

Assessing the Gaps

A Review of NASHP's Hospital Cost Tool

Considerations for Policymakers and Purchasers and Implications for Patient Care

Executive Summary

The National Academy for State Health Policy's (NASHP) Hospital Cost Tool (HCT) attempts to use hospital Medicare cost reports (MCRs) to calculate a "break-even" point for state government and commercial insurers to negotiate commercial rates with hospitals. The HCT misses the mark in many ways, and its use by payers, purchasers and policymakers could have dire consequences for hospitals' financial well-being, and, ultimately, patients' access to care.

To the extent payers and policymakers are increasingly leveraging the NASHP HCT and other tools like it to develop their own mechanisms for rate setting, it is important for policymakers to understand the limitations and shortcomings of these tools and be cautious when interpreting their results.

MCRs are intended to evaluate costs associated with traditional (i.e., fee-for-service) Medicare beneficiaries, and are not designed to include the data necessary to accurately assess other payers' financial impact on hospitals. Consequently, the HCT makes many significant, often highly inaccurate assumptions in order to determine the costs and margins associated with other payers.

MCRs have several key blind spots that impact the HCT's calculations:

- 1) **Inaccuracy:** MCRs are not a complete picture of hospital financial health.
- 2) **Volatility:** Inputs often change year-to-year.
- 3) **Age:** MCRs are not timely enough to assess current costs.
- 4) **Inconsistency:** High level cost allocations differ from hospital to hospital within the MCR.
- 5) **Heterogeneity:** Differences in health system corporate organizational structures causes irregularity in costs reporting on the MCR.

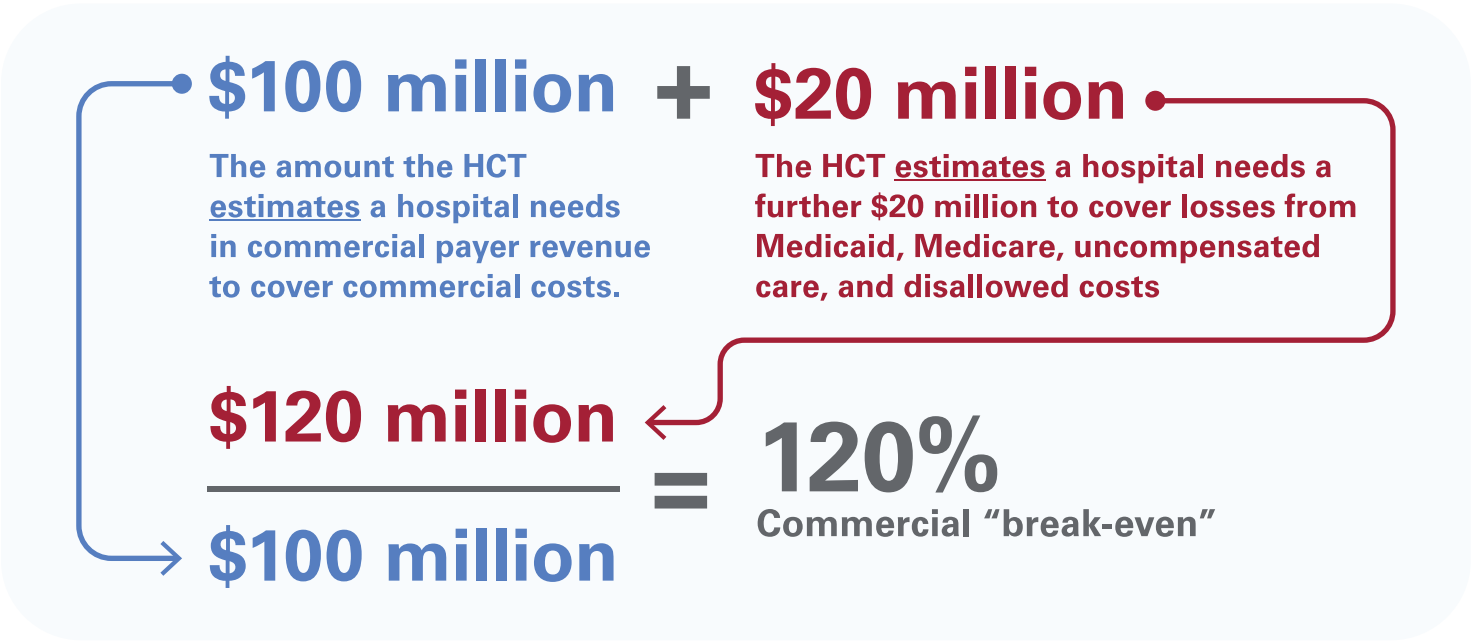
Inaccuracies and inconsistencies aside, the concept of targeting future reimbursement to a poorly conceived "break-even" point from the past is problematic. As applied prospectively, it assumes that services, prices and costs will remain the same as the period upon which the break-even was calculated. More to the point, hospitals don't have the luxury of knowing what their break-even point will be for their upcoming contract years when negotiating rates with payers. The health care landscape is constantly evolving, and past rates may have very little bearing on the present demands or market dynamics. Put simply, the break-even concept does not align with how hospitals make financial decisions. Naturally, as reflected by the HCT's output, the "break-even" point for most hospitals is highly volatile from year to year.

