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Do Health Care Providers That Serve Historically Marginalized Populations Get Paid Less?

An Analytic Investigation

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Executive Summary

Health inequities are pervasive across the country, with the health and well-being of Americans too often diverging along racial and ethnic lines. While recent studies have identified many factors leading to health disparities—from differences in health care access to social determinants like housing, safety and food security—how we finance health care services and the structural payment inequities embedded in our health care system have gone under-explored.

Through this report, we seek to address this gap by investigating how health care provider payment variation contributes to disparities. Specifically, do providers who predominantly treat Black, Hispanic, American Indian/Alaska Native (AI/AN), and Native Hawaiian and Other Pacific Islander (NHOPI) individuals—collectively, "historically marginalized populations" (HMPs)—get paid **less** for the same services than those that treat predominantly White populations? And if so, is this driven only by payer mix—as HMPs are disproportionately covered by lower-paying public payers like Medicaid—or do payment differences within payer types play a role?

To investigate these questions, we analyzed data from three state All-Payer Claims Databases (APCDs) in Arkansas, Massachusetts and Virginia and examined whether hospitals that disproportionately served HMPs were paid less for a set of services they delivered. Our analysis found evidence that, in these states, hospitals that disproportionately served HMPs faced several compounding financial disadvantages:

- Hospitals that disproportionately served HMPs **were more reliant on Medicaid as a payer**. Among hospitals disproportionately serving HMPs, **the average share of Medicaid patients was 16 to 28 percentage points higher than that of other hospitals**. This **reduces overall levels of reimbursement**, because Medicaid typically pays less than other types of insurance.[i]
- In **two of three states** that hospitals that disproportionately served HMPs also received **commercial payment rates that were 7% to 15% lower** for delivering the same services, compared with other hospitals.

In other words, in addition to having fewer patients with higher-paying commercial insurance, hospitals that disproportionately served HMPs also received lower payments for commercial patients.

Lower payments for services—if our findings scale beyond our examined basket of services—would mean the providers that disproportionately serve HMPs would chronically have fewer resources to invest in staff, technology and facilities, and other longer-term investments in care delivery improvements and innovation, perpetuating the existence of "haves" and "have-nots" that is too common in health care. Though our investigation was targeted, its results add to the emerging body of research on this issue and highlight the need for greater inquiry into whether and how the way our health care payers set reimbursement rates for health care services perpetuates health inequities.[1]

i. This analysis examined only base payments and did not account for any Medicaid supplemental payments. Supplemental payments in some states can be significant, though they are often financed at least in part by the hospitals themselves. The supplemental payments may offset, at least in part, the low Medicaid base rates.

In nearly all states, hospital payment rates are negotiated between payers and providers. This market-driven system favors large hospitals and systems and those with prestige—the "must have" hospitals in any payer's network—while leaving behind smaller hospitals or those less vaunted. This research suggests that hospitals serving HMPs have less bargaining power than other hospitals in their states, leading to lower reimbursement and consequently less investment, further diminishing the desirability of these facilities.

Policymakers along with stakeholders and researchers should explore the prevalence of these disparities in payment levels locally and across service lines using data from their own state health data organizations and consider taking policy actions to address observed financial inequities, which may include but are not limited to: raising Medicaid payment rates; establishing state cost benchmarking targets that provide different allowances for growth between historically high-cost and low-cost providers, avoiding "freezing" in payment disparities for served populations; and potentially increasing direct oversight of commercial payment rates and network designs. The observed differential payment rates in this investigation are the result of years of negotiating dynamics likely driven by differences in perceived power or desirability of providers rather than considerations of quality, cost or equity. Undoing these dynamics will take sustained effort, and such effort is needed to have a more equitable health care system.

While there is much work that needs to be done within the health care sector and beyond to promote health equity, understanding the fundamental financial disadvantages associated with serving HMPs is a critical step in understanding the deep structural inequities inherent in our systems of health.

I. Introduction

Health inequities are pervasive across America, with the health and well-being of our populations too often diverging along racial and ethnic lines. Historically marginalized populations (HMPs) in the United States, including Black, Hispanic, American Indian/Alaska Native (AI/AN), and Native Hawaiian and Other Pacific Islander (NHOPI) individuals, have poor health care outcomes and unequal access to health care, on average.[ii] HMPs have significantly higher rates of infant mortality compared with White individuals, particularly Black individuals, for whom the rate is more than twice as high.[2] Black individuals are at a higher risk for cancer death compared with White individuals, in part because Black individuals are less likely to receive appropriate care for some types of cancers.[3] HMPs also face higher rates of diabetes, asthma and certain other chronic conditions.[4]

While the root causes of disparities in health care outcomes are complex and multifaceted, persistent access barriers likely bear some of the blame. HMPs report not having a personal health care provider at greater rates than White individuals and are more likely to seek routine care from the emergency department (ED).[5] HMPs also consistently struggle to access a range of needed specialty care.[6]

What is behind these access barriers? One potential factor that we explore through this report is the role that disparities in health care payments might play in perpetuating inequities for HMPs. Medicaid, for example, which is a disproportionate source of insurance for many HMPs, often pays lower rates compared with commercial payers (though differences in base payments may be partially offset by supplemental payments).[7,8,9,10] Lower payment rates can have significant implications for access to care and quality by increasing the risk of hospital closures and limiting the ability of providers to make critical investments.[11,12] As one recent article noted, "Poor neighborhoods have proportionately more people who are uninsured or insured by Medicaid, which has payment rates that are often too low to cover the costs of care. People tend to seek health care near home. As a result, hospitals that are located in poorer neighborhoods have less to work with, and often lack the resources needed to provide optimal health care. In effect, doctors and hospitals in the United States are paid less to take care of Black patients than they are paid to take care of White patients. When we talk about structural racism in health care, this is part of what we mean."[13]

In this report, we seek to shed additional light on differences in health care payments to providers disproportionately serving HMPs through an analysis of state All-Payer Claims Databases (APCDs) and hospital discharge data across three states. We also assess the implications of payment inequities and provide options for states seeking to address these issues.

ii. Due to data limitations, we used a binary classification system in our analysis to characterize the race and ethnicity of hospital patient populations (i.e., Non-Hispanic White vs. all others). We recognize that this does not reflect the full spectrum of patient race and ethnicity in America.

