The Hilltop Institute
UMBC

report

Insurer and Provider Concentration in Maryland

December 5, 2025

Suggested Citation: Mouslim, M. & Henderson, M. (2025, December 5). *Insurer and provider concentration in Maryland*. Baltimore, MD: The Hilltop Institute, UMBC.

Acknowledgements

Hilltop thanks Doug Jacobs, Ben Steffen, David Sharp, Kenneth Yeates-Trotman, Tracey DeShields, Eva DuGoff, David Cooney, and stakeholders for their valuable feedback. Hilltop also thanks Joshua Gottlieb for sharing data relating to physician income.

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Executive Summary

During the 2024 Maryland legislative session, concerns were raised about the acquisition/ownership of nursing homes, but these same issues have become a concern in other health care services. To make appropriate health care policy in this area, the Maryland House Health and Government Operations (HGO) Committee asked the Maryland Health Care Commission (MHCC) to conduct a study on the market concentration of the health insurance market and the impact on the delivery and quality of health care in Maryland. MHCC contracted with The Hilltop Institute at the University of Maryland, Baltimore County to conduct this work.

Hilltop conducted an objective, data-driven study to better understand the market dynamics of health insurance and health care providers in Maryland, with an emphasis on competition, market concentration, and how these issues affect consumers and health care providers. The principal findings are summarized below:

- Maryland has relatively high insurer market concentration compared to other states. Across all fully insured market segments, the largest health insurance company in Maryland had a 61.5% market share in 2023, compared to 55.6% in states neighboring Maryland and 55.7% nationally. This is most pronounced in the small group and individual markets, where the market share of the largest carrier in Maryland in 2023 was 78.3% and 65.3%, respectively. While Maryland is not an outlier, the market share of the largest carrier is high relative to other states: 21st overall, 16th largest in the small group market, and 12th largest in the individual market. However, recent entry to the individual market in Maryland implies that market concentration may fall for this market segment in the future. Additionally, there is less concentration in larger counties within Maryland.
- Maryland has relatively low provider prices compared to other states. Maryland has a unique model of hospital price regulation, and prior research has found that inpatient hospital prices for commercial payers in Maryland are significantly lower than in other states. While the landscape of provider pricing information is highly fragmented, the Hilltop research team used data from several different sources and found that Maryland has relatively low provider prices relative to other states. Based on data from 2017, commercial reimbursements in Maryland for selected professional services averaged 104% of equivalent Medicare rates, third lowest among all states and significantly lower than the national average of 122%. Data from 2021 support this: overall prices in Maryland ranged from 1% to 13% below the national median. Focusing on selected services in selected cities within Maryland, prices tended to fall below the national average. This aligns with recent research that indicates that average physician earnings are relatively low in Maryland compared with other states. Finally, comparing prices for primary care services for CareFirst and Kaiser, we find that negotiated rates tended to be lower for CareFirst than for Kaiser. While this may reflect CareFirst's significant market share, it may also be a consequence of Kaiser's unique staff operating model.