Additionally troubling is the HCT's use of Medicare payments as reference rates, and only furthers the false premise that Medicare rates are sufficient to cover costs. In reality, the Medicare rate setting process is demonstrably estranged from the real costs of caring for patients and is governed by annual rulemaking. Furthermore, one cannot compare the "break-even" point to RAND's commercial payer pricing data without evaluating the related reliability of those data, which are also questionable.

I. Introduction

In 2020, the National Academy for State Health Policy (NASHP) released a public dataset and dashboard derived from hospital Medicare Cost Reports (MCRs), which it refers to as the Hospital Cost Tool (HCT). According to NASHP, “as health care spending continues to rise — with the largest proportion of those expenditures on hospital services — states and other purchasers are seeking to better understand and address hospitals’ costs. To support these efforts, [NASHP] has developed an interactive hospital cost tool and accompanying resources.”

One of the primary outputs of the HCT is a “break-even” point, which is expressed as a percentage of Medicare rates that the HCT claims a hospital needs to receive from commercial insurers to cover its expenses (i.e., expenses that will not otherwise be covered by other payers and not anything more than that). This “break-even” point is calculated by dividing the needed commercial net revenue — a calculated amount needed to cover costs not covered by other payers — by the commercial hospital operating costs — an amount calculated by subtracting other payer allowed costs from total allowed costs — by the Medicare revenue as a percent of Medicare allowed costs.¹ NASHP then proposes users of the HCT to compare this “break-even” point to RAND Corporation’s survey data from its Nationwide Evaluation of Health Care Prices Paid by Private Health Plans to assess whether a hospital can be paid more or less and break even.



While the stated goal of NASHP in developing the HCT is to provide more transparency around hospital finances and the differences between Medicare rates and commercial rates, the HCT falls well short of this goal. The tool relies exclusively on hospital MCR data and surrounds this data with various estimates, adjustments and calculations. However, MCR data are significantly limited for these purposes, and NASHP fails to acknowledge the many assumptions it is making in the HCT. For a variety of reasons outlined in detail below, these assumptions are often inaccurate and meaningfully impactful to the HCT’s output.