II. Background

Health Inequities Faced by Historically Marginalized Populations

Health inequities experienced by HMPs in the United States are well-documented. Black, Hispanic and AI/AN individuals are significantly more likely to report fair or poor health status compared with White and Asian individuals.[14] Black individuals have a lower life expectancy at birth compared with White individuals, and both Black and Hispanic individuals saw greater declines in life expectancy relative to White individuals during the COVID-19 pandemic: From 2019 to 2021, Black and Hispanic life expectancy fell by approximately four years (from 74.8 to 70.8 and from 81.9 to 77.7, respectively) compared with less than three years for White individuals (from 78.8 to 76.1).[15] Preterm births, low birth weight, inadequate prenatal care and infant mortality are more common for Black, Hispanic and AI/AN individuals compared with White individuals. Black, Hispanic and AI/AN individuals are also at higher risk for a range of chronic conditions, including diabetes and HIV/AIDS.[16]

A broad range of historical and intersecting social, economic, and cultural factors contribute to health inequities, with inequitable access to health care being a primary driver. While the implementation of the Affordable Care Act (ACA) markedly improved rates of health insurance coverage for HMPs, they continue to experience disparities in access and health outcomes.[17] Black, Hispanic and AI/AN individuals are more likely to report not having a regular doctor, delaying care due to cost, and not receiving routine dental care.[18] Black, Hispanic and AI/AN individuals are also significantly less likely to be up to date on recommended adult and childhood vaccinations.[19]

Differential Payment Rates as a Contributor to Health Inequities

In this report, we examine the role of financial inequities as a potential contributor to health inequities. Low payment for health care services can have implications for quality of and access to care. Previous studies have shown that patients who have insurance with lower reimbursement rates receive worse care and have worse health care outcomes.[20,21] Akinleye et al. (2019) found that less financially stable hospitals are less able to make critical investments in health information technology, qualified staff, training programs, evidence-based clinical protocols and other activities activities as compared to more well-resources hospitals and health systems.[22] Additionally, safety net and rural providers, which tend to disproportionately treat Medicaid and uninsured patients, have faced an epidemic of closures in recent years, spurred by an increasingly dire financial picture.[23,24] Hospital closures can directly reduce health care access by disrupting ongoing care relationships and shifting the burden of care to other hospitals (often without short-term and proportionate increases in staff, beds, physical space and other medical resources).[25,26,27]

While Medicaid is critical for ensuring financial and health security for millions, Medicaid payment rates tend to be lower than those from other payers, financially disadvantaging providers that serve Medicaid populations—particularly those where payment rate disparities are not otherwise mitigated by supplemental payments. A 2017 study by the Medicaid and CHIP Payment and Access Commission (MACPAC) found that Medicaid inpatient hospital rates were approximately 78% of Medicare rates (which were themselves less

than commercial rates).[iii,28] Zuckerman et al. (2019) found that Medicaid fee-for-service payment rates for primary care, obstetric and other physician services were also a fraction of Medicare rates (67%, 80% and 78%, respectively).[iv,29]

Medicaid payment differences directly impact HMPs and the providers that serve them, as HMPs are disproportionately covered by Medicaid. HMPs—particularly Black and Hispanic individuals—are more likely to be enrolled in Medicaid compared with White individuals. In 2021, Black and Hispanic individuals accounted for approximately 12% and 19% of the U.S. population, respectively, but 19% and 31% of the Medicaid population, respectively.[30] Medicaid eligibility and enrollment are largely a function of income, and HMPs disproportionately have lower incomes.[31]

The impact of this "payer mix" effect on providers disproportionately serving HMPs is increasingly being investigated. A recent analysis by Himmelstein et al. (2023), for example, found that hospitals serving a disproportionately high share of Black patients receive $283 less revenue and $111 less profits per patient day compared with hospitals serving a higher proportion of White patients.[32] The authors note that this is driven to a significant extent by payer mix.[33]

Providers that disproportionately serve HMPs may also face a compounding limitation: lower commercial payment rates compared with other hospitals delivering the same services. Commercial payment rate variation, broadly, is increasingly reported on. For example, Whaley et al. (2020) found that hospitals in the 75th percentile for average employer-sponsored insurance rates are paid 45% more, on average, compared with hospitals with average rates in the 25th percentile,[34] while White and Whaley (2019) found that commercial prices paid to hospital systems vary by as much as threefold, with the lowest-priced systems receiving rates at approximately 150% of Medicare rates, on average, compared with some systems that receive average rates in excess of 400% of those offered by Medicare.[35]

iii. Note: This figure excludes supplemental payments. After accounting for supplemental payments, Medicaid payment rates were comparable to Medicare payment rates, on average. However, not all providers receive supplemental payments, and their value varies widely across states.
iv. We note that most studies to date have examined Medicaid fee-for-service payment rates. However, rates in Medicaid managed care delivery systems are often closely tied to fee-for-service rates.

Commercial payment rates are often driven by provider bargaining power: Hospitals with higher market shares are able to command higher rates, on average, from commercial payers as a result of their strong negotiating positions. Cooper (2015) found that prices at "monopoly hospitals" are 12% higher than those in markets with four or more rivals.[36] Prestigious, "brand-name" providers (such as academic medical centers or specialty hospitals) are similarly able to command higher reimbursement rates from commercial insurers.[37,38] Conversely, "safety net" providers that serve a higher share of Medicaid enrollees and the uninsured may struggle to negotiate favorable commercial rates as insurers may not view them as critical to have in-network. A recent analysis by Manatt Health and FAIR Health, for example, found that commercial rates for some hospitals in New York City are up to seven times higher than the average rates paid to safety net hospitals for similar services.[v,39]

Drivers of Payment Differences for Providers Serving HMPs

While there is a growing body of literature that speaks to the Medicaid "payer mix" effect that providers serving HMPs may face, few studies have examined whether these providers also receive lower payment rates from commercial insurers.[vi] Through this report, we seek to expand the evidence base on this question.

v. In general, there is less room for rate negotiation in Medicare and Medicaid. Payment rates for traditional Medicare and Medicaid fee-for-service programs are established administratively by the federal government and states, respectively. Medicare Advantage and Medicaid managed care plans often have some ability to negotiate payment rates. However, these plans often face regulatory or market limitations that lead to rates being closely tied to fee-for-service rates. See https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2014.1427 and https://www.macpac.gov/wp-content/uploads/2022/06/June-2022-Directed-Payments-Issue-Brief-FINAL.pdf.

vi. We also sought to assess rate variability within Medicare Advantage and Medicaid, though we expected to see less variability within these payer categories.

III. Analytic Approach and Limitations

Through this analysis, we sought to examine associations between hospital price variation for a select basket of outpatient services and the race and ethnicity and payer mix of hospital patient populations.

Manatt partnered with state health data organizations (HDOs) in Arkansas, Massachusetts and Virginia to access and analyze available All-Payer Claims Database (APCD) and hospital discharge data.[vii,40,41] We used APCD data to identify and assess hospital payment rate variation for a basket of outpatient services across payer types (see Table 1 below).[42] We used hospital discharge data to assess the racial and ethnic composition and payer mix of hospital patient populations.[viii,ix] For purposes of this analysis, we defined "hospitals disproportionately serving HMPs" as those in the top decile in terms of the share of patients who are HMPs relative to other hospitals in the state.

Table: Outpatient Services of Interest

• Appendectomy	• Hernia repair
• Cataracts surgery	• Mammography
• Chest X-ray	• MRI
• Cholecystectomy	• Psychotherapy
• Colonoscopy	• Spirometry
• CT scan	

We worked with partner states to define the scope and methodology of the analysis, including the types of payers, providers and services of interest, as well as to understand the limitations of available data.[x] At a high level, analytic steps included the following:

- Identifying claims for services of interest
- Calculating amounts paid for identified claims
- Calculating weighted average payment ratios at the hospital-payer type level

vii. These states were selected as partner states for this project because they are geographically diverse, have differing racial and ethnic compositions, and have APCDs and hospital discharge data that were available for research purposes.
viii. Hospital discharge data were used to categorize the racial and ethnic composition of hospital patient populations given well-documented issues impacting the collection and reporting of patient race/ethnicity in administrative claims data. See, for example, https://www.manatt.com/insights/white-papers/2021/unlocking-race-and-ethnicity-data-to-promote-healt.
ix. In Massachusetts and Arkansas, hospital discharge data available for this analysis included both inpatient discharges and ED visits, while data in Virginia included only inpatient discharges.
x. These decisions were informed by preliminary analyses conducted by state partners to investigate data availability, common coding practices and other potential analytic barriers. Manatt then developed detailed analytic guidance describing how to operationalize the analytic approach as well as table shells to capture results summarizing key data points.