- **Health insurance companies in Maryland with higher market share tend to have larger networks.** Using data collected from the five largest health insurance companies in Maryland, Hilltop found that most insurers contract with a large proportion of available providers across counties and specialties. Moreover, while it is theoretically possible that insurers with higher market share may restrict their networks in order to control costs, we found that insurers with higher market share tend to contract with more—not fewer—providers within a given county and specialty. Thus, we found no evidence that insurer market concentration adversely affects provider networks.
- **Hospitals and group practices in Maryland are increasingly affiliated with health systems**. Nationally, the percentage of acute care hospitals in a health system has grown from 69.1% in 2016 to 76.0% by 2023. The percentage of acute care hospitals in neighboring states that are system-affiliated rose from 79.0% in 2016 to 93.6% in 2023. In Maryland, the percentage of acute care hospitals that are system-affiliated rose from 83.7% in 2016 to 100.0% in 2020 and remained at 100.0% through 2023. The percentage of group practices in health systems also grew strongly in Maryland, from 14.0% in 2016 to 19.4% in 2022. The equivalent metric also grew for neighboring states, from 14.0% in 2016 to 20.1% in 2022, whereas this metric grew relatively slowly nationally from 2018 (16.0%) to 2022 (16.9%).
- **Independent physician practices, medical groups, and outpatient surgical centers in Maryland are undergoing a structural shift.** From 2018 to 2023, the number of independent physician practices in Maryland fell by 45.9%, while the number of medical groups and outpatient surgical centers grew by 17.5% and 27.0%, respectively. Ownership patterns reveal growing affiliations with corporate entities and health systems, particularly among medical groups and outpatient surgical centers. However, this changing ownership structure does not necessarily imply rising concentration: as of 2023, facility ownership remained relatively fragmented across most counties, with a few exceptions in rural areas where the top owner accounts for a significant share of the local market.
- **Maryland's unique regulatory and market structure requires a Maryland-focused lens.** While a significant body of research has examined various aspects of the consequences of consolidation in the health landscape, Maryland is an outlier in three ways. First, Maryland's hospitals are highly regulated, with the state's Health Services Cost Review Commission (HSCRC) setting global budgets for each hospital and also setting cost center-specific rates for each hospital. Maryland is currently the only state with this regulatory structure for hospitals. Second, the insurer market is also unique. While CareFirst had over 61% market share in 2023, the second largest health insurance company in Maryland is Kaiser, with 21.3% market share. Kaiser's integrated care model is distinct from that of other health insurers and thus may not be subject to the same market dynamics as traditional health insurance carriers. Third, the state has invested significantly in its primary care workforce through multiple large-scale primary care programs and will likely continue to do so as a component of the AHEAD model.

- **Given structural shifts in provider ownership patterns and high levels of insurer concentration, policy interventions may be appropriate.** While health system affiliation and the corporate ownership of providers has been increasing, as noted in this study, provider prices tend to be relatively low in Maryland, and Hilltop researchers found no evidence that larger insurers are restricting networks; thus, the data indicate that health care consumers in Maryland have not been disproportionately adversely affected by the consequences of consolidation occurring in other states. Furthermore, while the relatively low negotiated rates may in part manifest as low physician compensation, this has not adversely impacted physician supply: Maryland ranks 7th among states in terms of medical doctors per capita, and the state's recent investments in primary care may mitigate the relatively low reimbursement rates for primary care providers. Nonetheless, certain providers, particularly federally qualified health centers and rural health centers, could face revenue pressures if Medicaid enrollment or subsidized exchange coverage declines under H.R. 1 or if enhanced advanced premium tax credits (APTC) are allowed to expire. Policy solutions may be warranted to safeguard against future adverse consequences to consumers and providers as a result of consolidation.

  Specifically, Maryland could leverage the diverse array of publicly available data sources on health services provision and ownership as the foundation for a registry of health service providers, including—as far as possible—ownership information. Then, by linking this information to the state's all-payer claims database, state officials could monitor changes in pricing or service delivery for health services providers that have undergone a change in ownership, thus potentially laying the groundwork for a robust, data-driven public interest review process. Furthermore, the state could continue to promote stability in the individual marketplace by continuing to support the §1332 reinsurance waiver and/or other affordability programs. Finally, the state could foster innovation in health services delivery by continuing to invest in the state's existing and upcoming advanced primary care programs.

In summary, while Maryland's unique regulatory structure has helped maintain relatively low provider prices and broad insurance networks, the state continues to face high insurer concentration and recent structural shifts in the provider landscape that may pose long-term risks to competition, access, and affordability. Maryland has an opportunity to strengthen its regulatory framework and also leverage existing policies and programs to both promote a stable insurance landscape and foster innovation in care delivery—and, in so doing, support a competitive and accountable health care system.

