,22} Denver Health requested employees voluntarily reduce hours.²³ As of August 2020, 16% of hospital and health systems nationally eliminated executive bonus payouts entirely.²⁴ Note that these publicized actions may not comprehensively represent actions taken to protect hospital financial viability, both in the short and the long term. This experience revealed the need for real-time information to more fully understand the effects on the health care workforce and hospital financial strain, both initially and over time, in order to inform future practices as we head towards a “new normal.”

IV. Hospital Financial Data and the Pandemic

The state stood up data collection processes to monitor disease spread, track the treatment of patients, and monitor and support providers when there were reported shortages. However, reliable, real-time financial information to monitor the financial pressures of hospitals was largely unavailable. During this time, concerns about hospital financial health and dropping revenue streams was relayed through word of mouth, the media, and from hospital representation like the Colorado Hospital Association and the Colorado Rural

¹⁹ Heilman, Wayne. (2020, May 18). *UHealth requiring salaried employees to use vacation days*. The Gazette. www.gazette.com/business/uhealth-requiring-salaried-employees-to-use-vacation-days.

²⁰ Ellison, Ayla. (2020, April 21). *Banner Health cuts exec pay, plans to furlough up to 7% of employees*. Becker's Hospital Review, www.beckershospitalreview.com/finance/banner-health-cuts-exec-pay-plans-to-furlough-up-to-7-of-employees.html.

²¹ Ellison, Ayla. (2020, September 11). *22 Hospitals Laying off Furloughed workers*. Becker's Hospital Review. <https://www.beckershospitalreview.com/finance/22-hospitals-laying-off-furloughed-workers.html>.

²² Ellison, Ayla. (2020, August 24). *Financial fallout from COVID-19: 38 hospitals laying off workers*. Becker's Hospital Review. www.beckershospitalreview.com/finance/financial-fallout-from-covid-19-38-hospitals-laying-off-workers.html.

²³ CBS Denver. “Denver Health Executives Get Bonuses 1 Week After Workers Asked To Take Cuts”, (2020, April 24). <https://denver.cbslocal.com/2020/04/24/coronavirus-denver-health-bonus-ceo-pay-cuts/>.

²⁴ Kacik, A. (2020, August 1). *As front-line workers suffer layoffs and furloughs, giving executives bonuses can stir resentment*. Modern Healthcare. <https://www.modernhealthcare.com/executive-compensation/front-line-workers-suffer-layoffs-and-furloughs-giving-executives-bonuses>.



Health Center. In the early months of the pandemic, the Department turned to publicly available data to evaluate the financial pressures on the hospital industry.

Initially, the Department sought insight by investigating how hospitals were financially prepared for periods of revenue shortages. Some nonprofit hospitals and hospital systems had channeled pre-pandemic high profit margins that built large reserves of cash and investments.^{25,26,27} Cash and investments held by Colorado hospitals increased from \$2.7 billion in 2009 to \$6.9 billion in 2018, reflecting some of the highest profits in the country.²⁸ These reserves are to sustain organizations during difficult times, while building them is sometimes used as justification for high hospital margins.²⁹ However, hospitals appeared reluctant to dip into reserves and instead made business choices focused on cost-cutting measures such as furloughing employees. Smaller rural hospitals, more likely to be under financial strain, may not have had the same opportunity to build up their rainy-day funds, causing the COVID-19 pandemic to generate further financial pressure on these vulnerable hospitals.

Key Findings: Hospital Financial Data and the Pandemic

- ✓ Two large Colorado hospitals and two Colorado hospital systems have reserves large enough to operate for more than 10 months with no incoming revenue.
- ✓ Federal COVID-19 aid gave rural hospitals a median of three additional months of cash to cover their short-term costs, ranging between 27 and 223 days.
- ✓ Federal COVID-19 aid provided urban hospitals a median of 19 days of additional covered costs.
- ✓ Financial filings show that, when including federal stimulus, all major Colorado hospital systems recorded operating profits in 2020 with no need to utilize reserves, *which is a significant finding.*

²⁵ Rau, Jordan. (2020, April 28). *Amid Coronavirus Distress, Wealthy Hospitals Hoard Millions*. Kaiser Health News. www.khn.org/news/amid-coronavirus-distress-wealthy-hospitals-hoard-millions.

²⁶ Allen, J. (2020, May 5). *How many Days Cash on Hand should a Hospital Have?* The Hospital Medical Director. www.hospitalmedicaldirector.com/how-many-days-cash-on-hand-should-a-hospital-have.

²⁷ Gooch, K. (2019, February 14). *Deeper dive: Analysis finds Colorado hospitals shifted more costs to commercial insurers*. Becker's Hospital Review. www.beckershospitalreview.com/finance/colorado-hospitals-have-shifted-more-costs-to-commercial-insurers-state-agency-says.html.

²⁸ Hospital Cost Price and Profit Report, July 2021 available at <https://hcpf.colorado.gov/hospital-reports-hub>.

²⁹ Rau, Jordan. (2020, April 28). *Amid Coronavirus Distress, Wealthy Hospitals Hoard Millions*. Kaiser Health News. www.khn.org/news/amid-coronavirus-distress-wealthy-hospitals-hoard-millions.



A. Hospital Financial Preparedness - Days Cash on Hand

The financial liquidity metric “days cash on hand” well represents hospital preparedness and reserves.³⁰ Days cash on hand measures the savings of a business compared to its operating costs to project how many days of business could occur if all incoming funds halted. For example, a business with 75 days cash on hand could continue paying bills, payroll and purchasing supplies as normal for 75 days if it stopped receiving any income.

Keeping large amounts of short-term reserves (i.e. days cash on hand) serves several purposes for hospitals. One purpose is covering expenses in case of financial downturns. Higher reserves also generate lower interest rates on loans through higher credit ratings. Additionally, days cash on hand is one of the most common covenants in debt issuance; failing to meet covenants can have consequences from increased scrutiny up to default.³¹ These negative effects of decreased days cash on hand incentivize hospitals to maintain a higher amount of savings.

Figure 1 shows the disparity of days cash on hand pre-COVID-19 pandemic across Colorado for rural and urban independent hospitals as well as hospital systems. Colors indicate hospital size or system hospitals. The size of Colorado hospitals was determined using the Hospital Transformation Program measurements, while “systems” are defined as three or more hospitals operated by the same entity that have been open the entirety of 2019 and 2020. The systems are: AdventHealth, Banner Health, CommonSpirit (Centura-CHI), San Luis Valley, SCL Health and UCHealth.