- Characterizing the race and ethnicity as well as payer mix associated with hospital patient populations
- Assessing associations between weighted average payment ratios and the proportion of HMP and Medicaid patients at the hospital level.

Additional details regarding our methodology can be found in Appendix A, and service codes in Appendix B.

Key Data Sources

- **APCDs.** APCDs are large state databases that include public and commercial payer health care claims and encounter data, including records of health care service utilization, associated payments, and contextual information about the individuals served and their diagnosed conditions.
- **Hospital Discharge Data.** State hospital discharge data typically include line-level elements collected on hospital uniform billing forms from inpatient and ED discharges in nonfederal acute care facilities, including data on patient diagnoses, procedures rendered, expected payer and patient demographic information.

Data and Analytic Limitations

Our analysis is subject to several data and analytic limitations, as discussed below.

Limited basket of services. We selected the basket of services for this analysis in collaboration with state partners, with the goal of identifying a diverse set of services that are commonly provided in the outpatient setting and where complete data were available across states and payer types. We excluded inpatient services from the analysis due to observed inconsistencies in billing practices and small sample sizes for several candidate inpatient services in some states. While we sought to identify a broad selection of services, our basket of outpatient services may not fully reflect systemic differences in payment rates across institutions or payer types and may not be generalizable to other types of services (e.g., there may be less variation in rates for routine, shoppable outpatient services than in rates for inpatient services examined in other studies).[xi]

Impact of alternative payment arrangements. Reimbursement rates captured in APCD data may not represent exact rates ultimately paid to providers under alternative payment models. Standardized data on these types of payment arrangements are not presently available in most APCDs.

Impact of Medicaid supplemental payments. Claims data do not reflect Medicaid supplemental payments, which can be substantial and are highly variable by state and provider type. Supplemental payments may narrow the net payment gap between Medicaid payments and other payers (though they do not change the underlying adequacy of payment). Providers may also fund a portion of the supplemental payments through provider fees or intergovernmental transfers, which lower their net value.

xi. A full list of the outpatient services that were included in this analysis can be found in Appendix B.

Classification of patient race and ethnicity. Due to data limitations, we used a binary classification system to characterize the race and ethnicity of hospital patient populations: "White" and "HMP." We considered Non-Hispanic White individuals to be "White," while we considered individuals of all other races and White Hispanic individuals to be HMPs. We acknowledge that this classification does not reflect the full spectrum of patient race and ethnicity in America.

State-specific data limitations. Our analysis is subject to several state-specific data limitations. We provide additional details regarding these limitations and their potential implications in Appendix A.

IV. Key Findings

Through this analysis, we sought to answer the following questions for our basket of services and with the data available to us across our three partner states:

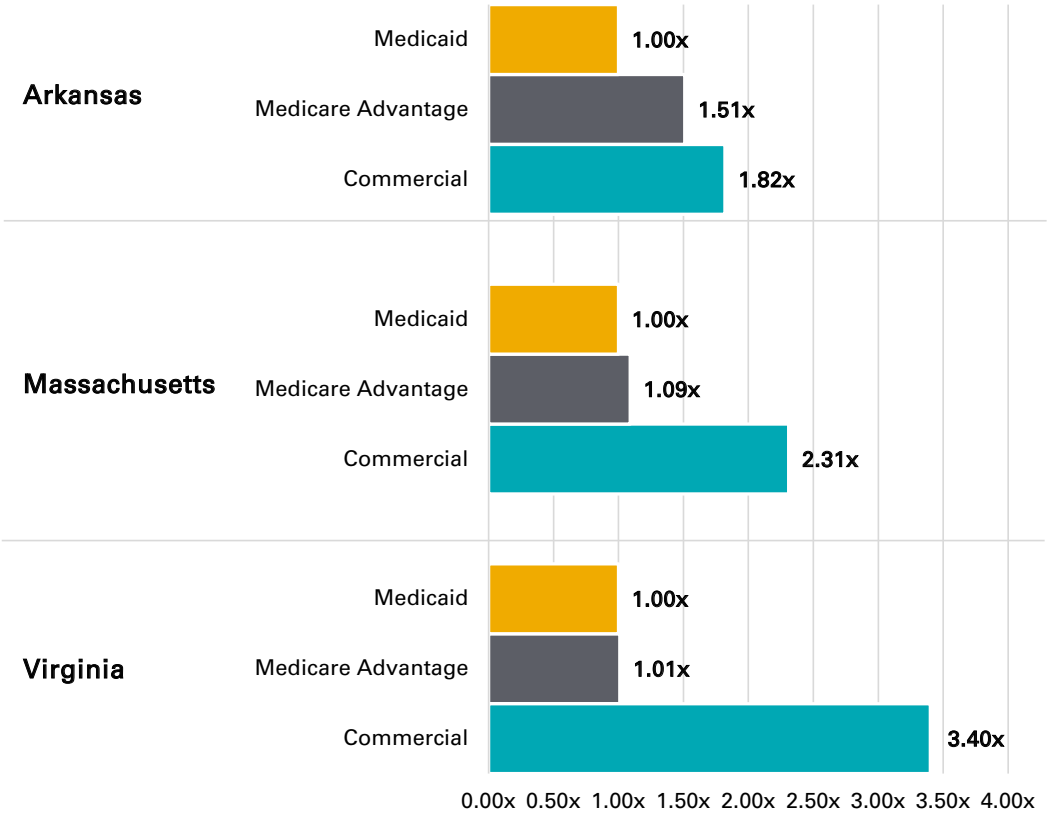
1. **How do hospital payment rates vary by payer type?** Variation in payment rates by payer type has been extensively documented in the existing literature, with Medicaid payments regularly found to be among the lowest across payers. We sought to confirm this finding.
2. **Are hospitals that serve a higher share of Medicaid patients paid less overall relative to other hospitals?** We sought to validate that hospitals with a high-Medicaid payer mix (defined as hospitals in the top decile in terms of the proportion of patients with Medicaid) receive lower aggregate reimbursement, on average, for a given set of services compared with other hospitals.
3. **Do hospitals with a high-Medicaid payer mix disproportionately serve HMPs?** We sought to validate that hospitals with a high-Medicaid payer mix also serve a high share of HMPs and, as a result, that the low Medicaid reimbursement "payer mix" effect disproportionately impacts providers serving HMPs.
4. **Do hospitals that disproportionately serve HMPs receive lower payment rates within a given payer type for delivering similar services relative to other hospitals?** We aimed to assess whether payment rates within a given payer type (i.e., commercial, Medicare, Medicaid) vary based on the racial and ethnic composition of a hospital's patient population. Little previous research has been published on this topic.