Insurer and Provider Consolidation in Maryland

Introduction

During the 2024 Maryland legislative session, concerns were raised regarding the acquisition/ownership of nursing homes, but these same issues have become a concern about other health care services—particularly in physician practices.[1] Recent news stories report that the U.S. Department of Justice launched an antitrust investigation into a leading health insurer, citing issues over acquisitions of health care providers and other health care companies.[2]

To make appropriate health care policy in this area, the Maryland House Health and Government Operations (HGO) Committee asked the Maryland Health Care Commission (MHCC) to conduct a study on the market concentration of the health insurance market with its acquisition and ownership of other health care services and businesses and the impact on the delivery and quality of health care in Maryland. MHCC contracted with The Hilltop Institute at UMBC to conduct this work.

The general topic of insurer and provider consolidation in health care is vast. Given the fragmented nature of the insurer and provider landscape, Hilltop conducted one study with five distinct aims to analyze the changing health insurance landscape in Maryland and how market concentration (as well as the acquisitions/ownership of other health care services and businesses) affects competition, affordability, and accessibility—and how these then affect consumers and health care practitioners. Specifically, Hilltop assessed the following aims:

- Aim 1: Insurer concentration and prices. First, using a variety of different data sources, Hilltop examined insurer market concentration, at various levels, over time in Maryland and neighboring states. The analysis used data at both the state- and sub-state levels to better understand local insurer market concentration across counties in Maryland. Additionally, Hilltop examined provider rates in Maryland and situated them nationally.
- Aim 2: Insurer concentration and access to care. Second, using results from a survey conducted among Maryland's five largest insurance carriers, Hilltop analyzed how carrier market concentration may affect insurance carriers' provider networks. Additionally, this report presents results from a literature review on the extent to which insurer market concentration impacts consumers' access to care.

[1] For additional information, see https://mhcc.maryland.gov/mhcc/pages/home/workgroups/documents/nh_acq/wkgrp_nh_acq_final_rpt_01102024.pdf

[2] See https://www.healthcaredive.com/news/unitedhealth-antitrust-investigation-doj-unitedhealthcare-optum/708727

- Aim 3: Provider concentration. Third, Hilltop analyzed concentration among health care providers. Specifically, Hilltop used a variety of data sources to examine trends in market concentration and ownership for various providers in Maryland at the state level and within Maryland, including hospitals, outpatient sites, and provider groups. Additionally, Hilltop examined narrative evidence on late-breaking developments in the landscape of Maryland providers not yet systematically captured in data sets.
- Aim 4: Costs and benefits of investment and acquisitions in health care. Fourth, Hilltop assessed the peer-reviewed literature to assess the costs and benefits of investment and acquisition of health care providers. There is a large body of literature on this subject, and relevant results were interpreted using a Maryland-specific lens.
- Aim 5: Policy options. Finally, Hilltop provided policy options Maryland may take to promote competition, transparency, and accountability in the health care market.

This study begins with a review of the economic concepts relating to insurer and provider concentration and a general overview of the insurer and provider landscape in Maryland.

Background: Concentration and Maryland Insurer and Provider Landscape

Conceptual Background on Insurer and Provider Consolidation

The economic concepts of competition, consolidation, and concentration are interrelated but distinct. Market concentration is a characteristic of a market in which there are a few powerful buyers or sellers in a market, implying low levels of competition; consolidation is the process of market participants seeking to obtain more market power and thus reduce the degree of competition. Market concentration and competition are states; consolidation is an act of change. Thus, to understand the potential impacts of consolidation, it is necessary to understand the functioning of both competitive and concentrated markets.

Broadly, the market for health services consists of individuals who demand services and providers who supply those services. In a textbook example of market dynamics for a single good in a competitive market, the market price of that good is determined by the willingness of consumers to demand that good at a given price and the willingness of producers to supply that good at a given price. The market price adjusts to equalize the number of units that are demanded by consumers and supplied by firms. If the market price were "too high," then supply would outstrip demand: many suppliers would seek to supply the good at the high price (leading to greater profit), and few individuals would seek to consume the good at that price (specifically, only those with a high willingness to pay). In this case, the market would have an oversupply of the good, units would be unsold, and suppliers would reduce the price in order to sell excess inventory. Conversely, if the market price were "too low," the demand would outstrip supply: many individuals would seek to consume the good due to its low price, but relatively few suppliers would produce it (because the low price may not fully cover production costs). In this case, there would be a shortage, and consumers would bid up the price in order to consume available goods.