II. Hospital Medicare Cost Reports

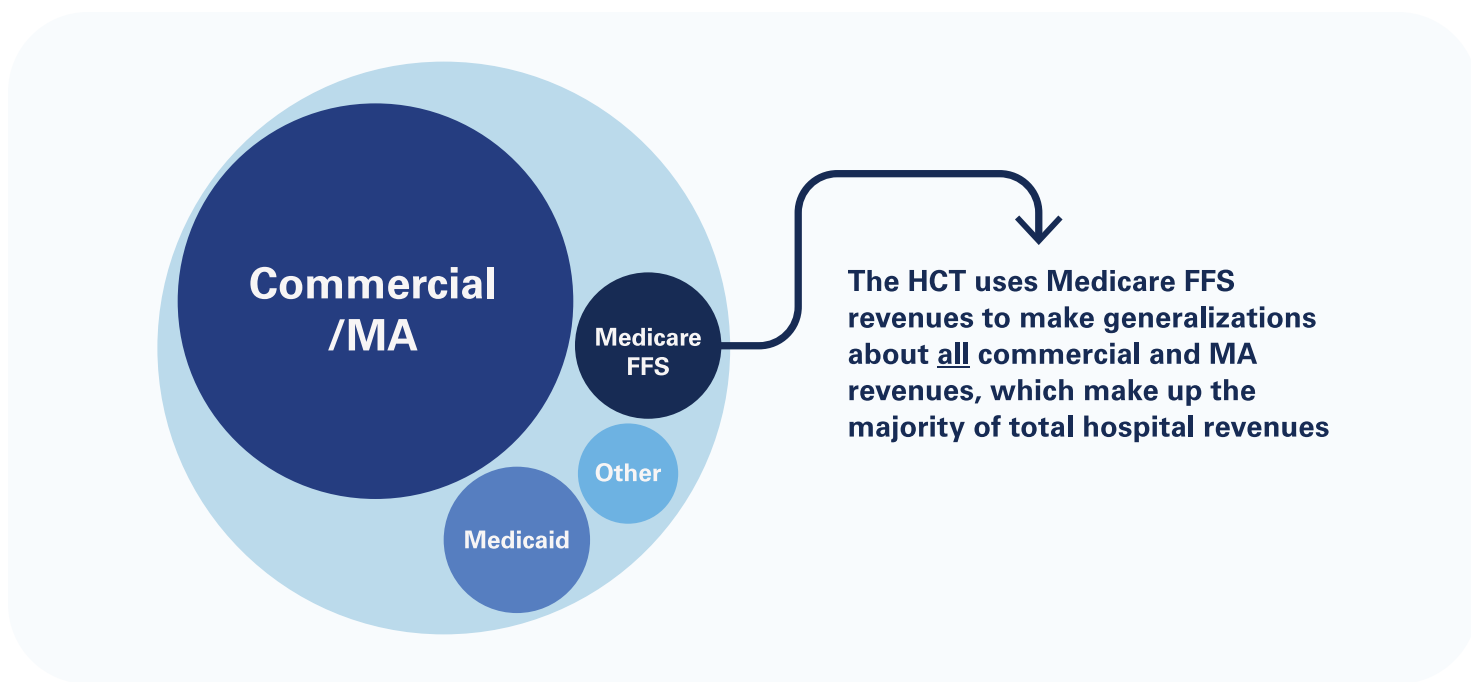
Medicare-participating hospitals have been required to file MCRs since the inception of the Medicare program. In the beginning, MCRs were required in order for Medicare to pay hospitals cost-based reimbursement for items and services provided to Medicare beneficiaries. Hospital MCRs were designed with this approach in mind — they include a series of worksheets to identify and apportion costs related to inpatient and outpatient care provided to traditional Medicare beneficiaries and ultimately culminate in a settlement amount. Some hospitals, such as critical access hospitals, continue to be paid by Medicare based on their costs of serving traditional Medicare beneficiaries, and their MCRs continue to serve this purpose.

Today, however, most hospitals are paid for services provided to traditional Medicare beneficiaries pursuant to the Prospective Payment System (PPS), which was implemented in the 1980s. Under the PPS, hospitals receive a predetermined, fixed payment amount for their services (based on patient diagnoses for inpatient services and based on services provided for outpatient services). Hospitals receiving reimbursement under the PPS still submit MCRs, but their function has shifted to determining market-based values that are used in the PPS rate setting process, to produce settlement amounts for specific costs, to determine outlier payments and make other determinations.

Hospital MCRs are a key source of data on costs associated with traditional Medicare beneficiaries. The Medicare Payment Advisory Commission (MedPAC), an independent congressional agency charged with advising Congress on issues affecting the Medicare program (a trusted standard on objective Medicare policy), has noted that “[MCRs] are a primary source of data used by CMS, MedPAC, providers, and financial analysts to examine providers’ Medicare financial circumstances.”

Despite their common usage for analyzing Medicare’s impact on hospitals, MedPAC has long noted several key issues and blind spots with MCRs,² and these limitations continue to exist today. First, MCRs generally do not provide a complete picture of hospital financial statements. While one of the MCR worksheets (Worksheet G) reproduces some hospital financials, it does not reflect all relevant detail, nor is this worksheet necessarily consistent with audited financial statements of the hospital. Second, MCRs are not timely enough to assess current costs. While cost report data may be available 7-8 months after the close of a hospital’s fiscal reporting period, the average delay in public MCR data over all hospitals is more than a year.³ Third, allocation of joint, overhead costs, such as general administration, at the highest product line levels (e.g., inpatient, outpatient, rehab facility, skilled nursing facility) may differ from hospital to hospital, causing variability in cost reporting. Fourth, differences in health system corporate organizational structures (i.e., issues with narrowly defining the hospital reporting entity’s costs) may also cause variability in cost reporting.