Figure 1: 2019 Days Cash on Hand for Colorado Nonprofit Hospitals and Systems^{32,33}

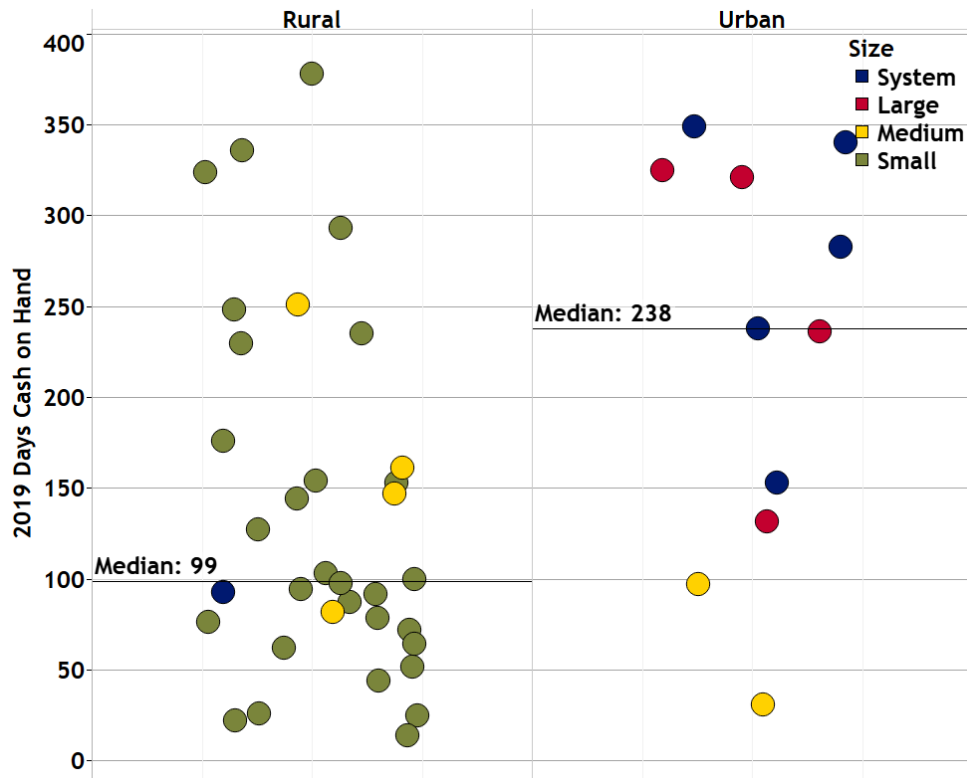
³⁰ See the Methodology section of this report for the detailed calculations and a discussion of limitations.

³¹ Hall Render. (2020, May 5). *Managing Financial Covenants for Healthcare Borrowers*.

www.hallrender.com/2020/05/05/managing-financial-covenants-for-health-care-borrowers-in-a-pandemic.

³² See the section of this report for the detailed calculations and a discussion of limitations, which includes an explanation on why only nonprofit hospitals are depicted.

³³ Each circle is a nonprofit hospital or hospital system and their days cash on hand measure. There were two clear categories for analysis: rural and urban. Also depicted in the following visuals are sizes, determined by [Colorado's Hospital Transformation Program](#), grouped into small, medium and large based on bed numbers (less than 26, 26-90, and greater than 90, respectively). A random variable was applied to the X axes to better show the circles.



There was a wide range in Colorado hospitals' financial preparedness before the COVID-19 pandemic, from having enough cash reserves to operate an entire year without revenue to having such low cash reserves that the hospital could operate for less than 50 days without revenue. Rural hospitals generally had a lower "days cash on hand" ratio than urban hospitals, with the days cash on hand median being 99 days for rural hospitals and 238 days for urban hospitals and systems. For hospital specific information, please see the Appendix Dataset.

As construction and expansion are indicators of available cash, the cash on hand trends are not surprising given construction and expansion in urban areas as thoroughly described in the Department's *Hospital Cost, Price and Profit Review* report.³⁴ However, there is a subset of rural hospitals³⁵ with higher levels of days cash on hand than their peers and more in line with urban hospital and hospital system counterparts. These organizations

³⁴ Hospital Cost Price and Profit Report, August 2021 available at <https://hcpf.colorado.gov/hospital-reports-hub>.

³⁵ Rio Grande Hospital, Keefe Memorial Hospital, Gunnison Valley, and Sedgwick County Health Center. Followed by Heart of the Rockies Regional, Aspen Valley, and Yuma District Hospital. The Medium sized hospital is Valley View. A full list of hospitals is in Appendix A.

(hospitals systems, large urban hospitals and some rural hospitals) had enough available funds to operate for eight months or more without revenue with minimal solvency risks; however, most rural hospitals had few available funds to weather any financial downturns.

B. COVID-19 Federal Stimulus Funding - Days Cash from Stimulus

The federal government provided substantial federal COVID-19 aid through the CARES Act and other stimulus packages.³⁶ The pressing need to get money directly to health care providers and hospitals led to limitations on the complexity of formulas used to calculate disbursement amounts. Initial reporting on the simple formulas suggested large, high volume hospitals were favored, although there has been little discussion beyond raw amounts.^{37,38,39} Hospitals started receiving federal COVID-19 aid in April 2020 and some are still receiving it; however, the majority of aid was distributed in summer and fall of 2020.

At first glance, this might make sense as larger hospitals have more expenses, lost more revenue (reduced utilization) and treated more COVID-19 patients. However, hospitals' current financial resources were not considered when making disbursements of federal COVID-19 aid. Even if the federal government wished to consider current financial resources, current and real time financial data is not readily available.⁴⁰ The Department's analysis hopes to shed light on how federal COVID-19 aid was distributed among Colorado hospitals.

The Department actively tracked non-repayable federal COVID-19 aid. By dividing this amount by daily operating expenses, we can estimate how many days of expenses were covered by federal monies.⁴¹ The following

³⁶ See "Government Policy Response to COVID-19" section for more information.

³⁷ Drucker, J., Silver-Greenberg, J., & Kliff, S. (2020, May 25). *Wealthiest Hospitals Got Billions in Bailout for Struggling Health Providers*. The New York Times. www.nytimes.com/2020/05/25/business/coronavirus-hospitals-bailout.html.

³⁸ Liss, S. (2020, June 23). *Nonprofit health systems — despite huge cash reserves — get billions in CARES funding*. Healthcare Dive. www.healthcaredive.com/news/nonprofit-health-systems-despite-huge-cash-reserves-get-billions-in-car/.

³⁹ Jordan Rau, C. S. (2021, April 2). *Some of America's wealthiest hospital systems ended up even richer, thanks to federal bailouts*. The Washington Post. <https://www.washingtonpost.com/us-policy/2021/04/01/hospital-systems-cares-act-bailout/>.

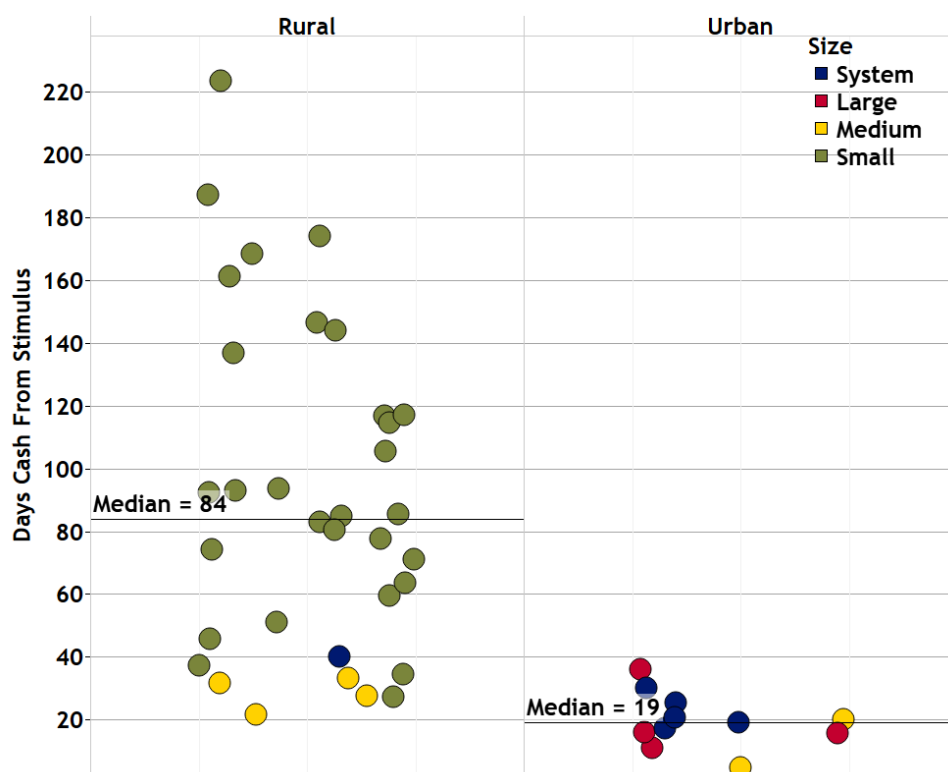
⁴⁰ At this time, there is no timely and reliable national dataset on hospital financial health. Medicare Cost Reports are not timely and issues in some self-reported Medicare Cost Report data could result in an unfair distribution of federal stimulus. For example, a hospital may not include corporate level financial resources in the balance sheet of the hospital's Medicare Cost Report.

