



EMPOWERING MARKET-BASED HEALTH REFORM in COLORADO: A Detailed Financial Review of Front-Range Hospitals and Health Systems For Employers, Taft-Hartley Plans, Other Purchasers and Policy Makers

Co-Authored by Marilyn Bartlett, Senior Policy Fellow
National Academy for State Health Policy
And
Robert Smith, Executive Director
Colorado Business Group on Health

On behalf of
The Colorado Purchasing Alliance
(Funded by the Robert Wood Johnson Foundation)
(11.16.2020)

Afterward: “Implications for Value-Based Purchasing”
By William Lindsay, Lindsay3 LLC

“A problem well-defined is a problem half-solved.” – Chas Kettering

“To control costs going forward, employers may have to confront the true underlying causes of rising health care expenditures: high prices and health care inefficiencies. To address these challenges, they will have to band together in purchasing coalitions that give them the local market power to force health systems to reform.” - David Blumenthal, MD¹

Background: A Problem Well-Defined

Noting healthcare’s consistent inefficiencies, inconsistent effectiveness, and increasing lack of affordability, health care critics typically observe that “US healthcare is broken.” In a market-based industry such as the commercial healthcare market, however, a more logical and economically feasible conclusion would be that, rather than being “broken,” healthcare in Colorado works ***exactly as the market dynamics predict it would*** – e.g., with prices in a consolidating hospital market increasing without any evident relationship to either quality or the actual costs of care. Given the fact that *hospitals today represent almost 40% of total health care spending and that they influence another 10% or more indirectly*, a critical question arises for the employers, Taft-Hartley plans, and employer trusts who pay for care – either directly or through a third-party: What drives hospital pricing in Colorado?

What Drives Hospital Pricing in Colorado?

A study by The Commonwealth Fund titled “[Trends in Employer Insurance Costs](#),” documented that from 2018 to 2019 employer-sponsored insurance premium costs increased:

¹ “[To Control Healthcare Costs, US Employers Should Form Purchasing Coalitions;](#)” Blumenthal, Gustafson, and Bishop, Harvard Business Review, November 2, 2018

- For single coverage, 20% greater for Colorado employers than the US average (4.7% versus 3.8%).
- For family coverage, **more than twice for Colorado employers than the US average** (10.1% in Colorado vs 4.7% nationally).

When the [Rand 2.0 Price Transparency Report](#) documented that prices paid by Colorado employers to hospitals were among the highest in the country and increasing faster than the CPI, in 2019 The Colorado Business Group on Health, in partnership with the [Colorado Consumer Health Initiative](#), published the “[Colorado Hospital Value Report](#).” Intending to determine what, if any, relationship exists between quality and price across Colorado, this analysis juxtapositioned the results of the publicly available “Rand 2.0” report” with composite quality ratings from Quantros’ “[CareChex Hospital and Physician Rating System](#).” The report demonstrated that, across 58 non-critical access hospitals:

- While patients in Colorado hospitals can and do receive some of the most reliable high clinical outcomes in the country, the exact opposite of that statement is also true;
- Hospital quality/clinical reliability varied as much within hospitals – on a service line basis and even by physician – as it did across hospitals;
- No reliable relationship between quality and price was observed. The 9 most expensive hospitals (all being paid in excess of 400% of Medicare) had no overall better reliability than the 9 least expensive hospitals – generally being paid less than 200% of Medicare.

Having observed that **the wide variation in hospital pricing is not being driven by quality** across Colorado, the next step was to determine to what degree hospital pricing is being driven by actual hospital costs of care. As such, CBGH wanted to answer some questions of vital interest to all health care purchasers:

- **Break-Even Requirements.** What is the level of reimbursement required for commercial payers to allow the Hospital to cover its costs for providing hospital patient care?
- **Cost to Charge Ratios.** What percentage of the hospital charge master rates is the actual costs related to providing hospital patient services?
- **Payment to Cost Ratios.** To what degree do the hospital payments cover related costs for each payer group?
- **Profit Margins.** What is the profit (loss) the hospitals, particularly tax-exempt hospitals, experience and how does that margin compare to the overall business community?
- **The Need to Cost Shift.** Do hospitals need to shift costs to the commercial payers to cover losses from other payer groups? If so, to what extent do they need to do so in order to breakeven on their costs of care?
- **Charity Care, Uninsured, and Bad Debt.** What is the actual cost (not the published charges) of care provided for which there is no reimbursement and how do hospitals compare on this measure?