Perhaps most importantly, however, because MCRs were designed to pay hospitals based on the cost of serving traditional Medicare beneficiaries, data reflected on the MCR with respect to non-traditional Medicare payers, including Medicaid, Medicare Advantage, other government payers, self-pay, and commercial insurers, are either limited or missing altogether. Notably, traditional Medicare payments accounted for less than one-sixth of hospital revenues in 2022.⁴ Therefore, in order for the HCT to do what it purports to do, it must make many assumptions, and those assumptions will often be inaccurate.



III. Assumptions and Inaccuracies in the HCT

In order for the HCT to calculate its “break-even” point using MCR data, it must make many assumptions. Generally, those assumptions involve estimating hospital costs (and revenue) attributable to other payers that aren’t included in the MCR and then backing those amounts out of total costs to estimate the costs that remain to be covered by commercial insurers.

A. Traditional Medicare Assumptions

The HCT uses several cost and revenue values from the MCR to estimate the impact of traditional Medicare on hospital finances. The MCR itself estimates costs attributable to traditional Medicare by calculating all patient cost-to-charge ratios (CCRs) at the hospital cost center level and then applying those CCRs to charges for hospital services provided to traditional Medicare beneficiaries. The accuracy of using CCRs to allocate costs to traditional Medicare has been debated — some studies suggest that using CCRs is an accurate approach to approximating actual costs; others suggest that there are more accurate methods (particularly considering the sophistication of cost accounting systems today). Nevertheless, the use of CCRs is the historical approach used to allocate hospital costs to traditional Medicare on the MCR.

B. Medicaid Assumptions

Although not used for payment purposes, Medicaid charges and revenue have been layered on to hospital MCRs over time. The MCR also estimates hospital costs attributable to the Medicaid program by reference to the overall CCR of the hospital. These calculated costs and revenue are brought into the HCT (and subtracted from total hospital costs) in order to calculate the “break-even” point.

While the Medicaid values reported on the MCR may serve to get a high-level sense for the impact of the Medicaid program on hospitals, there might be more accurate sources of Medicaid data than the MCR (namely, state-specific, pre-audited Medicaid cost reports) that the HCT does not acknowledge

nor attempt to use. For the purposes of calculating rates to be negotiated by payers to narrowly cover hospital costs, as the “break-even” point purports to do, more accurate approaches to cost allocation should be employed.

C. Medicare Advantage (MA) Assumptions

Medicare Advantage enrolls more Medicare beneficiaries than traditional Medicare and is projected to continue to enroll a greater proportion of traditional Medicare in future years.⁵ Medicare Advantage enrollees overwhelmingly receive their non-emergency hospital care through in-network facilities, which are paid according to privately negotiated rates between the hospital and the MA plan. The HCT assumes that the cost to a hospital of providing health care for an MA plan enrollee is the same as providing health care for a traditional Medicare beneficiary, which is likely inaccurate. First, the HCT assumes that inpatient charges per discharge for MA plan enrollees will be the same as the inpatient charges per discharge for traditional Medicare beneficiaries. Second, the HCT assumes that outpatient charges as a percent of the calculated inpatient charges for MA plan enrollees will be the same as for traditional Medicare beneficiaries. Third, the HCT calculates CCRs for inpatient and outpatient services for traditional Medicare and applies these to the MA calculated inpatient and outpatient charges (noted in the first and second assumptions) to calculate hospital operating costs attributable to MA. Fourth, the HCT assumes that MA net revenue for inpatient and outpatient services will be the same as traditional Medicare revenue as a percent of traditional Medicare costs. In summary, the HCT uses only one actual MA value from the MCR, MA discharges, to calculate hospital operating costs associated with MA.