⁴¹ This analysis does not include a delay in Medicare rate cuts, or repayable advance Medicare payments, which for some hospitals are substantial. See the Appendix section of this report for the detailed calculations.



chart (Figure 2) shows days cash from stimulus across Colorado for rural and urban independent hospitals and hospital systems, with color indications for hospital size or system.

Figure 2: Days Cash from Stimulus for Colorado Nonprofit hospitals, Updated April 21, 2021⁴²



The impact of federal COVID-19 aid on hospitals varied widely. Our data shows rural hospitals received more federal stimulus proportionally to daily operating expenses than urban hospitals. It is important to note the rural hospital median of 84 days cash from stimulus is about three months of additional cash and is highly variable from rural hospital to rural hospital due to the additional allocations to rural hospitals in various federal acts. Urban hospitals received a median of 19 days cash from stimulus. These impacts should be taken in scale to the losses from the COVID-19 pandemic discussed in the “COVID-19 Financial Impacts” section.

⁴² Each circle is a nonprofit hospital or hospital system and their days cash from stimulus measures. A random variable was applied to the X axes to better show the circles.

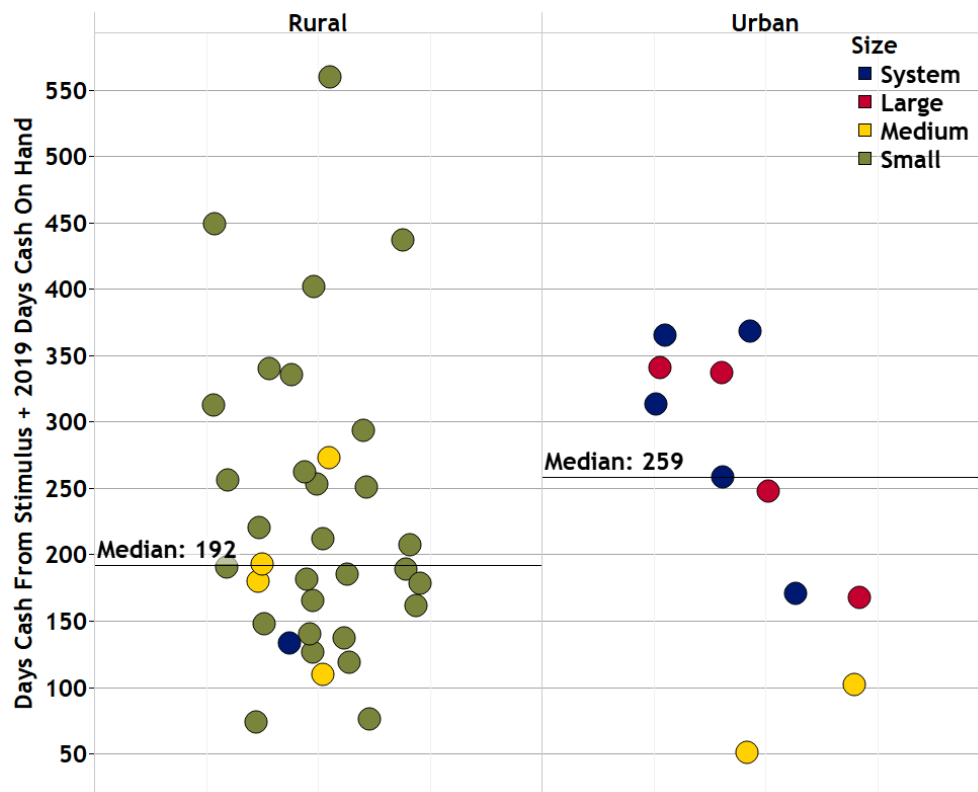
As the federal government continues to distribute additional COVID-19 aid, or if hospitals return federal COVID-19 aid, these figures may change. The Department will continue to monitor and revise our reporting, accordingly. During Department phone surveys with hospital leadership, some hospitals found the federal guidance on federal COVID-19 aid unclear and expressed reluctance in using that aid.⁴³ For hospital specific information, please see Appendix A.

C. Hospital Short-term Liquidity Through the Pandemic - Days Cash in Total

Colorado hospitals had different levels of financial preparedness and support during the pandemic. Figure 3 shows a combined days cash on hand and days cash from stimulus to give an indication of Colorado hospitals' short-term liquidity through the pandemic.

⁴³ Observed from Department phone surveys conducted by the CFO and members of the Finance team.

Figure 3: Days Cash on Hand Plus Days Cash from Stimulus
(Updated April 21, 2021)



With the additional federal COVID-19 aid, rural hospitals' ability to cover expenses were brought more in line with urban hospitals, although a large gap still existed between the two. The days cash on hand combined with stimulus median is 192 days cash on hand for rural hospitals and 259 days cash on hand for urban hospitals and systems. **These analyses show federal COVID-19 aid as the lifeline for most rural hospitals to overcome short-term COVID-19 pandemic effects.** Even after federal COVID-19 aid, liquidity funding for rural hospitals was less (192 days cash on hand and from stimulus median) than the urban hospitals' position **before** federal stimulus (238 days cash on hand median).

Table 1: Short-Term Liquidity of Colorado Hospitals Before and During COVID-19

Cash Measure	Rural	Urban
Days Cash on Hand - Median (pre-pandemic)	99	238
Days Cash from Stimulus - Median	84	19
Days Cash in Total - Median	192	259