Medicare as a Benchmark: Are Medicare Payments Adequate?

Purchasers of hospital services must understand the adequacy of Medicare payments to hospitals by the Centers for Medicare and Medicaid Services (CMMS) for two reasons:

1. Hospitals typically cite underpayment by Medicare (along with Medicaid) as justification for shifting significant costs to commercial purchasers.

2. Using Medicare as a point of reference or benchmark provides the only quantifiable, and therefore justifiable, means of placing a reasonable dollar value on what can otherwise be invaluable services offered by our community hospitals and regional medical centers.

To address the question of payment adequacy, an independent commission of economists annually reports to Congress on the *adequacy of Medicare payments*. As it does each year, the [March 2020 MedPAC Report to Congress](#) examines trends in quality and the *relationship between payments and hospital costs* as well as financial performance by hospital type, the impact of caring for low-income patients, and impacts of mergers on pricing and margins. In March, MedPAC reported that

- Average hospitals overall had a negative margin on Medicare in 2018 of -8%
- Average tax-exempt hospitals had a negative margin of -11%.
- **“Relatively efficient hospitals had a negative margin of only -2%.”**

These measures of performance are proposed as reasonable benchmarks for purchasers utilizing in determining for themselves what would constitute a “fair price.”

Colorado Hospital Cost Tool

The financial performance of thirty-five hospitals on the Front Range was reviewed using the Hospital Cost Tool (HCT) developed by the [National Academy of State Health Policy](#) (NASHP). The HCT extracts data from the Medicare Cost Reports (CMS 2552-10 format) and other publicly available sources to calculate and report on hospital performance.² CBGH collaborated with NASHP so as to be able to use a data-driven approach when negotiating contracting through the recently established purchaser cooperative, [The Colorado Purchasing Alliance](#).

While the HCT includes numerous metrics for analysis, this summary report includes only the following:

1. **Financial Statement.** Net Patient Revenue (Allowed Amounts), Net Income, Reserves, and Profit Margin are reported for the entire hospital, with no adjustments made for Medicare disallowed costs.
2. **CCR.** Cost to Charge Ratio (CCR) shows the relationship between a hospital’s costs and charges. The ratios consider the hospital’s operating costs and charges for services performed during a one year period. The ratio is stated in two formats:
 - a. Cost to Charge Ratio = Costs divided by Charges. A CCR of 25% means costs are 25% of charges.
 - b. Charges as % of Costs = Charges divided by Costs. A ratio of 500% means costs are multiplied by 500% to equal charges.
3. **Charity Care, Bad Debt, and Uninsured.** Costs that are not reimbursed, as a percentage of total operating costs, indicate the level of uncompensated care. We typically see hospital reporting of charity care, bad debt, and uninsured at charge master rates. Recent changes in accounting rules, however, require *the actual costs* to be reported. For Audited Financial statements, a hospital may no longer report the higher charge master numbers. While CMS has not adopted the new rules, the HCT does report *at the cost level*.

² Craig Hospital, Denver Health, and Children's Hospital Colorado were considered outliers and not included, as their unique missions, cost structures and lack of Medicare reporting did not allow for a fair comparison.