Values Used to Estimate Medicare Advantage Costs and Revenues	
In Medicare Cost Report	Not in Medicare Cost Report
# of MA discharges	MA inpatient and outpatient charges per discharge Hospital operating costs attributable to MA MA net revenue for inpatient and outpatient services

As a general matter, hospital costs under MA are managed much more aggressively than traditional Medicare. This management of costs under MA generally results in more outpatient services, higher levels of denied claims, and generally higher costs as a percent of revenue and charges for MA plan enrollees than traditional Medicare beneficiaries. Therefore, the assumptions noted above, individually, but particularly cumulatively, likely result in highly inaccurate MA financial metrics in the HCT.⁶

D. Direct Graduate Medical Education (DGME) and Indirect Medical Education (IME) Inaccuracies

There seems to be misalignment in the way medical education revenue and costs are addressed in the HCT. Users of the HCT calculator are prompted to include from the MCR an inpatient revenue value that includes DGME and IME payments. However, the costs for interns and residents are excluded

from allowed costs in the calculation of CCRs on the cost report, and, therefore, are excluded from Medicare allowed costs as reported on the MCR. The inclusion of DGME and IME as revenue in the numerator and the exclusion of costs for interns and residents in the denominator would cause the HCT to calculate an inappropriately high ratio of Medicare revenue to Medicare allowed costs -- and thus an inappropriately high Medicare margin. As noted above, the “break-even” point in the HCT is expressed as a percent of Medicare rates by dividing the commercial break-even by the Medicare revenue as a percent of Medicare allowed costs. Therefore, an inappropriately high ratio of Medicare revenue to Medicare allowed costs results in an inappropriately low “break-even” point.⁷

E. Deductibles and Coinsurance Inaccuracies

The HCT treats amounts billed to Medicare beneficiaries for deductibles and coinsurance as reported on the MCR as Medicare revenue. However, hospitals collect significantly less than 100% of these amounts. The amounts not collected result in bad debt. Medicare pays 65% of the reimbursable bad debt attributed to Medicare beneficiaries. Therefore, considering the amounts billed as 100% revenue results in an inappropriately high Medicare revenue as a percent of Medicare allowed costs resulting in a (further) inappropriately low “break-even” point.⁸

F. Inpatient and Outpatient Split Inaccuracies

The calculator accompanying the HCT also calculates a “break-even” point for inpatient and outpatient services. It determines inpatient and outpatient splits of charges, costs and revenue for other payers, including commercial payers, by reference to the splits of inpatient and outpatient values for traditional Medicare. However, traditional Medicare patients tend to have more inpatient services than for any other payer. As noted above with respect to MA, other payers, including commercial insurers, tend to manage hospital costs more aggressively toward outpatient services through the use of site-neutral payments or medical management techniques than traditional Medicare. Therefore, the assumption that the splits are the same for other payers tends to overstate these amounts for inpatient care and understate them for outpatient care. This may cause a hospital for whom inpatient and outpatient “break-even” splits are used to actually be paid more or less than is needed to actually break even (according to the HCT).⁹

G. Health System Assumptions

For hospitals that are part of a health system, MCRs do not include all costs of operating the health system, and some of those costs do not have adequate funding sources. For example, MCRs do not include net losses (operating costs that exceed revenue) associated with home health agencies. While home health agencies are often used in lieu of longer hospital stays, home health agency services frequently operate at a loss for health systems.

H. Medicare Margin Concerns

Generally, the Medicare margins that are calculated in the HCT seem to be significantly higher than Medicare margins that are reported by MedPAC. MedPAC reported in its March 2024 Report to Congress that inpatient PPS hospitals’ overall traditional Medicare margins across service lines fell to a record low of -11.6% in 2022. However, the HCT data shows an average Medicare margin of -7.9% for non-critical access hospitals in 2022. Furthermore, for each year from 2018 to 2021, MedPAC shows

traditional Medicare margins that are 2% to 3% lower than the HCT average Medicare margin for the same year.¹⁰ We have highlighted some likely causes of this discrepancy above. The net effect of an inappropriately high Medicare margin (and Medicare revenue as a percent of Medicare allowed costs) is that it results in an inappropriately low “break-even” point as a multiple of Medicare.¹¹

IV. Break-even Point is a Problematic Concept

Moreover, the very concept of the HCT’s “break-even” point is concerning. First, the calculation assumes that sales (i.e., items and services), prices (i.e., each payer’s prices and the payer mix) and costs will remain constant. However, we know that these inputs vary in any given year and are even more volatile when economic conditions like labor and supply, as well as patient population shifts occur (as they have over the last few years). In addition, the HCT calculates the break-even point for several years in the past, but it makes no attempt to apply the break-even point to future years or to calculate it for a future year (which, if it did, could only involve many additional assumptions). If the break-even calculation is to be believed, it is only the calculation of past break-even pricing. This renders the tool less useful for determining appropriate payment levels prospectively.

