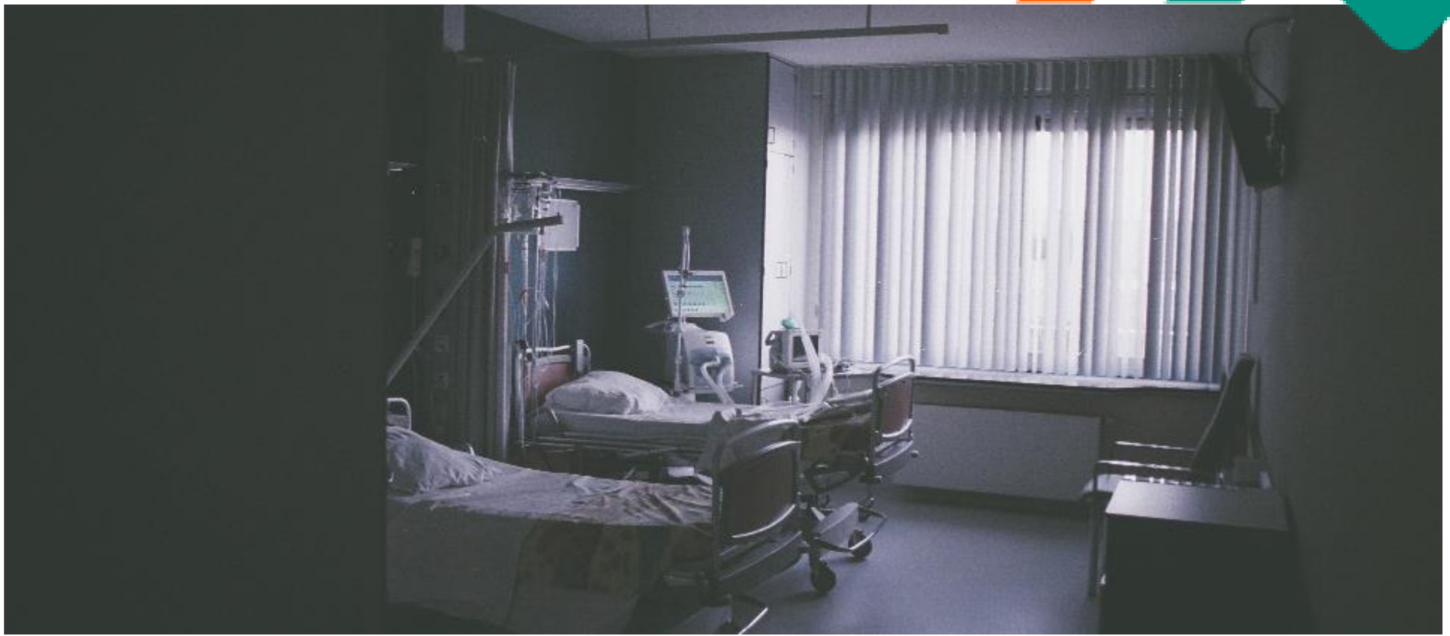

The Effects of Hospital Consolidation in Colorado

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Introduction

Over the last year, health care costs nationwide have grown dramatically. From January 2019 to January 2020, prices for hospital services jumped 3.8 percent and health insurance rose 4.8 percent, much faster than overall inflation, which was 2.5 percent.[1] While the health care system is complex and prices for procedures vary across the country, one major contributor to these price increases is hospital consolidation. A study of 366 hospital mergers from 2007 to 2011 showed that prices increased 6 percent when those hospitals were less than five miles apart but not at greater distances, which strongly suggests that more concentration in a given market leads to higher prices.[2] This is a big problem all across the US, as 90 percent of metropolitan areas have "highly concentrated" hospital markets.[3] Specifically, the number of community hospitals that merged into a hospital system rose from a little over half of community hospitals in 1999, to two-thirds by 2016.[4] These trends help to explain part of the reason why Americans face higher prices for comparable health services, leading to US health spending being substantially higher than other high-income countries in the Organization for Economic Cooperation and Development (OECD).[5]

This report will look at the state of Colorado to examine the factors that are contributing to consolidation in local markets and the impact of consolidation on residents across all regions of the state. The trends discussed here are found more broadly in the US, suggesting that there are important lessons to be learned from Colorado when policymakers and advocates are crafting future health care reforms.

[1] Baker, "Overall CPI Rises 0.1 Percent in January, While Core Index Rises 0.2 Percent."

[2] Cooper, et al., "The Price Ain't Right?"

[3] Fulton, "Health Care Market Concentration Trends In The United States."