D. COVID-19 Financial Impacts

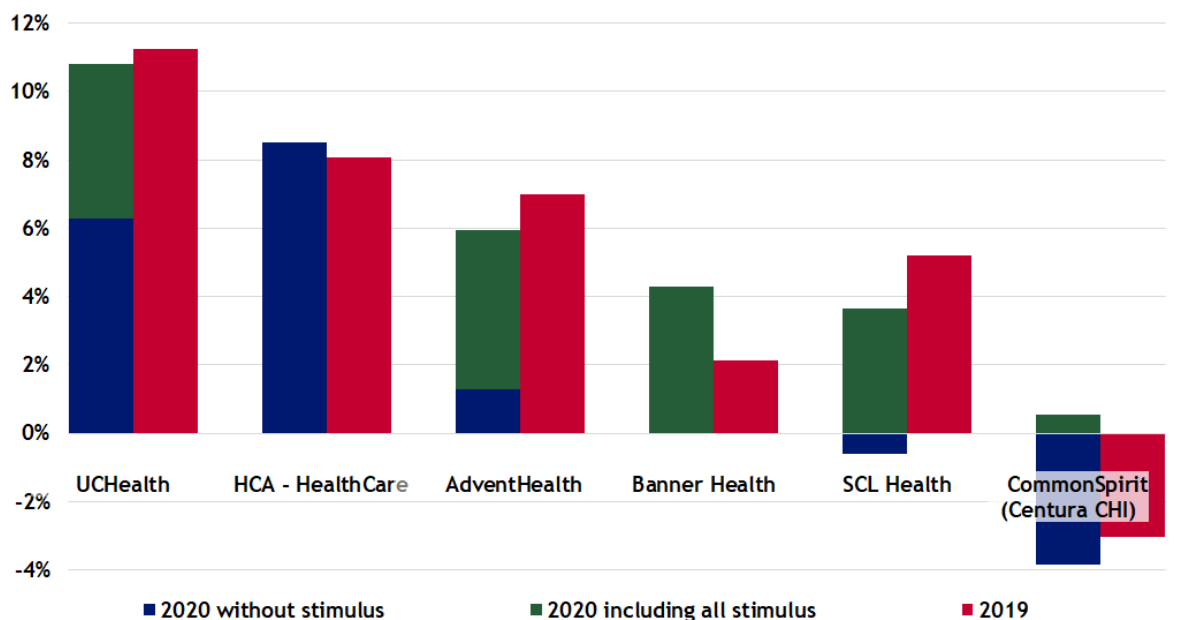
Presently, there is limited hospital financial information publicly available to better understand hospitals' financial situation during the COVID-19 pandemic. Lack of obligation to real-time reporting makes it difficult to see a full picture of a hospital's financial health. Few hospitals are obligated to publish quarterly financial documents due to bond issuances, and full year financial documents are often released months after the year ends. As a result, the complete analysis of 2020 financial statements will only be possible when the Department receives hospitals' financial and utilization data pursuant to [House Bill \(HB\) 19-1001: Hospital Transparency Measures to Analyze Efficacy](#), which will be published annually on Jan. 15.

Hospitals, hospitals systems and lobbying associations have focused their discussions on lost revenue as well as the amount of federal COVID-19 aid they received; however, that attention may be misdirected. **A review of currently available filings shows that, partially due to federal COVID-19 aid, all Colorado hospital systems have recorded operating profits in 2020 (Figure 4).** While operating profits in 2020 are smaller than the previous year's record-setting large operating profits, they are still positive.^{44,45} **Three health systems (HCA Healthcare, UCHealth, AdventHealth) recorded a profit before stimulus.**

⁴⁴ Booth, Michael. Colorado hospitals' profit margins are nation's highest as state lawmakers move to cap health care costs. (2021, February 18). <https://coloradosun.com/2021/02/18/colorado-hospitals-most-profitable-in-nation/>.

⁴⁵ Ingold, John. Denver-area hospitals made a record \$2 billion in profits in 2018, according to a new report. (2019, September 13) <https://coloradosun.com/2019/09/13/colorado-hospital-profit-margins/>.

Figure 4: National Operating Margin for Major Hospital Systems (Three or more hospitals in Colorado) in 2020 and 2019

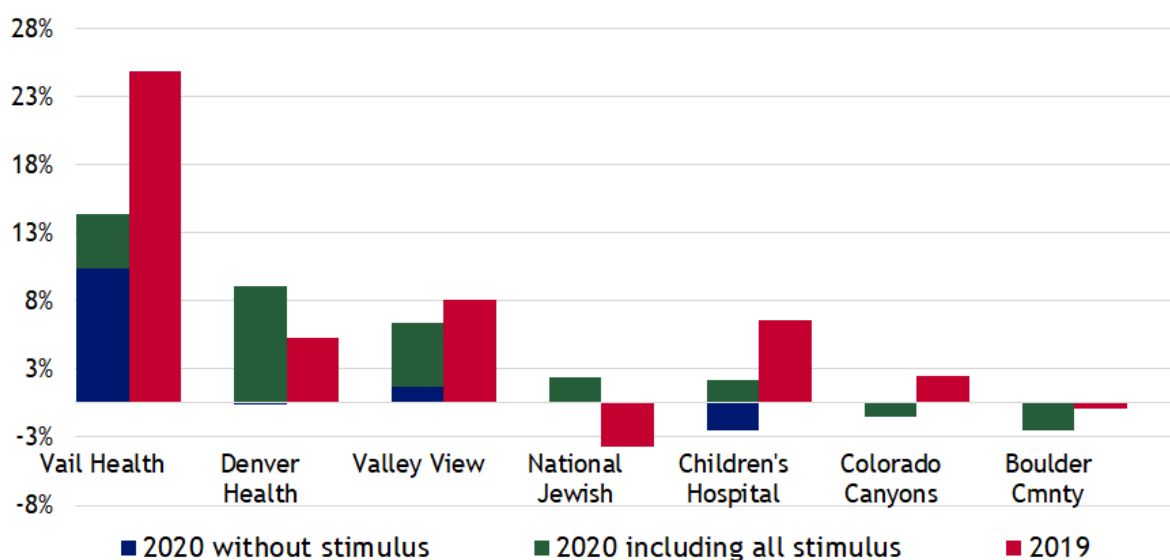


- HCA-HealthCare does not include stimulus monies due to their returning of all stimulus
- Data from financial statements available through Electronic Municipal Market Access or system websites
- HCA-HealthCare, UHealth, and AdventHealth had positive operating margins *before stimulus*

Independent (non-system) hospitals who have financial statements due to bond issuances are released later and often do not include as much detail as hospital systems. In many cases, where federal COVID-19 aid was attributed is not clear.

Figure 5 shows a small portion of Colorado's independent hospitals. These hospitals had high variation in 2020 compared to 2019 margins with some hospitals having improved margins. More analysis needs to be done on how Colorado's independent hospitals fared through the pandemic as financial data becomes available.

Figure 5: Operating Margin for Select Independent Hospitals in Colorado in 2020 and 2019



- Canyons, National Jewish, and Boulder Community don't have a margin estimate without stimulus, and these are assuming all stimulus is included in operating revenue, which may be incorrect.
- Data from year end financial statements available through Electronic Municipal Market Access.

Current financial data indicates hospital systems and some Colorado hospitals had enough cash reserves available to cover their short-term costs for months, yet Colorado hospitals reported cutting labor costs and reducing staff. During this period, health care workers were pushed to their mental and physical limits with many reporting strained or unsafe staffing levels, stress, burnout and a desire to leave their profession.^{46,47} All Colorado hospital systems earned enough revenue and received enough federal stimulus to make a profit.^{48,49}

The Department's analysis shows hospital systems that made staffing reductions chose to address the decline in revenue projections by mitigating costs instead of using their reserves. This cost cutting also reflects the findings described in the *Hospital Cost, Price and Profit Review* report, which describes how Colorado hospitals are high cost and continue to charge high prices to sustain those high costs, which presents an opportunity for continued conversation with these hospitals to reduce prices and

⁴⁶ Kaiser Family Foundation and The Washington Post. (2021, March). KFF and Washington Post Frontline Health Care Workers Survey. www.washingtonpost.com/context/washington-post-kff-frontline-health-care-workers-survey-feb-11-march-7-2021/.