4. **Payer Mix.** Percentage of hospital charges by payer are used to calculate the Payer Mix for a hospital by the different payers. Charity Care, Uninsured & Bad Debt, State Health Insurance Plan (SCHIP), and other low income programs. Medicare, Medicaid, and Commercial are reported with “Commercial” representing insurance company, employer self-funded plans, Veterans Administration, Self-Pay, etc.
5. **Profit (Loss) is calculated for Medicare, Medicaid and Commercial.** The Medicare Cost Report includes costs for Medicare, Medicaid, SCHIP and other Low-Income Programs, and uncompensated care. Applying the hospital cost-to-charge ratio (CCR) to commercial charges, the tool calculates the related costs. Profit margins are calculated for the different payer groups. It is important to look at Payer Mix and Profit (Loss) together. For example, one hospital looked at shows a loss margin of 68% for Medicaid, but Medicaid only comprised 3% of their payer mix.
6. **Multiples of Medicare.** Hospital rates paid by employer plans (Included in commercial) are expressed as a multiple of Medicare for breakeven and the RAND 3.0 Report.
 - a. Break-even point is an accounting calculation showing revenue = cost, which would result in zero profit. Negotiations with hospitals would add a factor for profit margin, and possibly other hospital activities outside of inpatient and outpatient care. The breakeven rate was calculated from the HCT as follows:
 - i. “Low” break-even point calculates the level of payment required to cover commercial patient costs plus any balance from Government Program payments, charity care, bad debt and uninsured.
 - ii. “High” break-even point calculates the level of payment required to cover commercial costs, balance from Government Programs, Charity Care, Bad Debt & Uninsured, Medicare Disallowed operating costs, and hospital other income & other expense. Physician direct patient costs are not included in the add-back of Disallowed Costs, as their related reimbursement is processed through other channels (RBRVS, Fee Schedules, Network Contracts, etc.)
 - b. The average of the low and high breakeven points is calculated and expressed as a multiple of Medicare.
 - c. Results from the recent “[Rand 3.0 Employer Hospital Price Transparency Project](#),” which calculated paid amounts by commercial payers in 49 States, are reported as a blended rate of inpatient and outpatient hospital services only. This is intended to provide prudent purchasers with a comparison of paid amounts to the calculated breakeven needs of hospitals.

Summary of Key Findings

1. **For Profit Hospitals.** HCA hospitals, classified as for profit indicate the for-profit hospitals had:
 - a. Higher overall profit margins and higher margins on Medicare, likely a reflection of greater cost efficiency in delivering patient care.³
 - b. Roughly the same absolute levels of charity care as the tax-exempt hospitals. HCA hospitals averaged charity care at 3% of operating expenses compared to the average of

³ The January 2019 edition of Becker’s Hospital CFO Report reflected that expenses at Colorado’s non-profit hospitals were \$3,119 per adjusted in-patient day versus the national average for non-profit hospitals of \$2,488.

2% for all hospitals. While their operating costs are lower, HCA hospitals provided comparable charity care.

2. **Cost to Charge Ratio (CCR).** This ratio shows the percentage of charges that are actual costs. The analysis indicates a significant range across these hospitals from 8% to 60% with an average cost to charge ratio of 21%. The lower the percentage, the larger the profit margin on charges. This ratio is useful when looking at insurer or TPA network discounts off charge master rates. While insurers often boast about their negotiated discounts with hospitals, the important question for purchaser is this: If a hospital's costs are only 10-25% of their published charges, is a discount of 30% or even 50% off the charge master, a good deal?

It is critical to look at both sides of the ratio calculation. For example, the HCA hospitals show low CCRs (e.g, charges are a greater multiple of costs.) Further analysis indicated low costs were the reason for these results. Basically, Charges as a Percent of Costs will show how much the hospital is "marking up" costs.

3. **Charity Care, Bad Debt, and Uninsured.** These percentages are based on "costs as a percentage of total operating costs." The overall average is 2.7% with little significance difference between the tax-exempt and taxable hospitals. Two important points need to be made here:
 - a. These percentages are based on a hospital's *actual costs as reported to Medicare*, which is different than the uncompensated care amount hospitals report to the public.
 - b. *The public reports of uncompensated care may reflect both unpaid charges and the negotiated reductions in payments made by insurers, all of which is based on the hospital charge master.*⁴

Also of note: States and the Federal government use the "Community Benefit" as the value to compare to tax exemption for not-for profit hospitals. IRS rules and state laws allow many items to be included in this category, including the difference between charges and allowed amounts for Medicaid, health fairs, physician education and more.