[4] Gee and Gurwitz, "Provider Consolidation Drives Up Health Care Costs."

[5] Papanicolas, Woskie, and Jha, "Health Care Spending in the United States and Other High-Income Countries."

The Front Range

According to the *Colorado Hospital Cost Shift Analysis*, a new report from the state of Colorado which looked at nonprofit and for-profit hospitals, total statewide hospital profits have increased 280 percent since 2009, with profit-per-patient increasing from $538 in 2009 to $1,518 in 2018.[6] A hospital's status as a nonprofit means they are granted an exemption from paying taxes in exchange for offering healthcare as a community benefit. In the case of nonprofits "profit" refers to net income from operating expenses versus operating revenues.

These profits are driven mostly by "Front Range Counties" in Colorado, which refers to the counties around major population centers such as Denver and Boulder. Part of the reason hospitals in this area are doing well financially is that they are performing less uncompensated care. Since 2009, Colorado hospitals have seen a $385 million decrease in "bad debt" because more Coloradans are covered by insurance. Colorado has seen a decrease in the number of uninsured by 50 percent, which means more hospital procedures are paid by insurance.[7] This decrease in the uninsured rate is due, in part, to small state-level reforms in 2009 combined with the Affordable Care Act's (ACA) 2014 expansions of Medicaid and private market insurance. However, instead of passing those savings on to consumers, hospitals have pocketed the difference.

According to the *Cost Shift Analysis*, rather than taking into account this $385 million reduction in bad debt when setting hospital prices, in 2019 Colorado hospitals charged private insurers 269 percent of what Medicare would pay, on average, for the same care.[8] The Colorado Hospital Association, the hospital lobbying group in the state, claims that these price increases are necessary because more people are using hospital services with government insurance, which has a lower reimbursement rate than private insurers. Therefore, they argue, the higher prices are necessary to offset the losses they are taking by accepting more Medicaid patients.[9]

[6] "Colorado Hospital Cost Shift Analysis."
[7] "Colorado Hospital Cost Shift Analysis."
[8] "Colorado Hospital Cost Shift Analysis."
[9] "Statement on Cost Shift Report Release."

However, the problem with this argument is that prices are growing much faster relative to the rest of the country, which also saw decreases in the uninsured rate as a result of ACA. Colorado hospital operating expenses, which were already 3.2 percent higher than the national average in 2009, grew to 14 percent higher in 2018.[10] Prices were also growing faster than the number of patients; prices grew 71.3 percent from 2009 to 2018, but patient visits only grew 16.6 percent[11] during the same time period. This suggests that it is an increase in prices, not in the amount of patient care, that is driving up hospital expenses.

Further, an examination of hospital operating margins makes it clear that it is the ability to charge higher prices that is behind the increase in hospital income. One of the biggest culprits of this is the University of Colorado health system (UCHealth), the "nonprofit" and dominant player in the Denver Metro Area. UCHealth has been able to charge private insurers 316 percent of what Medicare pays, among the highest rates for services of any hospital in the country.[12] These high prices contributed to their 12.5 percent net income margin as a percentage of patient revenue in 2018.[13] Despite UCHealth's "nonprofit" status, this net income margin indicates they are very profitable but their nonprofit mandate requires that they provide a community benefit. Community benefits are typically understood to mean providing a reasonable level of charity care to uninsured patients or sponsoring health fairs that serve low-income communities. However, the term is quite vague, and evidence suggests that in many cases nonprofit hospitals see large benefits from tax exemption without providing a proportionate amount of community benefits.[14] Indeed, the requirement that nonprofit hospitals invest in themselves to meet community needs for new or better services can often be met through better salaries for executives. From 2005 to 2015, CEO compensation at nonprofit hospitals nationwide increased 93 percent compared to nurses who saw a 3 percent increase in salaries.[15] In 2018, all Denver area hospitals combined made $2 billion in net income in the case of nonprofits, or pretax profit in the case of for-profits.[16]

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[10] "Colorado Hospital Cost Shift Analysis."

[11] "Colorado Hospital Cost Shift Analysis."

[12] Owens, "Hospital Costs Are High and All over the Place."

[13] Ingold, "Denver-Area Hospitals Made a Record $2 Billion in Profits in 2018, According to a New Report."

[14] Herring et al., "Comparing the Value of Nonprofit Hospitals' Tax Exemption to Their Community Benefits"

[15] Ofri, "Why Are Nonprofit Hospitals So Highly Profitable?"

[16] Ingold, "Denver-Area Hospitals Made a Record $2 Billion in Profits in 2018, According to a New Report."