1. How do hospital payment rates vary by payer type?

A wealth of literature in recent years has put a spotlight on payment rate differences among commercial payers, Medicare and Medicaid (though few have examined Medicaid managed care rates specifically). As a first step in our analysis, we sought to confirm existing findings using claims data from Arkansas, Massachusetts and Virginia. We also sought to expand on the existing literature by incorporating Medicaid managed care data in two of our three states.[xii] For this component of the analysis, we calculated the average payment rate across our outpatient services of focus, weighted by service volume, across all payers within each payer category. We then compared this amount with the average amount Medicaid would have paid for those same services (see Figure 1).

xii. Data from Arkansas included only fee-for-service claims. Virginia data included only managed care claims. Massachusetts data included both fee-for-service and managed care claims.

Figure 1: Comparing Average Payment Rates for Select Outpatient Services Across Payer Types Relative to Medicaid Payment Rates[xiii]



Across the three states, average commercial payment rates for our basket of services were substantially higher than those for Medicare Advantage and Medicaid, largely aligning with previous studies. Commercial rates in Massachusetts and Virginia were more than double average Medicaid rates; they were 82% higher than Medicaid in Arkansas. Medicare Advantage rates varied by state. In Arkansas, Medicare Advantage rates were 51% higher than Medicaid, while Medicare Advantage rates in Massachusetts and Virginia were closer to those for Medicaid—9% and 1% higher, respectively.[xiv]

xiii. Note: Medicaid payment levels do not account for non-claims-based supplemental payments; Medicare fee-for-service claims were excluded from the analysis because the Massachusetts APCD does not include these claims; in Virginia, these claims are also prone to data quality issues. We also excluded Medicaid Qualified Health Plan claims for ACA Medicaid expansion enrollees in Arkansas. See the detailed methodology in Appendix A for additional details on this analysis.

xiv. We excluded from this analysis claims from Arkansas Medicaid Qualified Health Plans for ACA Medicaid expansion enrollees. As a result, Arkansas Medicaid claims examined through this analysis are primarily fee-for-service. Accordingly, it is possible that Medicaid payments are somewhat lower in Arkansas since payments are generally tied to a fee schedule. Medicaid payments may be higher, on average, in Massachusetts and Virginia relative to those from other payers as a result of rate negotiation between hospitals and private Medicaid managed care plans.

2. Are hospitals that serve a higher share of Medicaid patients paid less overall relative to other hospitals?

Previous studies have shown that providers with a high share of Medicaid patients receive lower average reimbursement across all sources of payment.[43] We sought to validate this across the three states by calculating an average payment ratio for each hospital. The ratio indicates whether the hospital is paid more or less, on average, across all services of interest and all payer types for the outpatient service basket, weighted by volume, relative to other hospitals in the state. We then compared ratios for each state's high-Medicaid hospitals with the statewide average (Figure 2).

Figure 2: Comparing Average Overall Reimbursement for High-Medicaid Hospitals With the Statewide Average[xv]

Across all three states, we observed that the average high-Medicaid hospital received less overall reimbursement relative to the average hospital within each state for these services. In Arkansas, high-Medicaid hospitals received 7% less reimbursement compared to the average hospital in the state; in Massachusetts and Virginia, these figures were 22% less and 10% less, respectively. These results are in line with those of other studies and reaffirm that high-Medicaid hospitals are at a financial disadvantage based on their payer mix.

xv. For purposes of this figure, we define "high-Medicaid hospitals" as those in the top decile in terms of the share of patients with Medicaid. Medicaid payment levels used to develop this figure do not account for Medicaid supplemental payments.

3. Do hospitals with a high-Medicaid payer mix disproportionately serve HMPs?

Nationwide, HMPs are disproportionately enrolled in Medicaid compared with White individuals.[44] We sought to confirm whether this is the case in our states of focus. For each state, we calculated the average share of Medicaid discharges for hospitals disproportionately serving HMPs compared with all other hospitals. Across all three states of focus, we found that the average share of Medicaid discharges was consistently higher for hospitals disproportionately serving HMPs (see Table 2 below).

Table 2: Average Share of Hospital Discharges With Medicaid Insurance

	AR	MA	VA
Hospitals Disproportionately Serving HMPs[xvi]	59%	50%	35%
Other Hospitals	31%	27%	19%

As Medicaid payment rates are lower than other payers (before accounting for supplemental payments), providers disproportionately serving HMPs may be less well-resourced because of their payer mix.

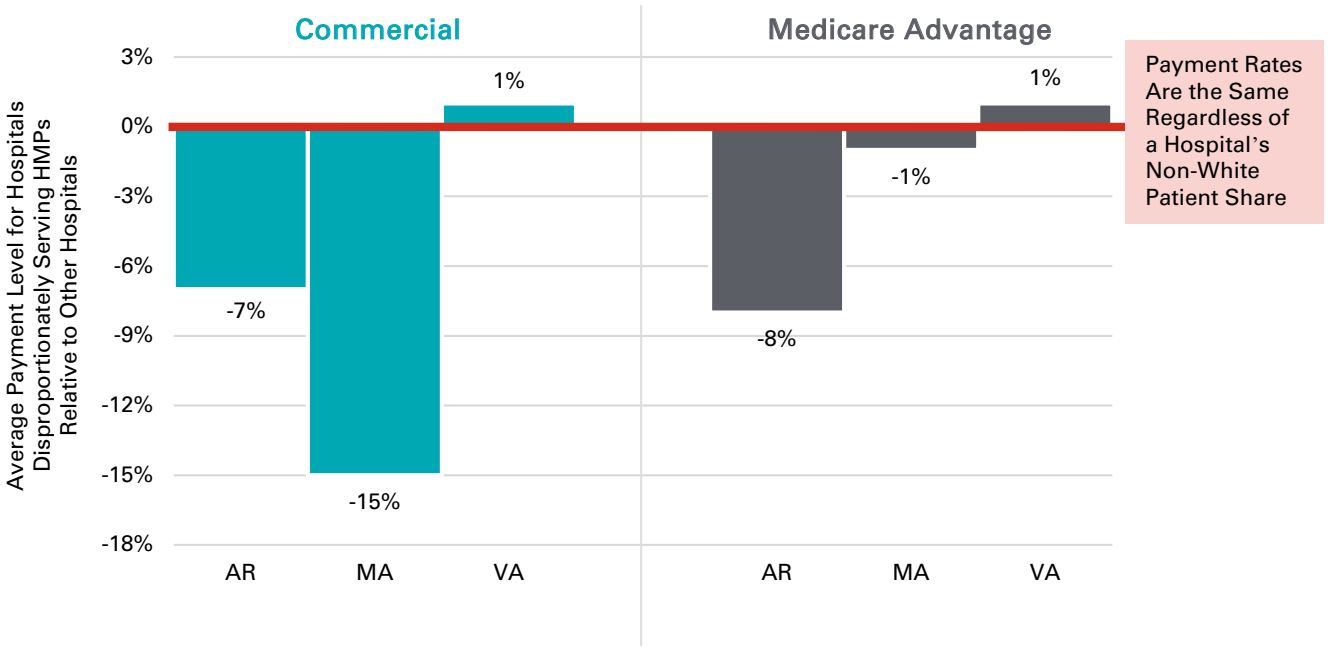
4. Do hospitals that disproportionately serve HMPs receive lower payment rates within a given payer type for delivering similar services relative to other hospitals?