4. **Payer Mix and Profit (Loss).** HCT reports the percentage of patient services for 5 payer groupings (Charity Care, Uninsured & Bad Debt; SCHIP and other Low Income Programs; Medicare, Medicaid, and Commercial), with associated financial results. On average across the CO hospitals analyzed, commercial profit is 52% and commercial payments also represent 52% of the payer mix.
5. **Price vs Cost (as a multiple of Medicare).** We see no correlation between the calculated breakeven requirements and the RAND report showing hospital payments. In other words, there is no discernable relationship between prices paid in the commercial insurance market and the costs of care. This seems to suggest that hospitals – including tax-exempt hospitals – simply price to what the market will bear.
6. **Other.** "Physician Direct Services and Private Offices" total nearly \$900,000,000 for the 35 hospitals. This figure represents Physician costs *unrelated to general hospital patient care*. Hospitals, of course, have argued that physician practices (primary care, specialty care, etc.) lose

⁴ Some hospitals have reported this correctly beginning in 2019 per FASB standards, but many do not report it using these standards and incorrectly continue to use the 990, Schedule H gross amounts.



money so they (the hospitals) “must” increase their prices to cover these losses and assure adequate access to physicians. This raises the the question for purchasers, however, whether these additional costs should be charged to commercial payer – particularly school districts (which are funded approximately 25% below the national average) and other public entities that are reliant on tax revenues.⁵

⁵ Without benefit of detailed information of physician practice financial performance, the calculation of profit or loss from these physician services could not be determined.

Afterward: Implications of Value-Based Purchasing

William Lindsay, Principal, Lindsay3 LLC

Hospital pricing alone, of course, by no means solely accounts for or explains the inexorable annual premium increases that Coloradans and Colorado purchasers have had to bear. For commercial purchasers – public and private alike – the incidence rates of chronic disease and the associated direct and indirect costs of less than optimally managed chronic disease increases year after year. Additionally, the impact of pricing increases in prescription drugs – particularly for specialty drugs and bio-similars – must be recognized.

As significant as the impacts of chronic disease and prescription drugs are, however, the single largest component of the “medical expense ratio” and, in Colorado, one of the fastest rising remains hospital prices. Increases in hospital prices, expressed as a percent of Medicare, have well exceeded those of Medicare itself – which, it should be noted, adjusts for inflation. However, to “place blame” on hospital pricing would fail to recognize the current contracting and purchasing practices that have incentivized and rewarded those increases over the past two or three decades.

Given that the commercial health market is designed to function on “free-market” principles, the above financial review of pricing and costs conducted by NASHP for Colorado hospitals suggests five specific changes in purchasing on the part of employers (particularly self-funded employers), Taft-Hartley plans, and employer trusts that would empower market-based health reform. They include:

1. A Multi-Year Perspective with a Multi-Dimensional Strategy.

- a. **Observation.** As recently documented by a leading consulting firm, self-funding alone does not insure lower premium trends. The only employers whose health care costs trended lower than the overall marketplace were those who had a multi-year strategy in place that addresses both price and use.
- b. **Implication.** Employers should have a multi-year strategic plan in place that identifies key drivers of their health care costs, establishes goals for each driver, and outlines strategies that can be adopted to realize these goal. Drivers to be addressed should include:
 - i. Unit Prices: This should include hospital pricing (as a percent of Medicare) and prescription drug pricing.
 - ii. Health services utilization – including underuse, overuse, and misuse.

2. Reference-Based Pricing a Fiduciary Responsibility.

- a. **Observation.** Hospital prices negotiated as a “discount from billed charges” – far and away the prevalent basis for agreement between most hospitals and health plans – leave purchasers without any insights into or understanding of the **reasonableness** of the prices being paid. As the “cost-to-charge ratios” documented in this paper make clear, when prices are 300 to 1000 percent times costs, discounts up to even 50% or more are meaningless and useless in determining value.
- b. **Implication.** If purchasers are to be responsible fiduciaries, pricing for hospitals must be negotiated based on empiric, reference-based data. Contracted pricing expressed as a

percent of discounts from charges – whether negotiated directly or through a third party – **do not meet this criterium**. A more appropriate, empirically-based measure would be payment as a multiple or percentage of Medicare payments.