This high level of net income and pre-tax profits was the result of a 19.3 percent operating margin, as the money hospitals were receiving for treating patients increased 9.2 percent from 2017 to 2018, but the cost of treatment increased only 4.1 percent.[17] The fact that the cost of treatment increased more slowly than hospital income suggests that the price increases are likely not due to greater investments in hospital equipment or other investments to enhance treatment quality.

Some have argued that Colorado is getting what it pays for. According to one review of state health systems, Colorado ranked 47th in costs, but an impressive 3rd in "outcomes."[18] However, a careful interpretation of this statistic shows Colorado is disproportionately young and affluent relative to the rest of the country, which likely contributes to these successful outcomes. Colorado ranks 46th in people covered by Medicare as a percentage of the population[19] in all states, and 27th in people covered by Medicaid as a percentage of the population out of the 36 Medicaid expansion states. This means Colorado tends to have people who are too well off to qualify for Medicaid and too young to qualify for Medicare, making good health outcomes easier to achieve. Youth and affluence also mean residents tend to have private health care, which, in general, is more comprehensive than government programs as they currently exist, and which allows for better access to care and earlier health interventions.

What Is Driving High Prices and Operating Margins?

Hospital consolidation is likely the biggest driver of prices and operating margins in Colorado's Front Range Counties. Colorado has seen the number of hospitals that are part of a chain grow from 26 in 2009 to 43 in 2019, according to the *Cost Shift Analysis*. This means that just over half of the 83 hospitals in Colorado are now in hospital systems. The major players in this consolidation are UCHealth, which increased from two hospitals to 11, and

[17] Ingold.

[18] McCann, "Best & Worst States for Health Care."

[19] "Health Insurance Coverage of the Total Population."

Centura Health, which increased from 10 to 14. By region, the numbers become even clearer. In the Denver metro area in 2018, four hospital systems, UCHealth, HealthONE, SCL Health, and Centura Health, owned 20 of the area's 24 hospitals[20] and received 85 percent of the total hospital admissions.[21] There is little evidence that there is competition among these four hospital systems. According to a 2016 Health Care Cost Institute report, which studied four Colorado metro areas, all four are "highly" concentrated based on the standard measure of market concentration, the Herfindahl–Hirschman Index.[22] Since then, consolidation has only increased with UC Health purchasing four new hospitals since 2017.[23]

The clearest reason why this consolidation is happening is that hospitals want market power in order to command higher prices for their services. In a competitive hospital market, hospitals would be forced to lower their prices so insurance companies will keep them in-network and allow their enrollees to go to the hospital. In an uncompetitive market, hospitals can charge insurers a lot of money because insurers cannot simply move their enrollees to a different hospital. As a result, as hospital systems buy up more hospitals that would otherwise compete with them, they are able to increase their prices, operating margins, and net income substantially.

However, the clear evidence of an ability to raise prices as a result of consolidation does not stop hospitals from trying to make the case for greater consolidation on the merits. After UCHealth bought Yampa Valley Medical Center, which serves the rural mountain communities around Steamboat Springs, the Yampa Valley CEO was quick to say that it was not about the bottom line, but rather about providing better quality of care.[24] However, there is no evidence that hospital acquisitions lead to better outcomes or patient experience, according to a recent study from the *New England Journal of Medicine*. The researchers found that between 2007 and 2016, hospital acquisitions nationwide were associated with worse patient experiences and no change in readmission or mortality rates.[25] Therefore, even if there are efficiencies achieved

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[20] "The Competition Conundrum."

[21] Ingold, "Denver-Area Hospitals Made a Record $2 Billion in Profits in 2018, According to a New Report."

[22] Johnson et al., "Hospital Concentration Index."

[23] Kacik, "UCHealth Continues Growing with New Health System Merger."

[24] Ingold, "In Colorado's Drumbeat of Medical Mergers, Rural Hospitals Often Trade Independence for Better Care."

[25] Ingold.

by an acquisition, these are not being passed on to patients through lower costs or better care.

Proponents of consolidation say that the benefits come from greater integration of health care delivery, which takes a long time to achieve and, therefore, the benefits do not reveal themselves until years later. Ultimately, they say, integration will reduce costs and improve quality by eliminating inefficient redundancies and lead to better communication. However, as Carnegie Mellon University health economist Martin Gaynor points out, given that the wave of consolidation has been happening since the 1980s, any benefits to patients from integration would have likely shown themselves by now.[26] The fact that there is no empirical evidence of higher quality or lower costs suggests that consolidated hospitals either do not achieve integration or that there are no substantial benefits to patients from integration and instead hospitals are capturing the benefits of lower costs as evidenced by Colorado hospitals' high profit margins. Further, it is not clear that the money that is being invested back into patient health is directed to meet the most pressing patient needs. According to the *Cost Shift Analysis*, the construction of new hospitals tends to take place in regions that are not in need of new hospitals but instead takes place in already well served higher-income areas so the hospital system can attract wealthier patients.