While previous studies have shown that hospitals serving a high share of Medicaid patients are paid less overall, little research exists on whether providers serving HMPs also receive lower payment rates **within a given payer type** for the services they render. For example, do hospitals that disproportionately care for HMPs receive lower rates from commercial payers compared with hospitals serving a larger proportion of White patients?

To investigate this question, we calculated an average payment ratio, weighted by service volume, for each payer type and for each hospital, with the ratio indicating whether a hospital is paid more or less by payer type, on average, compared with other hospitals in the state. We then compared the average payment ratios among hospitals disproportionately serving HMPs with those of other hospitals in each state for each payer category (see Figure 3). Percentages of less than zero indicate that hospitals disproportionately serving HMPs received lower payment rates, on average, compared with the state's other hospitals for a given payer type (and vice versa).

xvi. This group includes hospitals in the top decile in terms of the share of patients who are HMPs, relative to other hospitals in the state.

Figure 3: Comparing Payment Rates by Payer for Hospitals Disproportionately Serving HMPs vs. Other Hospitals



For commercial payers, we found that for our basket of services, hospitals disproportionately serving HMPs received lower commercial rates compared with other hospitals in the state in two of the three states studied:

- In Arkansas, hospitals disproportionately serving HMPs received 7% lower commercial payment rates for similar services relative to other hospitals in the state—and, interestingly, also received lower Medicare Advantage payment rates (-8%).
- In Massachusetts, hospitals disproportionately serving HMPs received 15% lower commercial payment rates.
- In Virginia, we did not observe a substantial difference in commercial payment rates between hospitals disproportionately serving HMPs and other hospitals.

We note that even relatively small disparities in commercial revenues can have major implications for hospital sustainability. Operating margins for the typical hospital in the United States range from 2% to 4%. However, they are often much smaller for providers that disproportionately serve Medicaid populations (i.e., safety net providers); one recent analysis pegged the average operating margin for safety net providers at virtually zero.[45,46]

For Medicare Advantage, we observed less rate variability based on whether a hospital disproportionately served HMPs, potentially due to legal and regulatory constraints.[xvii,47] For Medicaid managed care (not pictured), we observed some rate variability by hospital, though differences were directionally different across states.[xviii]

We tested the sensitivity of our "within-payer" analysis to confirm our findings (see Appendix C).

xvii. Medicare Advantage payment rates in Massachusetts and Virginia were not appreciably different based on the proportion of HMP patients.

xviii. In Massachusetts, hospitals disproportionately serving HMPs received 9% lower reimbursement compared with other hospitals; in Virginia, these hospitals received 10% higher reimbursement. We observed no substantial difference in rates in Arkansas. While Massachusetts was the only state where we found lower rates for HMP-serving providers, the observed 9% rate differential is concerning and merits further exploration.

V. Discussion

Compounding Financial Disadvantages

Our analysis found that hospitals disproportionately serving HMPs faced financial payment disparities for the basket of outpatient services delivered across our three partner states not experienced by other hospitals, a result of both greater reliance on Medicaid reimbursements **and** less favorable commercial payment rates.

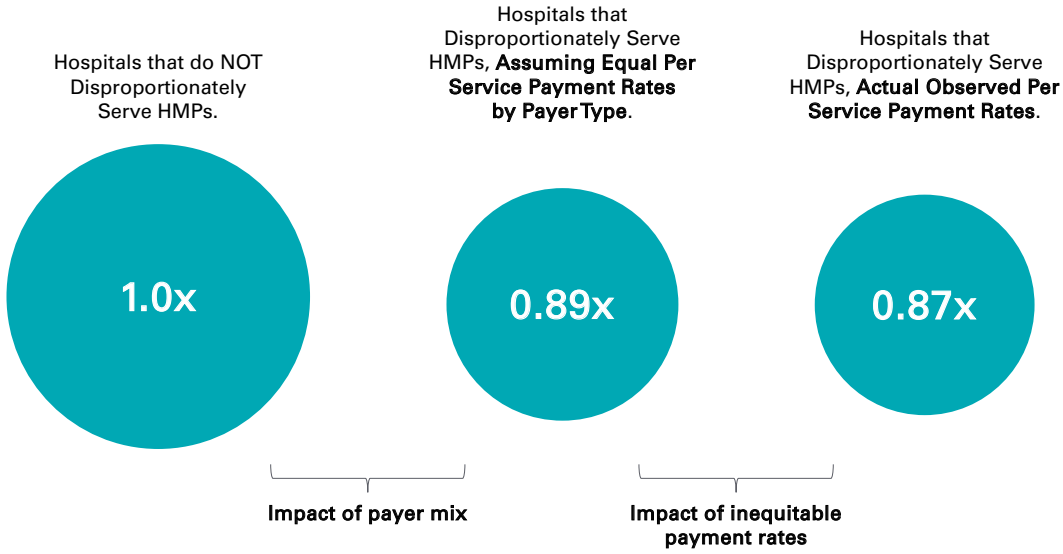
Payer mix effect. Hospitals that disproportionately served HMPs also disproportionately relied on lower-rate Medicaid reimbursements. When isolating the impact of payer mix alone (i.e., assuming equal per service rates across hospitals by payer type), hospitals that disproportionately served HMPs received 89% of the overall reimbursement as other hospitals (see Figure 4).

Disadvantaged hospital effect. This analysis also provides evidence that hospitals in two of our three states that disproportionately served HMPs received lower commercial payment rates than hospitals that served higher proportions of White individuals for the same services (see Figure 3 above).[xix]

Together, a disproportionate reliance on Medicaid as a payer **and** lower payment rates for commercially insured patients contributed to hospitals disproportionately serving HMPs receiving lower overall levels of reimbursement. On average across our three states of focus, hospitals disproportionately serving HMPs received 87% of the overall reimbursement as other hospitals when accounting for both these hospitals' payer mix **and** lower commercial payment rates (see Figure 4).

xix. We also identified concerning trends in Medicare Advantage rates in Arkansas and Medicaid rates in Massachusetts; however, we did not observe consistent trends within these markets across states.

Figure 4: Relative Overall Reimbursement by Hospital Type, AR/MA/VA Average



Note: Figures represent average overall hospital reimbursement levels among hospitals in AR, MA, and VA that disproportionately serve HMPs relative to hospitals that do not (unweighted at the hospital level). Hospitals that disproportionately serve HMPs include those in the top decile in terms of the percentage of HMP patients relative to other hospitals in each state.

Lower overall reimbursement can have wide-ranging implications for hospital financial sustainability and, by extension, access to and quality of care. This analytic investigation suggests that, at least in some states, differentials in commercial reimbursement may be compounding financial challenges for hospitals serving large numbers of HMPs and adds to the growing discussion on root causes of our national health disparities.

Policy Options for States to Identify and Address Payment Inequities

States may wish to consider how they can leverage their state HDOs and their APCD and hospital discharge data to confirm whether the payment inequities observed in this study exist locally and across a greater span of services.[48] States may also investigate whether administrative or operational characteristics of hospitals mitigate payment differences identified in this analysis, unique regional differences in payment, and the implications of resource availability on facility investment. States without established HDOs or APCDs may explore the use of Medicare cost reports, hospital and payer price transparency data, and private data resources from organizations such as Turquoise Health, the Health Care Cost Institute and the National Association for State Health Policy. States should use the data at their disposal to build a more nuanced understanding of their local payment landscapes and develop targeted and effective policy solutions that address local concerns.