⁴⁷ American Association of International Healthcare Recruitment. (2021, April 6). One Year into Covid-19, One-Third Of Nurses Are Considering Leaving The Bedside. www.aaihr.org/blog/2021/04/06/covid-nurse-survey-2021/.

⁴⁸ Seaman, Jessica. (2021, March 28). Colorado Health Care Workers Grapple with Burnout, Trauma As Pandemic Stretches into A Second Year. Denver Post.

www.denverpost.com/2021/03/28/colorado-covid-health-care-workers-trauma-burnout/.

⁴⁹ Cleveland, Claire. UHealth Employees Announce Plans To Unionize (2021, Dec 15)

<https://www.cpr.org/2020/12/15/uhealth-employees-announce-plans-to-unionize/>.

manage costs. Colorado hospitals must find a balance to remain open and staffed during shifts and reductions in revenue, while also maintaining financial efficiency in order to provide affordable and high-quality care regularly and through public health crises such as pandemics.

V. Hospital Utilization and the Pandemic

To better understand hospital financial pressure and the associated strategic decisions in response, the Department reviewed hospital utilization data during the pandemic. As discussed previously, hospitals were in a unique position during this public health crisis: They were responsible for treating an overwhelming amount of serious, highly contagious COVID-19 cases *while* experiencing a decline in other lines of services as a result of emerging life-saving policies as well as public hesitation to seek health services. This section reviews data to understand how utilization changed during the pandemic and the implications of those changes.

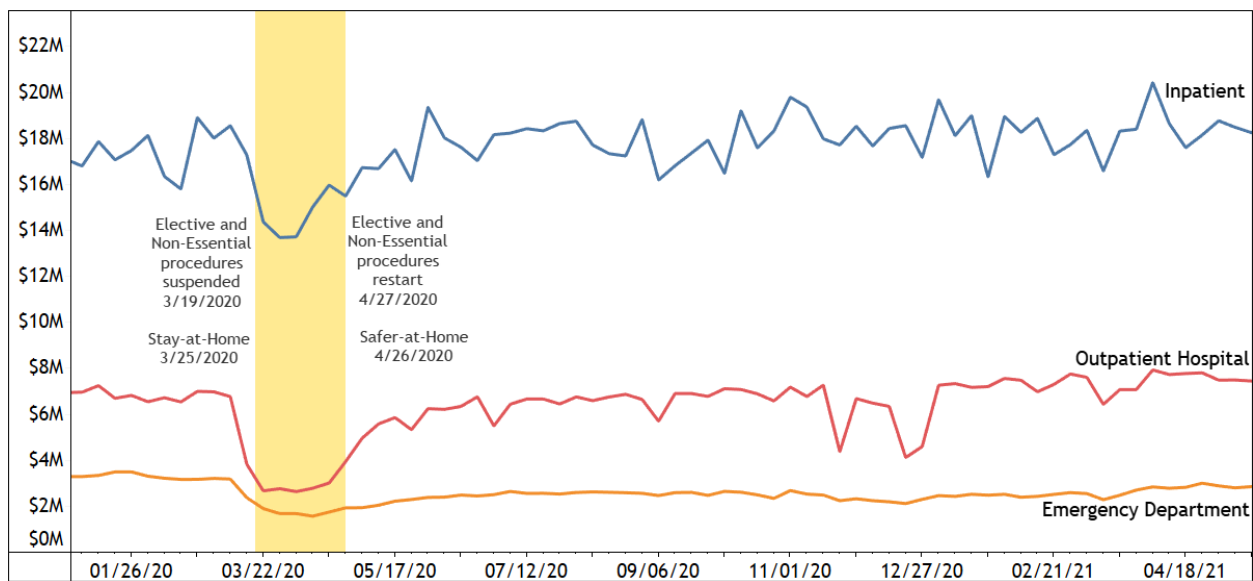
Key Findings: Hospital Utilization

- ✓ Hospital inpatient utilization declined but not as much as outpatient or emergency care, then rebounded since the height of the pandemic.
- ✓ Outpatient and emergency department services declined more significantly and have mostly recovered, but at a slower pace and with lower volume levels than inpatient utilization.
 - ✓ Medicaid outpatient service levels are back at around pre-pandemic levels while emergency department services are at 65% to 70% of pre-pandemic volume levels.
- ✓ Current levels of utilization prompt questions about previous utilization trends and expose the benefits of telemedicine and opportunities to increase access and affordability.

Colorado hospital utilization declined during the pandemic and in the months following the initial restrictions. However, in more recent months since the vaccine became available, utilization has neared pre-pandemic levels. An article in *JAMA Internal Medicine* revealed UCHealth's emergency department

visits declined 41.5% between January and April 2020.⁵⁰ Centura Health stated that as of August 2020 inpatient admissions and surgeries had returned to volume levels from before the pandemic, while emergency department visits and outpatient services are at 85 to 90% of volume levels compared to before the pandemic.⁵¹ Utilization of inpatient and outpatient hospital services rebounded after the stay-at-home order (Figure 6); however, spending per member per week has declined slightly from pre-pandemic levels.⁵²

Figure 6: Colorado Medicaid Weekly Incurred But Not Reported (IBNR) Expenditure/Utilization Trends for Inpatient, Outpatient Hospital and Emergency Department Services Per Member Per Week through May 22, 2021⁵³



Forgoing emergency care has serious risks, but the slower rebound in emergency department visits and hospital outpatient services prompts the question: **Are pre-pandemic utilization rates the appropriate benchmark for the health care system, or is the drop in utilization an indication of unnecessary utilization of hospital care? Or, is there a balance between the**

⁵⁰ Jeffery, M., D'Onofrio G., Paek H., et al. (2020, August 3). Trends in Emergency Department Visits and Hospital Admissions in Health Care Systems in 5 States in the First Months of the COVID-19 Pandemic in the US. JAMA Internal Medicine. doi.org/10.1001/jamainternmed.2020.3288.

⁵¹ Hillstrom, Zac, (2020, August 27). *Hospitals often lose money treating COVID-19 patients*. The Colorado Springs Business Journal. www.csbj.com/premier/businessnews/healthcare/hospitals-often-lose-money-treating-covid-19-patients.

⁵² Since the start of the pandemic hospitals are cumulatively up \$9.5 million for inpatient, down \$56.9 million for emergency department and down \$36.5 million for outpatient hospital for a net of -\$83.9 million. Note: emergency department includes both facility and professional charges.

⁵³ As these are IBNR adjusted, they are estimates, particularly for the later part of the timeframe displayed. Emergency department service utilization includes both the facility and professional costs. The period that non-essential procedures were suspended is highlighted.

two that starts to point at the appropriate “new normal” of emergency department utilization, which hospitals should prepare for going forward?

Concurrently, there is debate in Colorado, as well as on the national health care stage, about the level to which certain types of health care are low value (unnecessary or wasteful) and contributing to the growth of health care spending.⁵⁴ This debate deserves additional attention given the financial impact the pandemic has had on Colorado families, employers and the state budget.

The pandemic has brought to the forefront opportunities for health care delivery evolution and innovation, such as at-home telemedicine, to provide safe delivery of some services. Recent hospital utilization rates reveal new, lower benchmarks and the opportunity to further identify historic over-utilization challenges, business practices that drove them, and new alternative payment models to maintain appropriate utilization benchmarks. Concurrently, the Department recognizes the threat associated with under-utilization in some areas such as stroke, heart attack and chemotherapy, which can cause worse outcomes. Our shared goals should be to deliver - and therefore reward via new payment models - **the right care, at the right place, at the right time and at the right price that achieves better and more affordable outcomes**. Achieving this goal will require a reassessment of the complex payment delivery models currently in place in Colorado.