Notably, past break-even points as reported by the HCT also are highly volatile. For all non-critical access hospitals and for hospitals with all 12 years of data reported in the MCR (2011-2022), the average break-even point for a hospital was 147%, but the average standard deviation in break-even points for a hospital was 40.2%. The implication of this is that the break-even rate for one year is likely highly unreliable as a predictor of future years’ break-even rates.

Another aspect of the concept of a “break-even” point that is problematic is that it ignores the merits of a positive margin’s role in allowing hospitals to invest in new facilities, establish reserves, and invest in more equitable, higher quality, or value-based care and innovation. Regarding the latter point, researchers have found a relationship between hospital financial performance and hospital quality/safety performance score,¹² and similar positive associations between financial and quality performance also was found in a large literature review, with one study finding quality rising in the year following an increase in hospital profitability.¹³

V. Using Medicare Rates as Reference Rates

Others have noted that the HCT’s reliance on traditional Medicare rates as a reference in its “break-even” point is problematic for the flawed premise that Medicare pays for a hospital’s costs for providing care. Because Medicare fee-for-service rates are established in rulemaking, are set for a year, and are generally determined based on data that is at least a few years old, these rates will never be a completely accurate portrayal of the actual experience of hospitals in future years. In addition, there is evidence that Medicare rate calculations have drifted further from the costs hospitals incur when providing services to Medicare patients, which calls into serious question the suitability of these rates for the general patient population covered by other payers.¹⁴ Indeed, hospitals’ decreasing Medicare fee-for-service margins may have factored into MedPAC’s recent recommendation to establish a record high prospective payment update at current law plus 1.5% for hospitals in FY 2025.

Furthermore, the HCT layers in RAND’s commercial data for context but does not appropriately disclose the limitations (i.e., observation size and methodology) of the RAND data. The RAND data

represents less than 2% of total hospital spending and is comprised of voluntarily reported data from select payers and all-payer claims databases (which themselves largely consist of data from self-selecting data submitters).¹⁵

Beyond these methodological concerns, relying on HCT methodology that is grounded in Medicare fee-for-service rates presents two significant public policy conflicts that may impair the adoption of value-based care and government efforts to preserve and increase access to rural hospital care.

First, CMS, state policymakers, commercial payers, and purchasers alike are de-emphasizing traditional fee-for-service payment models in favor of alternative payment models (APMs). For example, the Maryland All-Payer Model achieved net Medicare savings even as payments were substantially higher under Maryland's all-payer rate setting system than they would have been under the inpatient PPS, ranging from 33% to 44% higher for the same mix of admissions. Medicare beneficiaries had 2.8% slower growth in total expenditures (\$975 million in savings) during the Maryland All-Payer Model relative to the comparison group, largely driven by 4.1% slower growth in total hospital expenditures (\$796 million in savings).¹⁶ Because the HCT reinforces a fee-for-service payment approach, reliance on it misses opportunities for policymakers, purchasers, and payers to change this dynamic by focusing on strategies to curb overall costs, incentivize higher quality and more upstream care, and disincentivize unnecessary care. Limiting the total amount spent on services rather than just the price at which care is provided carries forward the challenging, yet critical efforts to implement value-based care initiatives.