There are a range of policy options that states may use to level reimbursement rates across hospitals.

Interventions Outside of the Commercial Market. States have a range of options to address payment inequities through targeted changes to Medicaid and other payment-related policies that would indirectly address or otherwise offset disparities in commercial payment rates.

- **Raising Medicaid Payment Rates.** States have significant discretion in establishing Medicaid payment rates, and some states have taken steps to increase rates overall or in a targeted way. In fee-for-service delivery systems, states can establish fee schedules that set payment rates for providers, including developing heterogeneous fee schedules that target certain types of providers (e.g., safety net providers). States may also be able to leverage supplemental payments to bring Medicaid payment rates closer to parity with those of Medicare and commercial payers.[49] States could either add new dollars to support targeted payments to certain providers or reallocate existing dollars.

  In managed care delivery systems, states can mandate the adoption of state-prescribed fee schedules or supplement payment rates through "state-directed payments" to specified classes of providers.[50] Federal rules generally allow states to identify the appropriate level for state-directed payments, and the Centers for Medicare & Medicaid Services (CMS) historically has permitted states to make payments as high as the average commercial rate.[xx] States also have the ability to target providers facing historical underinvestment through state-directed payments, including by tiering payments by a provider's share of Medicaid patients and by tailoring which providers are eligible.[51,52]

  Many states have conducted targeted rate studies and leveraged results to justify rate increases. For example, a 2022 study by the Montana Department of Public Health and Human Services demonstrated that behavioral health and disability services providers are significantly underpaid.[53] Driven partly by the study, the state legislature subsequently enacted significant Medicaid rate increases for certain types of services.[54] Additionally, the California State Legislature required the state Department of Health Care Services to implement a series of targeted Medicaid rate increases beginning in 2024 as well as develop a proposal for additional rate increases to take effect beginning in 2025.[55] Similar analyses could be commissioned in other states to examine the impact of provider rate variation on health equity.

  States may also consider ways to better target disproportionate share hospital (DSH) funding to providers serving large populations of HMPs. While states have significant flexibility to target DSH payments, a MACPAC report found that states do not always effectively target these payments to hospitals serving Medicaid and other low-income patients, which are disproportionately HMPs.[56] Ensuring that DSH distribution methodologies target these hospitals could present an important opportunity to further address provider payment disparities.

- **Increased Transparency.** States can improve transparency of provider payment rates, including highlighting provider rate inequities by populations served. Some states currently require providers to make publicly available the data on prices for common services. For example, Massachusetts has developed a publicly available tool allowing consumers to access provider-specific commercial payment amounts for 295 different services.[57] States could expand on initiatives like this by analyzing data with an equity lens and highlighting specific payers that demonstrate inequitable payment rates and differences in rates between providers serving predominantly HMPs and Medicaid enrollees.

xx. This limit has previously existed as informal CMS policy, but recent proposed rulemaking proposes to establish this limit in regulation.

- **Targeted Provider Investments.** States can deliver targeted financial infusions to provider organizations serving predominantly HMPs or Medicaid enrollees to help remedy years of underinvestment (ideally paired with rate increases, as described above). Investments could help support a variety of capacity-building activities, such as building infrastructure, investing in facilities or hiring providers. States have multiple options to fund such investments, including using state funds or potentially leveraging federal Medicaid dollars under Section 1115 authority. For example, Illinois recently expanded its Hospital Assessment Program, which includes $150 million in funding that is specifically targeted to support hospitals with large Medicaid patient volumes that the state has deemed safety net providers.[58]
- **Equity-Focused Health Plan Incentives and Requirements.** States have a range of tools to provide incentives and requirements for both public and commercial payers to ensure equitable payment rates. For example, states with state-based marketplaces (SBMs) could replicate the payment rate equity analysis described here and, if disparities are identified, require qualified health plans (QHPs) to enhance payment rates for safety net providers or providers serving a high proportion of HMPs. States with SBMs also have the ability to require plans to have certain providers in their networks (e.g., Medicaid/CHIP/Marketplace network alignment) or dictate the placement of certain individual market plans on the state's online platform and link plan placement to measures of payment rate equity. Additionally, states could develop an equity-focused "stamp of approval" or certification (or include equity measures in existing certification programs) for commercial health plans that demonstrate rate equity, including requiring a stamp of approval to contract with a state Medicaid agency for Dual-Eligible Special Needs Plan (D-SNP) products. This would strengthen the economic incentive for payers to meet equity requirements as they seek access to the rapidly growing D-SNP market.[59]

Commercial Market Interventions. States may also wish to take on payment rate inequities in the commercial market more directly through one of the following methods:

- **Addressing Payment Equity Through State Cost Growth Benchmarking Programs.** State cost growth benchmarking programs allow state policymakers, regulators and health care stakeholders to better understand the sources and drivers of their state's health care spending across payers, providers and lines of business.[60] Now present in ten states, these programs promote health care system cost containment through transparency and, for some states, direct financial accountability for payers and providers to meet established benchmarks. States could build on these programs to both acknowledge the impact of provider rate variation on health equity, as California's new Office of Health Care Affordability will aim to do in its new program, and embed equity into accountability methods.[61] For example, states may allow for variability with benchmarks that are more generous for providers and populations that have been historically disadvantaged while maintaining overall system spending growth targets (i.e., converging cost growth to narrow financial inequities within the health care system over time).
- **Addressing Payment Disparities as a Factor in Insurance Rate Review.** State insurance departments are typically responsible for reviewing proposed health insurer premium rate increases, ensuring actuarial soundness and protecting consumers against excessive rate increases. Some state agencies have the authority to reject proposed premiums and payment rates that are determined to have an adverse impact

on consumers.[62] States may consider incorporating rate equity, including equitable network design, as explicit factors in the rate review process, disapproving rate/premium certifications from payers proposing rates or networks that treat providers serving predominantly HMPs or Medicaid enrollees inequitably.[xxi]

- **All-Payer Rate Setting.** States may require that all payers—including commercial health plans—pay state-defined rates for services, eliminating payment rate negotiations between providers and commercial health plans and limiting opportunities for rate discrimination against providers that may serve predominantly HMPs or Medicaid populations. This approach has been in use in Maryland for several decades. Since 1974, the state's Health Services Cost Review Commission has been responsible for approving hospital rates, and beginning in 1977, the federal government provided the state with a waiver of Medicare payment rules, exempting it from standard Medicare prospective payment systems for hospital services.[63] Beginning in 2014, the model evolved to adopt hospital-specific global budgets, though it continues to limit the ability of commercial payers to negotiate rates with hospitals. The model has been successful in constraining hospital cost growth relative to that in other states and could serve as a model for states looking to reduce payment differences across providers.[64]

Large employers and group purchasers can also play a role in the multi-stakeholder moral imperative to elevate health equity concerns on behalf of their employees, members, and communities, demanding equitable network designs and provider rates of their Third Party Administrators (TPAs) and vendors.

Rebalancing payment rates—in lieu of increasing overall health care system spending—will likely be a priority for many states in the coming years.

xxi. Provider consolidation has resulted in an increasing number of "orphaned" safety net hospitals that rely on a less favorable payer mix, as more lucrative payer populations are captured by larger health system acquisitions and service area encroachment.