The key observation is that perfectly competitive markets with homogenous goods, many small consumers and producers and full information, are self-correcting: the market price will adjust so that the number of units of the good that is produced eventually exactly matches the number that is demanded and consumed. Firms seek to maximize profits and individuals seek to maximize utility; but, in so doing, social surplus is maximized. In contrast, monopolistic conditions imply the existence of one large supplier (or, more broadly, a supplier with market power). In a monopoly, fewer goods are purchased and sold than in the competitive market, and the market-clearing price is higher than in the competitive market. Analogously, monopsony conditions imply the existence of one large purchaser, which would lead to a relatively low level of goods purchased and sold relative to the competitive market, at a relatively low market-clearing price.

The market for health services deviates from this ideal textbook market in several significant ways. First, information asymmetries are pervasive: patients often lack the clinical expertise or price transparency needed to make informed decisions regarding health service consumption, while providers have far greater knowledge about both the necessity and cost of care. Second, while insurance benefit design typically exposes individuals to a degree of cost-sharing, the nature of health insurance necessarily shields most individuals from the underlying costs of health services. That is, consumers of health services are not typically exposed to the prices (and cost) of those services. Additionally, most health services are local: while there are hospitals all across the country, individuals are typically constrained only to the hospitals or providers in their immediate area. Furthermore, demand for health services is typically price inelastic; that is, consumers are relatively insensitive to price and, in emergencies, consumers are likely highly price inelastic (Ringel et al., 2002). Finally, health insurers, in addition to smoothing financial risk for individuals, act as pricing intermediaries and typically negotiate prices with providers. Thus, the market for health services is characterized by interactions of relatively few demanders (i.e., insurers) and suppliers (e.g., hospitals) of health services.

In such a market, prices are determined by a different type of equilibrating mechanism. Instead of many small consumers and producers deciding whether to demand or supply an additional unit of the good, prices are determined by bilateral negotiation in which relative local negotiating power is the key metric. In an area in which providers (whether through historical circumstance, reputation, or recent consolidation) have high bargaining power relative to carriers, all else equal, prices of underlying services are likely to be high. Conversely, in an area in which carriers have high bargaining power relative to providers, all else equal, underlying prices are likely to be low. A large and growing body of literature attests to this fundamental model of the market for health services: when providers have high degrees of relative local market power, prices are high, and when carriers have high degrees of relative local market power, prices are low (Li et al., 2025; Pathak & Muhlenstein, 2024; White et al., 2014; Roberts et al., 2017; Scheffler et al., 2017; Wang et al., 2024; Yang et al., 2023).

This model can be used to contextualize recent developments in the health services landscape. For example, recent consolidation among providers, health systems acquiring provider groups, or hospital chains merging, can all be understood as provider-side increases in relative local

bargaining power. Indeed, recent high-profile research examined hospital mergers and acquisitions from 2007 to 2011 and found that hospital "prices increased by over 6% when merging hospitals were geographically close (e.g., 5 miles apart or less)." Consolidation leads to larger scale, which can lead to greater negotiating power (Cooper et al., 2019).

This is true for both providers and insurers, but the insurer side has an additional layer of nuance. In addition to acting as demand-side intermediaries of covered individuals and purchasing health services, insurers also compete for covered lives. While large scale (and thus, high negotiating power) in the standard economic model can indicate monopolistic, anticompetitive behavior (and higher prices for individual customers), large insurer size does not necessarily lead to worse financial outcomes for individual purchasers of insurance. Larger insurers have more market power and thus can negotiate lower prices with providers for health services, which could, in principle, trickle down to consumers as lower cost-sharing. As noted above, research indicates that insurers with more market power are able to command lower negotiated rates for services from hospitals and physicians. However, while smaller insurers may not be able to negotiate low reimbursement rates with providers, they would have to compete for patients. A separate strand of literature has documented that competition among insurers leads to lower premiums in the Affordable Care Act (ACA) exchange market, Medigap market, Massachusetts health insurance exchange, large employer market, and small employer market (Dafny et al., 2015; Starc, 2014; Ericson et al., 2015; Dafny et al., 2012; Guardado et al., 2013). Thus, the individual-level impacts of health insurer market structure are theoretically ambiguous: while markets characterized by large insurers with market power may be able to negotiate lower market rates than markets characterized by small insurers, due to lack of competition, they may not pass those cost savings to consumers in the form of lower premiums (Melnick et al., 2011; Ho & Lee, 2017).