The decline in hospital utilization and adoption of telehealth services indicates opportunities to ensure people are getting the right care, at the right place, at the right time and at the right price. Hospitals may not be the most appropriate place for certain services, especially during a pandemic that strains the hospital delivery system and brings vulnerable patients into the path of COVID-19. The delivery of care in a patient’s home reduces the congregation of individuals and could increase access to needed care, especially in geographic areas that have limited provider locations or public transportation. Prior to the pandemic, telemedicine was not significantly utilized; after access to telemedicine was expanded, providers and patients have utilized

⁵⁴ Shrank, W., Rogstad, T. & Parekh, N. (2019, October 7). *Waste in the US Health Care System Estimated Costs and Potential for Savings*. JAMA. doi.org/10.1001/jama.2019.13978.



telemedicine frequently.^{55,56} Although there are initial start-up costs to successfully implement telemedicine, the application of telemedicine is an opportunity to reach more patients without the high investment costs of opening new locations. Telemedicine service expansion and normalization will result in more patients getting the right care in the right place to the benefit of Coloradans, employers and the state. Emerging telemedicine reimbursement policy, aligned more with the lower telemedicine costs, also presents an affordability opportunity.

As we recover from the pandemic, now is the time to pinpoint opportunities to drive a “[new normal](#) in health care,” and the Department is very focused on this opportunity. The “new normal in health care” must include a wide adoption of new initiatives by hospitals, as hospitals represent the largest component of the health care dollar and the most influential part of the delivery system due to the number of physicians and other aspects of care delivery that they own.

VI. Conclusion & Opportunities

The increased financial pressures on hospitals during the pandemic, followed by the large amounts of federal COVID-19 aid, has led to new questions of hospital resiliency and financial practices. Initial analysis of 2020 financial filings show that all hospital systems that operate in Colorado have recorded operating profits when federal COVID-19 aid was included in calculations. Some major Colorado hospitals had built large reserves, yet many hospitals remained reluctant to dip into their reserves and instead leaned on federal COVID-19 aid, and chose to make payroll reductions and other cost-cutting measures to offset revenue reductions due to the pandemic.⁵⁷ This invites discussion on hospital strategic decisions, including pricing, and financial preparedness for sudden market disruption.

⁵⁵ Department of Health Care Policy & Financing. (2020, May). *Learning from COVID-19: Telemedicine Background & Policy Considerations*.

<https://www.colorado.gov/pacific/sites/default/files/Learning%20from%20COVID-19%20Telemedicine%20Background%20and%20Policy%20Considerations%20for%20Policy%20Makers%20-%20May%202020.pdf>.

⁵⁶ Siwicki, Bill. (2020, August 3). *Epic EHR-linked telehealth skyrockets at Children's Colorado*. Healthcare IT News.

<https://www.healthcareitnews.com/news/epic-ehr-linked-telehealth-skyrockets-children-s-colorado>.

⁵⁷ Gooch, K. (2019, February 14). *Deeper dive: Analysis finds Colorado hospitals shifted more costs to commercial insurers*. Becker's Hospital Review.

www.beckershospitalreview.com/finance/colorado-hospitals-have-shifted-more-costs-to-commercial-insurers-state-agency-says.html.



Conversely, for Colorado hospitals without large reserves, federal COVID-19 aid was a necessary lifeline to allow continued care for Coloradans through the pandemic. However, the high cost structure of many Colorado hospitals made them shoulder larger than necessary financial challenges as lower revenue levels struggled to cover unnecessarily high hospital costs. This may have increased dependence on stimulus funds.

Job loss and unemployment impacted, and continues to impact, the demand for public programs like Medicaid as Coloradans lost their employer-sponsored insurance coverage.⁵⁸ This increased the number of Coloradans covered by public programs and reduced those covered by employer-sponsored programs. That said, and as discussed in the *Hospital Cost, Price and Profit Review* report, as well as the *Colorado Hospital Cost-Shift Analysis*,⁵⁹ the evidence shows that shifting cost of care for publicly covered patients to privately covered programs is not the cause of Colorado hospitals' high prices; rather, Colorado hospitals have high prices fueled by their strategic decisions, high costs and high profits. To increase access and improve affordability for all Coloradans, it is essential that hospitals consider their role in how the cost of their community's commercial insurance is impacted if they choose to charge prices at levels far in excess of that necessary to cover public program shortfalls to maximize profits. High price levels may be built from high profits and/or high costs, as opposed to the overall value of care provided.

Since most Colorado hospitals are tax-exempt, nonprofits, the perception of reinvesting profits to increase market power instead of passing on cost-savings to consumers is a factor to consider as well. The continuation of hospital and physician consolidation and purchase by health care systems, during and as a result of the pandemic, brings further scrutiny about the distribution of federal COVID-19 aid; this also adds to a growing push to hold hospital systems accountable to anti-monopolistic regulations.⁶⁰

⁵⁸ Department of Labor and Employment. (2020). *Labor Force, Employment and Unemployment for Colorado in Multiple Time Periods: 2020 Monthly Unemployment Rate*. www.colmigateway.com.

⁵⁹ Hospital Cost Price and Profit Report, August 2021, and Colorado Hospital Cost Shift Analysis, January 2020, available at <https://hcpf.colorado.gov/hospital-reports-hub>.

⁶⁰ Abelson, R. (2021, May 21). *Buoyed by Federal Covid Aid, Big Hospital Chains Buy Up Competitors*. <https://www.nytimes.com.cdn.ampproject.org/c/s/www.nytimes.com/2021/05/21/health/covid-bailout-hospital-merger.amp.html>.



Right now, Colorado has an opportunity to expand and continue the delivery innovations discovered and developed during the pandemic to improve Colorado's health system and increase access to care to help hospitals, providers, patients, and the state provide not only higher quality but more affordable care as well. Expansion of telehealth, home health and digital health solutions are just a few examples of this. For a comprehensive list of solutions see [A New Path Forward in Health Care](#).

Our shared goals should be to deliver - and therefore reward via new payment models - **the right care, at the right place, at right time and at the right price that achieves better and more affordable outcomes**. Achieving this goal will require a reassessment of the complex payment delivery models currently in place in Colorado.

As more financial data becomes available to the Department, we will continue to update our analysis and reporting of savings, stimulus disbursements, and losses to improve the ability of our health care system to continue operations in future economic downturns and pandemics while also improving affordability.