VI. Conclusion

Through this analysis, we add new evidence to the argument that hospitals that disproportionately serve HMPs face compounding financial disadvantages. Beyond confirming previous research that asserts that hospitals that disproportionately serving HMPs have a financially disadvantaged payer mix (i.e., they serve a high share of Medicaid patients, whose coverage pays less than other payers sans supplemental payments), we also found directional evidence that commercial reimbursement levels vary based on whether a hospital serves a high proportion of patients from HMPs.[xxii] These early findings support long-standing claims by safety net hospitals that the financial disadvantages faced by hospitals that disproportionately serve HMPs extend beyond just their reliance on Medicaid as a payer.

The financial inequities in our health care system run deep, and can have profound impacts on the resources and tools our health care providers have to treat the next patient that comes in the door. Our policymakers and representatives have a duty to understand the causes of these inequities, and work—along with purchasers, plans, and providers—to remediate them. As discussed in this paper, states increasingly have the data resources available to understand their health care financial ecosystems, and the policy, program, and purchasing tools to address payment disparities. It is our charge, now, to act.

xxii. We saw mixed results in the Medicare Advantage and Medicaid markets but did identify Medicare Advantage rate disparities in Arkansas and Medicaid rate disparities in Massachusetts.

Appendix A: Detailed Methodology

Through this analysis, Manatt sought to examine associations between hospital price variation for a basket of outpatient services and the race and ethnicity and payer mix of hospital patient populations. Manatt partnered with state HDOs in Arkansas, Massachusetts and Virginia to access and analyze available APCD and hospital discharge data to support this endeavor.

Services Studied

Manatt worked collaboratively with state partners to identify a basket of services for inclusion in this analysis. The basket was developed to include a diverse set of services that are commonly utilized by commercially, Medicaid- and Medicare-insured individuals in the outpatient setting. Manatt refined the initial list of services of interest based on preliminary analyses conducted by state partners to investigate data availability, coding practices and other potential analytic barriers. The 11 service categories used for this analysis are listed in Table 3 below. Each of these service categories can be identified using one or more Current Procedural Terminology (CPT®) codes, which was the primary unit of analysis for this study. For the full list of procedure codes used in Manatt's analysis, see Appendix B.

Table 3: Services of Interest

• Appendectomy • Cataracts surgery • Chest X-ray • Cholecystectomy • Colonoscopy • CT scan	• Hernia repair • Mammography • MRI • Psychotherapy • Spirometry

Payer Types of Interest

Manatt examined variations in hospital payment rates both within and across Medicaid, Medicare Advantage and commercial payer types. It conducted initial analyses at the **payer** level (e.g., examining rates paid by commercial payer A vs. rates paid by commercial payer B). Manatt ultimately consolidated these findings at the **payer type** level for ease of interpretation. The analysis included as many different payers as possible in each state, but in some cases, payers were excluded due to data quality issues or lack of consistency across states. For example, Medicare fee-for-service claims were excluded from the analysis in all states because the Massachusetts APCD does not include Medicare fee-for-service claims, and Medicare fee-for-service claims in Virginia are prone to data quality issues. The specific Medicaid payers included also varied by state. For example, Manatt only included Medicaid fee-for-service claims in Arkansas. It excluded claims from Arkansas Medicaid Qualified Health Plans (i.e., Medicaid expansion private option plans) as well as the Provider-Led

Arkansas Shared Savings Entity program because these do not have direct corollaries in other states. In Virginia, Manatt excluded Medicaid fee-for-service claims due to data quality issues. In Massachusetts, Manatt included both Medicaid fee-for-service and Medicaid managed care claims.

Claim/Encounter Inclusion and Exclusion Criteria

Manatt limited its analysis to claims and encounter records that met the following inclusion criteria:

- Records were identified as outpatient claims or encounters with dates of service in calendar year 2019.
- Status on record was indicated as "Paid."
- Facility type was indicated as "Hospital."
- Claim included a CPT code that corresponds to a service in Manatt's final basket of services (see Appendix B).
- Claim included a positive allowed amount (i.e., Manatt excluded records with missing, negative or $0 allowed amounts).
- Hospital discharge data were available (i.e., Manatt excluded records from hospitals that were not included in the analysis of hospital discharge data—e.g., records from federal government hospitals).

Assessing Payment Amounts for Claims of Interest

Manatt assessed payment amounts for outpatient claims by examining the line-level allowed amounts recorded on claims of interest. Allowed amounts reflect both the payer paid amount and patient cost sharing. Manatt first calculated univariate statistics at the code-payer type level to assess average amounts paid by each payer type (e.g., commercial vs. Medicare vs. Medicaid) for each code. Claims that had line-level payment amounts that met or exceeded the 99th percentile payment amount associated with each code for each payer type were excluded. For example, if the 99th percentile payment amount for outpatient colonoscopy claims billed with CPT code 45738 from Medicaid payers was $3,000, then all colonoscopy claims with code 45738 from Medicaid payers that had allowed amounts greater than or equal to $3,000 were excluded. Manatt initially summarized allowed amounts at the hospital-payer-code level to identify the mean and median amounts paid by each payer (e.g., Commercial Payer A vs. Commercial Payer B) for each code at each hospital. Manatt then calculated weighted payment indices at higher-level stratifications to describe variation in rates inclusive of all services across hospitals and payer types.

Calculating Weighted Payment Indices

Manatt used results documenting mean and median payment amounts at the hospital-payer-code level to calculate weighted indices summarizing payment amounts at higher-level stratifications. The various payment indices, examples of how the indices can be interpreted, and steps describing how they were calculated are detailed below:

- **Payer type indices.** These indices were calculated to assess whether commercial and Medicare payers paid more on average across all services of interest relative to Medicaid payers. Manatt hypothesized that commercial payers would pay more than Medicaid payers on average and that Medicare payers would also pay more than Medicaid payers but less than commercial payers for similar services. Steps to calculate these indices included:
  1. Calculating the weighted average amount paid for each code by each payer type across all claims in the state.
  2. Dividing the average amount paid for each code by each payer type by the average amount paid for each code from Medicaid payers. This indicates whether a given payer type paid more or less on average for a given code relative to Medicaid payers.
  3. Calculating the weighted average index for each payer across all codes. This indicates whether commercial or Medicare payers paid more on average across all services of interest relative to Medicaid payers.
- **Hospital indices.** These indices were calculated to compare the average amount that individual hospitals were paid for all services in Manatt's basket of services relative to that of other hospitals in the state. Manatt hypothesized that hospitals with a greater proportion of services paid for by Medicaid payers would have lower indexed payment amounts relative to other hospitals, driven by lower rates paid by Medicaid payers relative to other payer types. Steps to calculate these indices included:
  1. Calculating the weighted average amount paid for each code across all claims in the state.
  2. Calculating the average amount paid for each code for each hospital.
  3. Dividing the average amount paid for each code at the hospital level by the average amount paid across all claims in the state for each code. This indicates whether a given hospital was paid more or less on average for a given code relative to other hospitals in the state.
  4. Calculating the weighted average index for each hospital across all codes. This indicates whether a given hospital was paid more or less on average across all codes in Manatt's basket of services relative to other hospitals in the state.
- **Hospital-payer type indices.** These indices were calculated to compare the average amount that individual hospitals were paid by each payer type across all services of interest relative to what other hospitals were paid for the same services from the same payer type. Manatt hypothesized that hospitals with a disproportionately large share of HMP patients would be paid less on average by Medicare and commercial payers relative to other hospitals in the state. Manatt also hypothesized that hospitals with disproportionately large Medicaid populations would be paid less on average by Medicare and commercial payers relative to other hospitals. Steps to calculate these indices included:
  1. Calculating the weighted average amount paid for each code by each payer type across all claims in the state.
  2. Calculating the average amount paid for each code by each payer type at each hospital.