Even this more nuanced model—relative to the textbook example of market dynamics under perfect competition—is still abstracted from reality. Specifically, there are two key elements that shape the landscape for health services. First, as part medical loss ratio (MLR) requirements introduced by the ACA, insurers in the individual, small group, and large group markets have been required to spend a certain fraction of premium revenue on claim costs (80% for individual and small group markets, 85% in large group markets) (Centers for Medicare & Medicaid Services, 2011). While this had the intention of capping insurer profits and thus reducing premiums and increasing affordability for individual consumers, this provision effectively placed a ceiling on profit margin rather than a ceiling on spending. Under an MLR regime, lower claims costs do not necessarily lead to higher profits for insurers close to or below the MLR threshold; instead, lower claims costs may instead trigger rebate obligations. Thus, insurers may have less incentive to reduce claims costs through, for example, aggressive price negotiations with providers.

The empirical evidence supports this: research indicates that the MLR rule has led to *higher* claims costs, not lower, as insurers strategically altered their behavior in response to this threshold (Cicala et al., 2019). That is, insurers appear to have responded to this regulation by

intentionally reducing the degree to which they negotiate low prices in order to further business objectives. This is relevant both to Maryland and across the country.[3]

Second, while researchers have long-since noted increasing horizontal and vertical integration in the health services delivery landscape, there have also been high-profile examples of consolidation between the demand, and supply-sides of the market for health services as insurers purchase providers (Furukawa et al., 2020; Cueller & Gertler, 2003; Liu et al., 2022; Brown et al., 2024). As noted in the introduction, the U.S. Department of Justice recently launched an anti-trust lawsuit against a prominent insurance company, and there have been two high-profile instances of insurance companies owning or purchasing large provider groups: starting in 2011, UnitedHealth formed Optum as a subsidiary, and in 2023, CVS Health (which owns Aetna) purchased Oak Street Health. As of late 2023, Optum employed or was affiliated with 90,000 doctors across the country, or roughly 10% of all medical doctors in the country, and as of August 2025, Optum acquired a 200-provider medical group in Tennessee (Herman, 2023; Newitt, 2025). Additionally, Elevance Health owns Carelon, which has recently been pursuing acquisitions of home health and pharmacy services (Gonzales, 2025). Such linkages across both sides of the market for health services—that is, across sellers and purchasers of health services—hold the potential for significant misalignment of incentives. For example, recent reportage has found that UnitedHealth pays its own physician groups "considerably more" than it does other groups, and recent research has found some—although not universal—support for this finding (Lake et al., 2025; Arnold & Fulton, 2025; Herman et al.,2024).

Finally, in addition to potentially altering reimbursement incentives, cross-market consolidation (that is, the purchase of providers by carriers) may also have the effect of impacting MLR rules through regulatory gaming. While academic research on this issue is relatively scant, recent work highlights that insurers that purchase providers could potentially shift revenue to these providers in the form of inflated reimbursements and thus count this "expense" as medical expenditure, even though the revenue remains within the broader corporate entity. This transfer, in turn, could potentially reduce "rebate liability while increasing held profits" (Angeles & Bailit, 2025).