VII. Appendix

A. Dataset

Table 2: Short Term Liquidity by Hospital/System [* indicates data from Medicare Cost Reports]

Hospital/System Name	Size Classification	2019 Days Cash on Hand	2020 Days Cash from Stimulus
Animas Surgical Hospital	Small	14	60
Arkansas Valley Regional Med Ctr	Small	98	81
Aspen Valley Hospital District	Small	235	27
Banner Health	System	283	30
Boulder Community Hospital	Large	325	16
Centura Health AdventHealth	System	238	21
CommonSpirit (Centura Health CHI)	System	153	17
Children's Hospital Colorado	Large	321	16
Colorado Canyons	Small	103	37
Community Hospital*	Medium	31	20
Delta County Memorial Hospital	Medium	82	28
Denver Health Medical Center	Large	131	36
Estes Park Medical Center*	Small	144	64
Grand River Hospital District	Small	154	35
Gunnison Valley Hospital	Small	324	78
Haxtun Hospital District	Small	87	169
Heart of the Rockies Reg Med Center	Small	248	46
Keefe Memorial Hospital	Small	336	223
Kit Carson County Memorial Hospital	Small	94	117
Kremmling Memorial Hospital District*	Small	62	85

Lincoln Community Hospital	Small	22	115
Melissa Memorial Hospital	Small	146	113
Montrose Memorial Hospital*	Medium	161	32
Mt. San Rafael Hospital*	Small	100	85
National Jewish Health	Medium	97	5
Pagosa Springs Medical Center	Small	72	94
Parkview Medical Center	Large	236	11
Pioneers Medical Center	Small	26	93
Prowers Medical Center*	Small	127	93
Rangely District Hospital	Small	176	137
Rio Grande Hospital*	Small	378	71
San Luis Valley	System	93	40
SCL Health	System	349	19
Sedgwick County Health Center	Small	293	144
Southeast Colorado Hospital	Small	92	161
Southwest Memorial Hospital	Small	79	83
Spanish Peaks Regional Health	Small	77	174
St. Vincent General Hospital	Small	44	147
The Memorial Hospital	Small	25	51
UCHealth	System	340	25
Valley View Hospital	Medium	251	22
Vail Valley Medical Center	Medium	147	33
Weisbrod Memorial County Hospital*	Small	153	187
Wray Community District Hospital	Small	52	74

Yuma District Hospital	Small	230	106
------------------------	-------	-----	-----

B. Methodology

1. Overview

This analysis presents two hospital liquidity (preparedness) measures from financial statements or Medicare Cost Reports: days cash on hand and days cash from stimulus. The analysis includes Colorado hospitals and splits them into urban and rural categories.

- Only hospitals with the following provider IDs (last 4 digits) are included: 0001 - 0899 (Short-term Hospitals), 1300 - 1399 (Critical Access Hospitals) and 3300 - 3399 (Children's Hospitals).
- To review geographic differences in financial preparedness and federal stimulus impact, this analysis uses a rural classification for hospitals not located within Metropolitan Statistical Areas (MSA) as designated by the U.S Office of Management & Budget.⁶¹
- This analysis excludes hospitals owned by publicly traded companies.
- Medians are used to summarize analysis results.

2. Days cash on hand

Days cash on hand is a commonly used financial ratio used to measure short-term liquidity by comparing unrestricted cash and investments to daily operating expenses. In common practice, days cash on hand is calculated using the following formula:^{62,63}

Equation 3: Days Cash on Hand Equation

⁶¹ There is one Colorado hospital system with only rural hospitals and is included in the rural grouping. Other systems are mostly urban hospitals and in the urban group.

⁶² Pink, G.H., Holmes, G.M., D'Alpe, C., Strunk, L.A., McGee, P. & Slifkin, R.T. (2006). *Financial Indicators for Critical Access Hospitals*. *The Journal of Rural Health*, 22: 229-236. doi.org/10.1111/j.1748-0361.2006.00037.x.

⁶³ Moody's Investor Service standard calculation. <https://www.moodys.com/>.

$$\text{Days cash on hand} = 365 * \frac{\text{Unrestricted cash \& equivalents} + \text{Unrestricted investments}}{\text{Total operating expenses} - \text{Annual depreciation}}$$

Days cash on hand is derived from two sources for this analysis: available financial statements and Medicare Cost Reports. Financial statements are the preferred method of calculating days cash on hand, but a small portion of financial statements were not available. Future analysis will be improved by better data availability following 2019's passage of [HB19-1001](#) and continued reporting.

There are several hospital systems in Colorado that operate facilities outside of the state or operate facilities other than hospitals, and days cash on hand calculations are taken at the system level using financial statements. For non-system hospitals, financial statement data was used if available, and publicly available Medicare Cost Report data was used otherwise. Thirty-one of the 39 independent hospitals in this analysis had days cash on hand verified by financial statements.^{64,65} From financial statements, days cash on hand is either clearly stated as a liquidity measure or can be calculated using the above formula. When Medicare Cost Report data was used, the fields listed below contributed.

Table 4: Days Cash on Hand from The Medicare Cost Report^{66,67}

Row	Calculation	Field	Cost Report 2552-10
A		Cash and short-term investments	Worksheet G, Columns 1 through 4, Lines 1 & 2
B	Plus	Investments	Worksheet G, Columns 1 through 4, Line 31
C		Cash and investments	
D		Total operating expenses	Worksheet G-3, Column 1, Line 4

⁶⁴ Electronic Municipal market access. <https://emma.msrb.org/>.

⁶⁵ Some Financial Statements available through hospitals' websites or provided to HCPF by HB19-1001.

⁶⁶ Pink, G.H., Holmes, G.M., D'Alpe, C., Strunk, L.A., McGee, P. & Slifkin, R.T. (2006). *Financial Indicators for Critical Access Hospitals*. *The Journal of Rural Health*, 22: 229-236. doi.org/10.1111/j.1748-0361.2006.00037.x.

⁶⁷ 2019 data is used for this analysis so only Cost Report 2552-10 form is used.

E	Minus	Annual depreciation	Worksheet A-7, Part II, Line 3, Column 9
F		Cash operating expenses	
G	Row C divided by Row F		
H	Row G multiplied by 365		

3. Days cash from stimulus

Days cash from stimulus is a unique Department calculation modeled on the days cash on hand measure. Days cash from stimulus measures short-term liquidity added by COVID-19 related financial stimulus by comparing federal COVID-19 aid amounts to daily operating expenses. For days cash from stimulus the numerator is federal COVID-19 aid amounts and the denominator is daily operating expenses. The Department calculates daily operating expenses using 2019 statements or Medicare Cost Report data (the same as used in the days cash on hand calculations). Nationwide systems had daily operating expenses for days cash from stimulus calculated using Medicare Cost Report data for only Colorado hospitals because stimulus estimates were only available for Colorado hospitals.

$$\text{Days Cash from Stimulus} = 365 * \frac{\text{Amount of stimulus monies}}{\text{Total operating expenses} - \text{annual depreciation}}$$

The analysis includes the stimulus amounts from multiple COVID-19 driven federal acts:

- From the Coronavirus Aid, Relief and Economic Security (CARES) Act, amounts from the Provider Relief Fund program are pulled from attestation data.^{68,69,70} Amounts in the high-impact dataset are double-counted in the general attestation dataset and have been adjusted accordingly.

⁶⁸ Centers for Disease Control and Prevention. (n.d.). *HHS Provider Relief Fund* | Data. Data.Cdc.Gov. data.cdc.gov/Administrative/Provider-Relief-Fund-General-Allocation/kh8y-3es6.

⁶⁹ Centers for Disease Control and Prevention. (n.d.). *HHS Provider Relief Fund High-Impact Payments* | Data. Data.Cdc.Gov. data.cdc.gov/Administrative/Provider-Relief-Fund-COVID-19-High-Impact-Payments/b58h-s9zx.

⁷⁰ Centers for Disease Control and Prevention. (n.d.). *HHS Provider Relief Fund Claims Reimbursement to Health Care Providers* | Data. Data.Cdc.Gov. data.cdc.gov/Administrative/Claims-Reimbursement-to-Health-Care-Providers-and-rksx-33p3.