3. Group Purchasing.

- a. **Observation.** We know of no studies associating either improvements in quality or the underlying costs of medical care with hospital pricing increases. This analysis of Front Range hospitals itself reflects that the hospital prices show no overall relationship to the underlying costs of care. Studies by health care economists across the country, however, have well-documented that hospital consolidation drives increase in pricing with no improvements in quality.
- b. **Implication.** Free markets rely on a balance of power between sellers and buyers. If purchasers have any hope of constraining hospitals and pharmacy pricing, they must have and be willing to wield purchasing power. To reiterate the critical observation by Dr. David Blumenthal, president of the Commonwealth Fund in the [*Harvard Business Review*](#)...

“... to control costs going forward, employers may have to confront the true underlying causes of rising health care expenditures: high prices and underlying health care inefficiencies. To address these challenges, they will have to band together in purchasing coalitions that give them the local market power to force health systems to reform.” [Emphasis added]

In December 2019, for exactly this reason, the Colorado Business Group on Health formed [The Colorado Purchasing Alliance](#). Authorized by the Colorado Division of Insurance as a “group healthcare purchasing cooperative” in January, TCPA brings together some of the State of Colorado’s larger employers – including the State itself – to work directly with providers on healthcare outcomes and affordability.

Interested employers should contact [Robert Smith](#), President of TPCA

4. Plan Designs Based on Value.

- a. **Observation.** Value-based plan design is an increasingly popular strategy for sponsors of both public and private plans as a means of encouraging use of high-value services for reasons that go beyond just financial savings. Value-based plan designs result in improved patient adherence to care plans and in improved health outcomes.
- b. **Implication.** Value-based plan designs with meaningful incentives for enrollees to access high value services and providers are absolutely essential for optimizing value-based contracts. Plan designs should encourage enrollee utilization in **three specific areas**:
 - i. Advanced Practice Primary Care.
 - ii. High Performing Specialists.
 - iii. Cost-Effective Sites of Care.

5. Consumer Empowerment.

- a. **Observation.** Sophisticated, consumer-friendly tools to assist in the selection of high performing, cost-effective providers are essential components of any value-based plan design strategy.

- b. **Implication.** Such tools need to be accompanied by effective employee engagement strategies that include employee education and specific incentives to encourage their use.

Attachment 1: DEFINITIONS

Bad Debt/Uninsured	Costs for insured and uninsured patients that are determined to be uncollectible. This does not include discounts given to Commercial/Other, nor difference between Charges and Fee Schedule or payments for Government Programs. Medicare program pays hospitals 70% of allowable Medicare patient bad debt, so these hospital costs are not included as Bad Debt/Uninsured since the government pays for 70% of allowable bad debt.
Breakeven	Breakeven points (where revenues are equal to expenses) are commonly used when setting prices and for determining an appropriate mark-up over breakeven point for profit. “Low” Breakeven on Attachment 2 leaves out all costs excluded by Medicare. “High” Breakeven includes all Medicare exclusions.
Charges	Total of charge master rates for services provided by the hospital during a reporting period. Charge master rates are set by hospitals.
Charity Care	Hospital services provided to patients qualifying for care under the provisions of the hospital’s charity care program. Charity care costs are calculated by applying CCR (cost-to-charge ratio) to charity care charges. Payments made under the hospital’s charity care policy/program and donations are classified as payments.
CMS	Centers for Medicare and Medicaid Services
Commercial/Other	Private Payers, includes commercial insurers, employer self-funded plans, Federal Employee Health Plans, Veterans Administration, Self-Pay, TriCare, etc.
Cost to Charge Ratio (CCR)	Costs divided by Charges. Result indicates the percentage of Charges that are Costs.
Costs	Total costs for patient services and hospital operations (as reported by the hospitals themselves) for a specific reporting period. May also be called Operating Costs or Expenses.
Mark-up on Costs for Charges	Using the Cost to Charge Ratio, the calculation divides the difference between charges and costs (mark-up) by the costs. The result is the percentage costs are marked-up to balance to charges.
MCR	Medicare Cost Report. Hospitals participating in the Medicare program must file annual cost reports. (42 U.S.C. § 1395g; 42 C.F.R. § 413.20(b)). Since May 1, 2010, CMS reporting format 2552-10 is utilized for the cost report submission.
MCR Allowed Costs	Hospital operating costs that are eligible for reimbursement per Medicare Federal regulations.
MCR Disallowed Costs	Hospital operating costs that are not eligible for reimbursement per Medicare Federal regulations. This could include physician direct patient services (reimbursed elsewhere), research, etc.
Multiple of Medicare	Payment is shown as a multiple of the associated Medicare rate.
Payer Mix	Hospital services consumed by different payers, with 100% representing total hospital services. Charges reported for payer types are used for calculating payer mix.
Profit Margin	Net Income/Loss divided by Revenue (Payments). Represents the percentage of Revenue (Payments) that is profit including non-operating income.