Impacts of Consolidation

The impact of more consolidation is problematic for patients, as it tends to increase out-of-pocket medical costs in several ways. First, it leads to health insurance premium increases. In response, insurers are forced to consolidate so they can survive the increased bargaining power that hospitals have when negotiating rates. This leads to a situation in which there is no health insurance market in the state that is considered competitive under the US Department of Justice definition.[27] In rural areas, few firms bother to compete; in 22 out of

[26] Gaynor, Examining the Impact of Health Care Consolidation.
[27] "The Competition Conundrum."

64 Colorado counties, there is only one insurer offering plans.[28] In urban counties there are more insurers offering plans but competition is still low. In the Denver Metropolitan Area two insurers control 75 percent of the individual insurance market.[29] Insurer consolidation has two impacts. First, hospital consolidation increases as hospitals look to maintain their leverage, leading to a spiral where both sides continue to escalate anti-competitive behavior to protect their bottom lines.

Second, insurer consolidation has been burdensome for consumers as Colorado has seen individual market health insurance premiums increase by 85.9 percent from 2014 to 2019.[30] Rates dropped for 2020 due to the state's new reinsurance program implemented in January of this year; the program covers the most expensive insurance claims in exchange for lowering premiums.[31] While this government program has helped reduce premiums, Coloradans still face a 48.3 percent increase in premiums compared with 2014. While these skyrocketing premiums describe just the individual market, which only covers 8 percent of Coloradans, the high premiums help explain why individual enrollment as a percentage of the population has not increased since 2009, despite nationwide enrollment in the individual market increasing more than 50 percent.[32] The lack of uptake in the individual market likely explains part of the reason why Colorado's uninsured rate was 8 percent in 2018, which was tied for the eighth highest rate among the 36 Medicaid expansion states.[33]

Further, those on employer-sponsored insurance (ESI) plans are not immune to these increases in premiums for a couple of reasons. First, employees are forced to contribute more towards their premiums as they rise. Nationwide, employee contributions have been growing faster than wages.[34] Second, because in ESI plans the employer foots some of the bill for premiums, the fact that premiums are increasing makes employers more likely to shift to health plans that have lower premiums and higher out-of-pocket costs for their employees. Nationwide, the number of workers in a plan with an annual deductible has increased from 63

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[28] Pham, "2020 Colorado Insurance Rates and the Role of Reinsurance."

[29] "The Competition Conundrum."

[30] Boone, "ACA at 10 Years."

[31] "Sustainable Relief? 2020 Colorado Insurance Rates and the Role of Reinsurance."

[32] Boone, "ACA at 10 Years."

[33] "Health Insurance Coverage of the Total Population."

[34] Tozzi, "Health Insurance Costs Hit a Record, Surpassing $20,000 Annually."

percent in 2009 to 82 percent in 2019, with the average deductible amount increasing from $826 to $1,655, just over a 100 percent increase.[35] In Colorado, a 2016 survey of 647 employers showed the number of employers offering high deductible plans, as defined as a deductible of $1,000 or more, increased to 51 percent in 2015 from 27 percent in 2009.[36] Rounds of insurer consolidation in response to hospital consolidation increase the amount of out-of-pocket expenses for all patients in Colorado.

Rural Hospitals

So far, this report has focused on hospitals in the Front Range region of Colorado, which constitutes mostly urban and suburban areas. The story for hospitals in the state's more rural regions is different in significant ways.

In general, rural hospitals in Colorado were greatly helped by Medicaid expansion because a larger proportion of people in rural counties are on Medicaid.[37] This significantly reduced the number of patients who needed charity care. However, in 2016 Medicaid on average only paid 72 percent of what Medicare paid for care[38] which means hospitals in rural Colorado are operating on much thinner margins than their urban and suburban counterparts. While no rural Colorado hospitals are at immediate risk of closing,[39] the long-term sustainability of these hospitals is worth interrogating.