Second, the use of the "break-even" point as a reference to Medicare PPS rates for critical access hospitals and rural emergency hospitals without factoring in their Medicare cost-based reimbursement would cause these facilities to be paid less than what they would need to actually break even. Critical access hospitals are designated by the state as such and must be located in a rural area or an area that is treated as rural and maintain no more than 25 inpatient beds that can be used for either inpatient or swing-bed services, among other criteria.¹⁷ Because critical access hospitals are reimbursed by traditional Medicare at 101% of allowed costs, their FFS Medicare revenue as a percent of allowed costs is higher than it would be under the Medicare PPS. The "break-even" as a multiple of Medicare is calculated using Medicare revenue as a percent of allowed costs instead of by reference to actual Medicare PPS rates. As a result, if a policymaker or payer used the "break-even" as a reference to Medicare PPS rates (instead of as a reference to 101% of costs), this approach would pay critical access hospitals below what it would need to actually break even.¹⁸

Congress established rural emergency hospitals as a new Medicare provider to "respond to rural hospital closures" and "give rural communities more access to health care."¹⁹ Because rural emergency hospitals are reimbursed by traditional Medicare at 105% of allowed costs, a similar, and potentially even more pronounced, underpayment would result if other payers used the HCT's "break-even" point by reference to Medicare PPS rates.

VI. Conclusion

The HCT calculations distort hospital finances, and its assumptions are too frequent and impactful to make meaningful conclusions about how purchasers and commercial payers should pay hospitals. Furthermore, the concept of targeting commercial rates to a past "break-even" point as a reference to Medicare rates is a problematic concept in many ways that conflict with the important progression to payment policies that are grounded in achieving quality, equitable, and performance-driven outcomes.

To the extent payers and policymakers are increasingly leveraging the NASHP HCT and other tools like it to develop their own misinformed mechanisms for rate setting, it is important for policymakers to understand the limitations and shortcomings of these tools and be cautious when interpreting their results. Otherwise, the HCT could have indiscriminate and dire consequences for hospitals' financial well-being, and, ultimately, patients' access to care.