Commercial Insurer Landscape in Maryland

Health Insurer Landscape

This section describes the insurer landscape in Maryland. Consistent with other research on insurer concentration, Hilltop used the MLR public use files published by the Centers for Medicare & Medicaid Services (CMS). Insurance carriers are required by the ACA to report this data annually, and it contains a variety of information on fully insured plans in the individual, small group, and large group markets. The U.S. Government Accountability Office (GAO) has used this data source to study insurer market concentration in recent years (U.S. Government

[3] Empirical evidence indicates that the incentive for carriers to negotiate lower prices has not entirely dissipated, evinced by recent contract disputes between prominent carriers and health systems. For example, see https://hartfordbusiness.com/article/amid-rising-costs-hospital-and-health-insurer-contract-disputes-become-more-frequent/

Accountability Office, 2024; U.S. Government Accountability Office, 2022). Table 1 presents the results.

Table 1. Insurer Landscape in Maryland, 2023

Carrier	Individual	Small Group	Large Group	Total Fully Insured	Self-Funded
CareFirst	161,360	187,191	552,400	900,951	663,908
Kaiser	59,521	9,778	243,192	312,491	0
United Health	25,403	33,653	86,186	145,241	2,870
Cigna	0	0	76,959	76,959	1,088,495
Aetna	0	8,345	19,282	27,626	0
All other	684	0	12	696	42,804
Total	**246,968**	**238,967**	**978,031**	**1,463,964**	**1,798,077**

Notes: Data are from the 2023 MLR public use file, available here: https://www.cms.gov/marketplace/resources/data/medical-loss-ratio-data-systems-resources. Self-funded market presence is identified using the variable "uninsured_plans_yearly." For this analysis, we used the "Number of Life Years" to measure enrollment.

The insurance landscape in Maryland as of 2023 was dominated by five carriers: CareFirst, Kaiser, United, Cigna, and Aetna. CareFirst was by far the largest carrier in the fully insured markets in Maryland, with total enrollment across the fully insured market segments of 900,951 and was the largest carrier in each market segment (individual, small group, and large group). Kaiser was next largest, with enrollment of 312,491, concentrated in the large group market. United Health had enrollment of 145,241, and a presence in all three market segments. Cigna was only present in the large group market, with 76,959 lives, and Aetna had enrollment of 27,626 split across the small group and large group markets.

CareFirst also had a significant presence in the self-funded market, with 663,908 covered lives in 2023. However, Cigna had the largest presence in this market segment, with 1.09 million covered lives in 2023. Restricted to only the fully insured market, CareFirst had the largest market share among carriers, at 61.5%. Including the self-funded market, CareFirst still had the largest market share among carriers, but at 48.0%. While very limited data are available on the dynamics of the self-funded market segment, it is important to note that, when considering the insurance landscape in its entirety—fully insured and self-funded—CareFirst had lower market share than when restricting attention only to fully insured market segments.

While these are the most recently available data, they do not reflect that Aetna entered the individual market in Maryland in 2024, and Wellpoint entered in 2025 (Maryland Health Benefit Exchange, 2024a). Recent data indicate that individual market enrollment is modest for Aetna and Wellpoint: 6,021 and 1,542, respectively, as of June 2025.[4] Additionally, Aetna will exit the individual market in 2026 (Wilson, 2025). The data in Table 1 include both the on-exchange and off-exchange individual markets. It is important to note that Kaiser is not a traditional insurer.

[4] For additional information on enrollment by carrier in the Maryland Health Benefit Exchange, see the data and analytics platform here: https://www.marylandhbe.com/news-resources/reports-data/analytics/.

Kaiser is a nonprofit health plan and integrated delivery system, in which it owns and operates its own medical offices and employs its own doctors and specialists. Kaiser only operates in 8 states and the District of Columbia (Kaiser Permanente, n.d.). Its model is built around tight alignment between financing and care delivery, with an emphasis on prevention, population health, and salaried physician compensation. Unlike traditional insurers that contract with independent provider networks, Kaiser members typically receive care within its fully integrated network, which allows for greater clinical coordination and data integration (Park, 2024).

Insurer business models differ substantially across carriers (e.g., traditional insurer vs. integrated delivery system). These structural differences, including the degree of vertical integration, whether a plan operates owned facilities and salaried clinicians, and the mix of fully insured vs. self-funded business, can affect network design, negotiated rates, and competitive dynamics. We therefore avoided treating all carriers as operationally equivalent in the analyses below and flagged model type when relevant.