3. Dividing the average amount paid for each code at the hospital-payer type level by the average amount paid for each code at the state-payer type level. This indicates whether an individual hospital is paid more or less on average for a particular code from a particular payer type relative to other hospitals in the state.
4. Calculating the weighted average index across all codes at the hospital-payer type level. This indicates whether a hospital is paid more or less on average by a given payer type across all services of interest relative to other hospitals in the state.

Characterizing the Race and Ethnicity and Payer Mix of Hospital Patient Populations

Manatt characterized the race and ethnicity of hospital patient populations using hospital discharge data. Manatt used hospital discharge data rather than APCD data due to known issues with variables capturing patient race and ethnicity in administrative claims. Manatt used discharge data from 2019 to calculate the percentage of discharges at each hospital for individuals who were classified as "Non-Hispanic White" vs. all other individuals (it considered all individuals in this latter category to be HMPs). Manatt classified individuals as Non-Hispanic White if they were documented as having White race and were not documented as having Hispanic ethnicity. Manatt considered all individuals with Hispanic ethnicity (including individuals with White race) and all individuals with any race other than White to be HMPs.

Manatt also used hospital discharge data from 2019 to characterize the payer mix of hospital populations. Manatt calculated the number and percentage of discharges associated with Medicaid enrollees, uninsured individuals and others for each hospital based on the primary expected payer captured on hospital discharge records. Medicaid discharges included discharges for all types of Medicaid payers, including fee-for-service and Medicaid managed care.

In Massachusetts and Arkansas, the percentage of HMP patients and the payer mix associated with each hospital were based on a weighted analysis of inpatient hospital discharges and ED discharges. In Virginia, the percentage of HMP patients and the payer mix associated with each hospital were based on inpatient hospital discharges alone.

Analyzing Associations Between Payment Rates and the Race and Ethnicity and Payer Mix of Hospital Patient Populations

Manatt used weighted payment indices at the hospital-payer type level to examine associations between hospital payment rates and the proportion of HMP patients. Payment indices calculated at the hospital-payer type level indicate whether hospitals are paid more or less on average by a given payer type across all services of interest relative to other hospitals in the state (additional details on how these indices were calculated are included above). For this analysis, Manatt compared the average payment index for each payer type for hospitals in the top decile in terms of the percentage of HMP patients relative to the average payment index for all other hospitals in the state. Manatt calculated ratios to describe the average payment index for hospitals in the top decile in terms of the percentage of HMP patients relative to other hospitals in the state for each payer type. These ratios indicate whether hospitals in the top decile in terms of the percentage of

HMP patients were paid more or less on average by each payer type relative to other hospitals in the state. Manatt also conducted a sensitivity analysis to compare average payment indices among hospitals in the top quartile in terms of the percentage of HMP patients relative to other hospitals in the state. Results from the sensitivity analysis can be found in Appendix C.

We used similar methods to examine associations between hospital payment rates and the proportion of Medicaid patients associated with each hospital. Manatt calculated ratios to compare the average weighted payment index for each payer type for hospitals in the top decile in terms of the proportion of Medicaid patients relative to other hospitals in the state. These ratios indicate whether hospitals in the top decile in terms of the percentage of Medicaid patients were paid more or less on average by each payer type relative to other hospitals in the state. Manatt also conducted a sensitivity analysis to compare average payment indices among hospitals in the top quartile in terms of the percentage of Medicaid patients relative to other hospitals in the state (see Appendix C).

State-Specific Limitations

Virginia: Manatt's characterization of the race and ethnicity of hospital patient populations was based on inpatient discharge data alone as opposed to a weighted analysis of inpatient and ED discharge data. Results from other states suggest that the race and ethnicity of patients captured in inpatient discharge data differ from the race and ethnicity of patients captured in ED discharge data. Thus, Manatt's characterization of the underlying patient population in Virginia is likely less accurate than it is in other states. To test the assumption, Manatt compared its analyses of race and ethnicity in hospital discharge data with estimates from the U.S. Census Bureau of the total HMP population in each state. In Massachusetts and Arkansas, the percentage of HMP patients in hospital discharge data was similar to the percentage of HMP individuals in census data. However, Manatt observed greater discrepancies in these data sources in Virginia relative to differences observed in Massachusetts and Arkansas.

Arkansas: The Arkansas Center for Health Improvement, the HDO providing access to APCD and discharge data, was required to suppress the number of claims in aggregate results when the cell size was less than 11. In these cases, they were able to share univariate statistics derived from the claims (e.g., the average and median amounts paid for these claims to a particular hospital). In these cases, Manatt imputed the number of claims so that these results could be included in the calculation of weighted payment indices.

Appendix B: Procedure Codes Used to Identify Services of Interest

Service	Procedure Code
Appendectomy	44970
Cataracts surgery	66984
Chest X-ray	71046
Cholecystectomy	47562
Colonoscopy	45378
CT scan	74160
	70540
	71260
	71250
	71275
Hernia repair	49505
Mammography	77052
	77057
	77065
	77066
	77067
MRI	72121
	72141
	73221
	70551
	70553
	72149
	72148
	73721
	73722
	73723
Psychotherapy	90792
	90837
Spirometry	94010
	94011
	94012
	94060
	94070
	94150
	94200
	94375
	94726
	94727

Appendix C: Sensitivity Analysis

Manatt tested the sensitivity of the "within-payer" analyses to modest changes in analytic specifications. In the analysis of within-payer payment variation by patient race and ethnicity, Manatt compared hospitals in the top decile in terms of HMP patient share with all other hospitals. For the sensitivity analysis, Manatt also compared the top quartile of hospitals with all other hospitals, the top quartile to the bottom quartile, and the top decile to the bottom decile. Key findings across each of these specifications were substantially similar to Manatt's primary findings described in the body of this report, suggesting that Manatt's results are robust to a broader range of analytic approaches. See the Table 4 below for full results.

Table 4: Sensitivity Analysis: Average Payment Index by Payer Type by Predominance of Serving HMP Patients

Payer Type	Ratio of Top-Quartile HMP-Serving Hospitals to Other Hospitals			Ratio of Top-Quartile HMP-Serving Hospitals to Bottom-Quartile Hospitals			Ratio of Top-Decile HMP-Serving Hospitals to Bottom-Decile Hospitals		
	AR	MA	VA	AR	MA	VA	AR	MA	VA
All Commercial	0.93*	0.90	1.04	0.88	0.97	1.04	0.95	0.97	1.02
Medicare Advantage	0.91	0.97	1.04	0.83	0.99	1.04	0.94	1.02	1.05
Medicaid	1.00	0.91	1.15	1.06	0.92	1.28	0.99	0.83	1.25

*Interpretation: On average, hospitals in Arkansas in the top quartile in terms of proportion of HMP patients received 93% of the reimbursement for the same services from commercial payers relative to other hospitals in the state.

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