Attachment 2: “Key Ratios” by Evaluated Hospitals

Hospital	Cost to Charge Ratio	Multiple of Medicare				RAND 3.0 Report Relative Price	Profit Margin	Charity Care % of Operating Expenses
		Required Breakeven (Low)	Required Breakeven (High)	Required Breakeven Average of Low and High	Required Breakeven			
Range	8% to 60%	53% to 244%	18% to 459%	36% to 345%	152% to 452%	-10% to 54%	0.6% to 6.4%	
Avista Adventist Hospital	21%	140%	167%	154%	202%	6%	1.4%	
Boulder Community Hospital	17%	179%	255%	217%	301%	-2%	2.5%	
Castle Rock Adventist Hospital	17%	144%	162%	153%	320%	3%	0.9%	
Community - Grand Junction	26%	231%	459%	345%	384%	0%	0.9%	
East Morgan County Hospital	60%	111%	130%	120%	NA	8%	2.0%	
Fort Collins Med Ctr	47%	206%	237%	222%	NA	-10%	2.1%	
Good Samaritan	17%	122%	136%	129%	179%	12%	0.6%	
Littleton Adventist Hospital	15%	129%	166%	148%	344%	11%	1.1%	
Longmont United Hospital	23%	244%	262%	253%	342%	-8%	2.4%	
Lutheran Medical Center	18%	131%	166%	148%	267%	7%	1.1%	
McKee Medical Center	30%	160%	180%	170%	318%	15%	1.8%	
Medical Center of Aurora	9%	127%	94%	110%	261%	38%	5.2%	
Medical Center of the Rockies	20%	143%	170%	156%	427%	18%	1.3%	
Memorial Health System	17%	129%	136%	132%	283%	19%	2.1%	
Mercy Regional Medical Center	23%	134%	195%	165%	315%	14%	1.2%	
N Suburban Medical Center	8%	140%	151%	146%	439%	23%	6.4%	
North Colorado Medical Ctr	23%	122%	178%	150%	363%	14%	3.3%	
Parker Adventist Hospital	17%	161%	188%	175%	377%	16%	1.4%	
Parkview Medical Center	11%	53%	18%	36%	299%	6%	0.7%	
Penrose/St Francis	17%	129%	142%	135%	265%	8%	1.7%	
Platte Valley Medical Center	28%	159%	206%	182%	373%	6%	1.6%	
Porter Adventist Hospital	19%	145%	172%	158%	265%	-4%	1.1%	
Poudre Valley Medical Center	24%	128%	123%	125%	423%	33%	1.2%	
Presbyterian/St Luke's Med Ctr	11%	119%	62%	90%	260%	49%	1.7%	
Rose Medical Center	10%	117%	84%	101%	260%	44%	2.4%	
Sky Ridge Medical Center	8%	87%	63%	75%	263%	54%	1.6%	
St Anthony Lakewood	19%	155%	164%	160%	446%	9%	2.2%	
St Anthony North Medical Center	16%	119%	166%	143%	344%	5%	2.4%	
St Joseph	17%	91%	120%	105%	152%	9%	1.9%	
St Mary Corwin Medical Center	19%	199%	197%	198%	303%	-9%	1.9%	
St Mary's	26%	133%	214%	174%	341%	7%	1.4%	
Sterling Regional Medical Center	41%	102%	158%	130%	452%	19%	2.1%	
Swedish Medical Center	9%	106%	130%	118%	337%	25%	2.6%	
UC Hospital Authority	20%	116%	147%	131%	274%	22%	1.5%	
Valley View Hospital	36%	153%	232%	192%	427%	13%	2.4%	
Average	21%	139%	167%	153%	325%	14%	2.0%	