Premiums

Across all market types in 2023, the average monthly premium in Maryland was $583.00 (24th most expensive in the country). There was significant variation across market segments. The premiums in the individual market were $454.60 (50th most expensive in the country), and the premiums in the small group market were $555.10 (32nd most expensive in the country).[5] Premiums in the large group market were $622.20 (11th most expensive in the country). Table 2 presents details.

Table 2. Average Monthly Premium, by Market Segment, 2023

Insurance Market Segment	Average Monthly Premium	State Ranking
Individual	$454.60	50/51
Small Group	$555.10	32/51
Large Group	$622.20	11/51
All	**$583.00**	**24/51**

Notes: Data for this analysis are from the 2023 CMS MLR files. For each state, by each market segment and overall, we calculated the total direct premium earned by all carriers in the state (TOTAL_DIRECT_PREMIUM_EARNED) and divide by the total number of member months (MEMBER_MONTHS).

Insurer premiums can reflect several factors: the underlying health of the covered population, the degree of administrative efficiency of the carrier, the services covered by the health plans, the health services utilization of the covered population, public policy, and the unit prices for each unit of that utilization. Typically, unit pricing is to some extent modifiable by carriers through bilateral contract negotiations with health care providers. However, there is a notable exception in Maryland: commercial carriers have very limited scope for negotiating with hospitals due to the state's hospital rate setting model. As described in greater detail below,

[5] Notably, the result for the individual market is echoed in a separate data source: as of 2025, Maryland has the third lowest average benchmark premium in the individual market across all states. Source: https://www.kff.org/affordable-care-act/state-indicator/average-marketplace-premiums-by-metal-tier/.

Maryland has a unique hospital regulatory landscape with implications for the dual roles of provider and insurer concentration in determining service pricing.

Provider Landscape

Provider Types

Maryland has a unique provider landscape. See Table 3 for selected summary statistics. The state has 45 hospitals (acute care and children's), which, scaled against Maryland's 2020 population and compared with other states, ranks 49/51. While 42 states contain at least one hospital owned by private equity, Maryland contains no private equity-owned hospitals at the time of writing. Maryland's hospitals are, on average, large: the average Maryland hospital has 259.9 beds, which ranks 7th in the country. As of 2022, Maryland had 21,077 non-federal, patient care medical doctors, which, on a per-capita basis, ranked 7th in the country. Finally, as of 2023, Maryland had 8,390 nurse practitioners, which, on a per-capita basis, ranked 17th in the country.

Table 3. Provider Landscape in Maryland

Provider Segment	Count	Per-Capita State Ranking
# Hospitals (2024 Q4)	45	49/51
% Owned by private equity	0%	51/51*
Average hospital bed count (2024 Q4)	259.9	7/51
# Non-Federal patient-Care Medical Doctors (2022)	21,077	7/51
# Nurse Practitioners (2023)	8,390	17/51

Notes: Population data are from the 2020 census, for which the summary table (NST-EST2024-POP) is available here: https://www.census.gov/data/tables/time-series/demo/popest/2020s-state-total.html. Hospital data is from the Q4 2024 CMS Provider of Services file, available here: https://data.cms.gov/provider-characteristics/hospitals-and-other-facilities/provider-of-services-file-hospital-non-hospital-facilities/data/q4-2024. For this analysis, we include only active (pgm_trmntn_cd==0) hospitals (prvdr_ctgry_cd==1) that are either short-term, children's hospitals, or critical access hospitals (gnrl_fac_type_cd = 1, 6, or 11). Private equity ownership is based on data from the "Private Equity Stakeholder Project", located here: https://pestakeholder.org/private-equity-hospital-tracker/#pe_map. Average bed count is determined using the variable bed_cnt. The count of non-federal patient-care medical doctors is from the 2023-2024 Area Health Resource Files, available here: https://data.hrsa.gov/data/download?data=AHRF#AHRF. For this analysis, we include total non-federal patient-care Medical doctors as of 2022 (md_nf_all_pc_22. The number of nurse practitioners as of 2023 is also from the 2023-2024 Area Health Resources Files (np_npi_23).
* This measure is ranked by percentage of hospitals owned by private equity, not on a per-capita basis. Eight states, including Maryland, contain no private hospitals with private equity ownership; we ranked these all as tied for 51st.