- Also from the CARES Act are Small Rural Hospital Improvement Program (SHIP) grants and telehealth awards.^{71,72}
- From the Paycheck Protection Program and Health Care Enhancement Act (PPP-HCE Act), money was added to the Provider Relief Fund, Testing Capacity awards were issued, and Paycheck Protection Program (PPP) loans were given out to small businesses including some Colorado hospitals.^{73,74} The PPP loan data is only available in ranges and the average of the high/low amount is used. PPP loans are forgivable when meeting certain criteria and the Department believes hospitals will meet these criteria. Failure to meet these criteria or use this funding may change stimulus amounts for some hospitals. As hospitals announced whether stimulus criteria are met the numbers have been updated.
- Funding through the Federal Emergency Management Agency's (FEMA) disaster relief program is included for hospitals that have received it.⁷⁵

The analysis does not include the following stimulus amounts:

- From the Coronavirus Preparation and Response Supplemental Appropriations Act (CORSA Act) grant money was distributed through the Hospital Preparedness Program; however, this is distributed to the Colorado

⁷¹ U.S. Health Resources & Services Administration. (2020, August). *Coronavirus Disease (COVID-19) Information - Federal Office of Rural Health Policy*. www.hrsa.gov/rural-health/coronavirus.

⁷² Federal Communications Commission. (2020, September 3). *COVID-19 Telehealth Program | Federal Communications Commission*. www.fcc.gov/covid-19-telehealth-program.

⁷³ Bureau of Primary Health Care. (2020, May). *Colorado Expanding Capacity for Coronavirus Testing Awards*. www.bphc.hrsa.gov/emergency-response/expanding-capacity-coronavirus-testing-fy2020-awards/co.

⁷⁴ U.S. Department of the Treasury. (n.d.). *SBA Paycheck Protection Program Loan Level Data*. Home.Treasury.Gov. www.home.treasury.gov/policy-issues/cares-act/assistance-for-small-businesses/sba-paycheck-protection-program-loan-level-data.

⁷⁵ U.S. Department of Homeland Security. Federal Emergency Management Agency. (n.d.) *Daily Public Assistance Grant Awards Activity*. [Fema.gov/about/openfema/data-sets/fema-daily-public-assistance-grant-awards-activity](https://fema.gov/about/openfema/data-sets/fema-daily-public-assistance-grant-awards-activity).



Hospital Association (CHA) and there is no way to attribute it to individual hospitals.⁷⁶

- A delay in the reduction of Medicare payment rates.
- Other stimulus sources providing short-term liquidity such as accelerated Medicare payments or payroll tax deferrals (both of which will need to be repaid later) and increased payments for COVID-19 Medicare patients.^{77,78,79}

Federal COVID-19 aid is still being distributed and the full amount of non-repayable stimulus is likely to change. Hospitals may have also received federal COVID-19 aid from additional sources not tracked by the Department due to lack of consolidated data on the many pathways of funding.

4. Financial Impacts

Operating margins for 2020 and 2019 were calculated using financial statements available through Electronic Municipal Market Access (EMMA) or official system/hospital websites. Medicare Cost Report data was not used. In some cases, hospitals use an accounting year that is not January through December (calendar year); these were adjusted back to encompass a standard calendar year. This analysis aims to attribute all federal COVID-19 aid received to the 2020 financial year; some hospitals have not recognized all stimulus monies in 2020 (deferring some of this cash to 2021). This is concurrent with U.S. Department of Health and Human Services (HHS) reporting guidelines. In cases where the deferred amount is clear, it is adjusted to be attributed in 2020. In some cases, location and amount of federal COVID-19 aid in hospital financials is unclear; this analysis

⁷⁶ U.S. Department of Health & Human Services. (n.d.). *Award Information* | HHS TAGGS. taggs.hhs.gov/Detail/AwardDetail?arg_AwardNum=U3REP200618&arg_ProgOfficeCode=255.

⁷⁷ Center for Medicare and Medicaid Services. (2020). *COVID Accelerated and Advance Payments by state*. www.cms.gov/files/document/covid-accelerated-and-advance-payments-state.pdf.

⁷⁸ Internal Revenue Service. (n.d.). *Deferral of employment tax deposits and payments through December 31, 2020* | Internal Revenue Service. www.irs.gov/newsroom/deferral-of-employment-tax-deposits-and-payments-through-december-31-2020.

⁷⁹ American Hospital Association. (n.d.). *Coronavirus Update: CMS Releases Guidance Implementing CARES Act Provisions* | AHA. www.aha.org/advisory/2020-04-16-coronavirus-update-cms-releases-guidance-implementing-cares-act-provisions.



assumes in these cases it is recognized in operating revenue and as more detailed financial data becomes available this may change for certain hospitals. There is a possibility of hospitals returning a portion of federal COVID-19 aid by choice or if they are unable to meet criteria for using it, in which case the numbers in this analysis would change.

Operating margin is operating profit divided by operating revenue. Operating margin adjusted to not include stimulus is calculated by removing federal COVID-19 aid accounted for in operations from both operating income and operating revenue. Federal COVID-19 aid not included in operations would not need to be adjusted for.

Operating margin adjusted to include all federal COVID-19 aid is calculated by adding stimulus monies to both operating income and operating revenue. If federal COVID-19 aid is already accounted for in operating revenue and operating income, then no adjustment was needed (most hospitals followed this accounting method). Federal COVID-19 aid hospitals accounted for in different areas of financial statements (i.e. current liabilities, cash flows from nonoperating activities) have been included in this adjustment when there were clear amounts of stimulus monies listed.

5. Limitations

For some hospitals, this analysis uses end-of-year 2019 data but, in some cases, this may not be recent enough to accurately portray hospital status at the onset of the COVID-19 crisis.

Medicare Cost Report reporting is not the same as financial statement reporting methodology, potentially causing small differences in days cash on hand. As stated previously, the Department compared values between differences in the two and differences (other than outliers) were consistently small. Only seven hospitals in the days cash on hand/days cash from stimulus analysis used Medicare Cost Report data (and hospital systems'

daily operating expenses for days cash from stimulus as noted in methods); all other hospitals and other sections of analysis were done with financial statement data.

Days cash on hand assumes operating expenses stay the same as incoming cash halts, but COVID-19 related factors (decrease in elective procedures, cost cutting, increased need for COVID-19 equipment, etc.) may have changed expense patterns and impacted some hospital types more than others, either improving or worsening short-term liquidity.

Days cash on hand is a useful and common ratio to judge short-term financial liquidity; however, future analysis could consider other factors. For example, open credit lines from financial institutions can offer short-term liquidity, but hospitals have varying levels of accessibility and amounts available.⁸⁰

At the time of publication, this analysis shows the most recent attested federal COVID-19 aid amounts from the sources listed. As distributions continue and hospitals manage stimulus monies and attestations, these amounts and other stimulus funding may change in either direction.

For systems, days cash on hand is at a consolidated level (including non-Colorado hospitals and health facilities), while days cash from stimulus is Colorado hospitals only. Margins are also on a consolidated level. Multi-state systems may not reflect their total average days cash from stimulus boost.

⁸⁰ Rau, Jordan. (2020, April 28). *Amid Coronavirus Distress, Wealthy Hospitals Hoard Millions*. Kaiser Health News. www.khn.org/news/amid-coronavirus-distress-wealthy-hospitals-hoard-millions.