End notes

- 1 For a simple example, if the HCT calculates that a hospital needs \$100 million in commercial payer revenue to cover commercial patient hospital operating costs (allowed costs attributed to commercial patients) and needs another \$20 million to cover all other hospital costs (disallowed costs, operating losses of other payers, etc.), the HCT calculates the hospital's break-even percent for commercial payers to be \$120 million / \$100 million or 120%. If the HCT also calculates the hospital's Medicare revenue as a percent of Medicare hospital operating costs (allowed costs attributed Medicare) to be 96%, the break-even point expressed as a percent of Medicare rates is 120% divided by 96%, or 125%.
- 2 See MedPAC, Report to Congress: Sources of Financial Data on Medicare Providers, June 2004, [govinfo.gov/content/pkg/GOVPUB-Y3_M46_3-PURL-LPS49906/pdf/GOVPUB-Y3_M46_3-PURL-LPS49906.pdf](https://www.govinfo.gov/content/pkg/GOVPUB-Y3_M46_3-PURL-LPS49906/pdf/GOVPUB-Y3_M46_3-PURL-LPS49906.pdf).
- 3 The most recent MCR data for hospitals in NASHP's newest version of the HCT (released on December 15, 2023) is for fiscal year ending sometime in 2022.
- 4 AHA analysis of Annual Survey data from 2022.
- 5 MA enrollment is approximately 54% of total Medicare enrollment and is expected to reach 60% of Medicare enrollment by 2030. KFF, 10 Reasons Why Medicare Advantage Enrollment is Growing and Why It Matters, Jan. 30, 2024, kff.org/medicare/issue-brief/10-reasons-why-medicare-advantage-enrollment-is-growing-and-why-it-matters/#:~:text=For%20the%20first%20time%20in,%20private%20Medicare%20Advantage%20plans.
- 6 The calculator that accompanies the HCT includes a "payment modifier" for MA, which can be used to modify the MA net revenue (revenue less allowed cost) calculation and could be used to mitigate the impact of the MA assumptions. The problem with this approach is two-fold: (1) a state government or commercial payer using the HCT would not know what the payment modifier should be for any given hospital, and (2) the payment modifier is not available in the dashboard or HCT datasets, and it is not clear what modifier was used to set those values.
- 7 For example, if the hospital from footnote 1 were to have a significant amount of DGME and IME payments such that if those were appropriately excluded from revenue, or the costs for residents and interns were included in allowed costs, such that the hospital's actual Medicare revenue as a percent of Medicare hospital operating costs was 92% instead of 96%, its "break-even" point expressed as a percent of Medicare rates would be 130% (120% / 92%), instead of 125%.
- 8 Carrying the example from footnote 6 forward, if the hospital were to collect significantly less than 100% of the coinsurance and deductibles such that its actual Medicare revenue as a percent of Medicare hospital operating costs was 90% instead of 92%, its "break-even" point (expressed as a percent of Medicare rates) would be 133% (120% / 90%), instead of 125%.
- 9 For example, if the HCT were to report for the hospital from footnote 1 break-even points for inpatients and outpatient services of 120% and 130% respectively, pursuant to a cost split 50/50 between inpatient and outpatient services for Medicare, but the hospital's split of inpatient to outpatient services for commercial payers was 30/70, a payer who uses the inpatient and outpatient "break-even" points would ultimately pay the hospital more than it needs to break even—that is, it would pay the hospital more at the 130% rate, and less at the 120% rate, than expected. Notably, the HCT dashboard and datasets do not appear to provide the inpatient and outpatient break-even points, which may be a reflection of their inaccuracy.
- 10 See MedPAC, March 2024 Report to the Congress: Medicare Payment Policy: Mar. 15, 2024, [medpac.gov/document/march-2024-report-to-the-congress-medicare-payment-policy/](https://www.medpac.gov/document/march-2024-report-to-the-congress-medicare-payment-policy/). Interestingly, RAND also calculates Medicare margins for hospitals using MCRs, and its margins are also consistently lower than the HCT's Medicare margins.
- 11 And this is true even if the "break-even" point purportedly includes "max" costs.
- 12 Dean D. Akinleye et al., "Correlation between hospital finances and quality and safety of patient care," PLoS One 14, no. 8 (2019): e0219124, available at: ncbi.nlm.nih.gov/pmc/articles/PMC6697357/.
- 13 Gang Nathan Dong, "Performing well in financial management and quality of care: Evidence from hospital process measures for treatment of cardiovascular disease," BMC Health Services Research 15, no. 45 (2015), available at: bmchealthservres.biomedcentral.com/articles/10.1186/s12913-015-0690-x#:~:text=There%20is%20a%20statistically%20significant,factors%20of%20health%20care%20quality.
- 14 As noted above, MedPAC estimated that in 2022, hospitals and health systems experienced a -11.2% margin on Medicare fee-for-service payments. MedPAC, Assessing Payment Adequacy and Updating Payments: Hospital Inpatient and Outpatient Services, Dec. 7, 2023, [medpac.gov/wp-content/uploads/2023/03/Hospital-Dec-2023-SEC.pdf](https://www.medpac.gov/wp-content/uploads/2023/03/Hospital-Dec-2023-SEC.pdf)
- 15 The HCT uses a "RAND 3.0 Price" (claims paid from 2016 through 2018 by "health plans participating" in the 2018 report, and a "RAND 4.0 Price" (similarly, claims paid from 2018 through 2021 by "health plans participating" in the 2020 report). NASHP, Hospital-Level Dataset Variable Definitions, Dec. 15, 2023, view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Ftool.nashp.org%2FNASHP%2520HCT%2520Data%2520Variable%2520Definitions%25202023%2520December.docx&wdOrigin=BROWSELINK
- 16 RTI International, Evaluation of the Maryland All-Payer Model, November 2019, downloads.cms.gov/files/md-allpayer-finalevalrpt.pdf
- 17 CMS, Critical Access Hospitals, [cms.gov/medicare/health-safety-standards/certification-compliance/critical-access-hospitals](https://www.cms.gov/medicare/health-safety-standards/certification-compliance/critical-access-hospitals)
- 18 Using the same hospital from footnote 1, if that hospital were a critical access hospital such that its Medicare revenue as a percent of Medicare hospital operating costs was 101% due to cost-based reimbursement, instead of 96% as it would be under the PPS, its break-even point expressed as a percent Medicare rates would be 120% divided by 101%, or 119%. Therefore, if a commercial payer used the break-even point as a reference to PPS rates (instead of as a reference to 101% of costs), that would result in the commercial payer paying 6% less (the difference between 125% and 119%) than the hospital would need to break even.
- 19 CMS, Rural Emergency Hospitals, [cms.gov/medicare/health-safety-standards/guidance-for-laws-regulations/hospitals/rural-emergency-hospitals](https://www.cms.gov/medicare/health-safety-standards/guidance-for-laws-regulations/hospitals/rural-emergency-hospitals)