The low reimbursement rate is a problem since rural hospitals have difficulty recouping these losses because their patient mix includes the remaining charity cases as well as patients who are still uninsured or underinsured. While charity cases have gone down since 2014 due largely to Medicaid expansion, there is still a lot of bad debt in rural hospitals. According to the National Rural Health Association, bad debt for rural hospitals nationwide has increased

[35] Claxton, Rae, et al., "2019 Employer Health Benefits Survey."

[36] "2016 Colorado Employer Benefits Survey Report."

[37] "Medicaid Enrollees."

[38] Holgash and Heberlein, "Physician Acceptance Of New Medicaid Patients."

[39] Topchik et al., "The Rural Health Safety Net Under Pressure:Rural Hospital Vulnerability."

by 50 percent since 2010.[40] While this number is driven by states that have not implemented Medicaid expansion, there is reason to believe that states like Colorado that have expanded Medicaid likely face similar, if less severe, issues in rural hospitals.

The story of stubbornly high rural hospital bad debt is, in part, due to the rise of high deductible plans as a result of the Affordable Care Act. As insurers enter the individual market, they often offer plans with high deductibles to hold down the premiums and make the plans look cheaper to people who are deciding whether or not to buy health insurance. Many people will choose plans that offer lower monthly premiums. However, these lower monthly premiums also mean that the deductibles, or the amount that a patient has to spend out-of-pocket before insurance kicks in, is higher.[41] Over 50 percent of all Colorado families (and 56 percent of families in the rural southern part of the state) who are not enrolled in Medicaid cannot afford an average bronze plan deductible of $5,798 spread out over three months.[42] This means that lower-income people, who cannot afford to pay a large deductible if they need immediate care, simply do not pay the hospital, resulting in more debt for hospitals. Nonpayment because of high deductibles are a much bigger problem for rural hospitals because they are operating on thinner margins; nonpayment for an expensive procedure is a much bigger percentage of their overall budget. As noted earlier, they have fewer opportunities to recoup those losses because the payer mix in more remote parts of the state is less favorable than in the urban centers.[43]

The problem of high deductibles leading to bad debt in rural hospitals is further exacerbated by the nature of health insurance. First, as discussed earlier, hospital consolidation forces insurer consolidation, leading to high deductible plans in the first place.

Secondly, it is mostly the urban hospital systems that have the ability to perform intensive, high-cost procedures that rural hospitals cannot. A patient living in a rural area who requires urgent care may go to their local hospital and receive relatively low-cost care, but the hospital may not be compensated because the patient cannot afford the deductible.[44] Then, if

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[40] Hawryluk, "High-Deductible Plans Jeopardize Financial Health Of Patients And Rural Hospitals."

[41] Hawryluk.

[42] Brennan, "Deductible Affordability for Colorado's Working-Age Families."

[43] "2019 Colorado Health Access Survey."

[44] Hawryluk, "High-Deductible Plans Jeopardize Financial Health Of Patients And Rural Hospitals."

there is an issue requiring more intensive care, patients from rural areas may be transferred[45] to a hospital in an urban area that has the means to perform the necessary procedure. However, that procedure *is* compensated because the patient has reached their deductible and their insurance company now pays for the care. This situation contributes to the crisis facing rural hospitals.

Third, rural hospitals are losing patients to urban hospitals. Even though rural hospitals are in most cases the only hospital for a large geographic radius, it does not necessarily mean that patients have no other choices. The Government Accountability Office reported that rural hospitals are experiencing a reduction in patients, in part, due to increasing competition from other health care providers.[46] This is because technological changes have made it possible for more services to be performed in outpatient settings, which means that rural hospitals face more competition from urban hospitals that can wield their dominant market position and offer non-hospital outpatient facilities in rural areas.[47]

Further, consolidation has not been a systemic solution for rural hospitals because few hospital systems want to buy hospitals that are not profitable, and, under current payment arrangements, are not likely to suddenly turn a profit. Only through investments from the government, or other actors uninterested in profits, will rural hospitals be placed on a sustainable fiscal path.

Conclusion

The case of Colorado illustrates just how fundamentally broken the American health care system is. It lays bare how the incentives of all the players in the system are not pointed in a direction that makes quality health care accessible and affordable to all. Proponents of tweaks to the system that look to limit government intervention just to covering those who are uninsured right now would not touch the underlying issues of skyrocketing health care

[45] Ramesh and Gee, "Rural Hospital Closures Reduce Access to Emergency Care."
[46] Cosgrove, "Rural Hospital Closures."
[47] Frakt, "The Rural Hospital Problem."

costs and increasing out-of-pocket costs. A single-payer system can address this situation by lowering health care costs and guaranteeing that any patient who walks through a hospital's doors will be compensated for the procedures they require.

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