Additionally, Maryland has multiple large-scale advanced primary care programs that provide support and financing to primary care providers in the transition to advanced primary care. Specifically, the Maryland Primary Care Program (MDPCP) offers participating practices enhanced payments, data tools, care management resources, and technical assistance to support comprehensive, coordinated, and person-centered care. MDPCP is a key component of the state's Total Cost of Care (TCOC) Model and aims to strengthen the primary care infrastructure while reducing avoidable hospital utilization (Peterson et al., 2024). Maryland has also recently implemented a companion primary care program in the Medicaid population—the Medicaid Advanced Primary Care Program (MAPCP)—and, as part of the AHEAD model, will be

launching an additional primary care program in the Medicare population starting in 2026.[6] Together, these programs have positioned Maryland as a national leader in primary care innovation and serve as a foundation for expanding value-based care across diverse provider settings.

Hospital Rate Setting Model

Maryland has a unique provider landscape. In particular, Maryland's hospitals are regulated by the Health Services Cost Review Commission (HSCRC), which has regulated Maryland's hospitals since the 1970s.

At the time of writing, Maryland hospital prices are regulated in multiple ways. First, the HSCRC sets the global budget revenue (GBR): that is, an annual revenue target for hospitals designed to both encourage cost containment and incentivize the delivery of high-quality care. The annual revenue target for each hospital is determined from a historical base period, and adjustments are made to account for inflation, demographic, and other factors. This system has been operational statewide in Maryland since 2014 (Health Services Cost Review Commission, 2016).

Second, the HSCRC sets hospital rates by cost center for each hospital on January 1 and July 1 each year. These average approved rates are designed to scale to the global budget revenue amount for a given hospital based on expected patient volume. These rates are derived from the global budget based on the hospital's cost allocations and expected volumes (Atlas, 2024). Additionally, hospitals are permitted to unilaterally change their unit rates by 5% throughout the course of the year in order to realize their global budget; larger changes require approval from the HSCRC.

Third, all commercial payers at a given Maryland hospital pay the same rate for the same service. In other states, commercial payers each negotiate contracts with hospitals, resulting in substantial price variation across commercial payers for a given service (for example, a blood test) at a given hospital. In Maryland, however, all commercial payers would pay the same amount for that service at a given hospital. Currently, public payers—that is, Medicare and Medicaid—receive a 7.7% discount relative to commercial payers (Maryland Hospital Association, 2024).

The all-payer aspect to Maryland's hospital rate setting has significant implications for Maryland hospital pricing practices relative to those in the rest of the country. Particularly, the system strongly contrasts with standard practice in hospital finance: a recent evaluation of the TCOC Model notes that, "in most of the country, where commercial hospital rates are not regulated—commercial payers pay higher rates for hospital care, and Medicare and Medicaid pay lower rates" (Machta et al., 2021). Previous evaluations of the Maryland model have found that Medicare payment rates are 36% to 44% higher for inpatient admissions and 58% to 66% higher for outpatient care in Maryland than they would be under standard Medicare reimbursement

[6] For additional detail on current and future primary care programs in Maryland, see https://health.maryland.gov/mdpcp/Documents/AHEAD_Primary_Care_Town_Hall_2.10.25.pdf

methodologies, and commercial payers paid 11% to 15% less per inpatient admission in Maryland than they would have paid outside Maryland (Haber et al., 2019).

At the time of writing, recent policy developments indicate that Medicare rates will no longer be included in Maryland's all-payer hospital rate setting (Health Services Cost Review Commission, 2025). This will have significant implications on the landscape of health services delivery in Maryland, with ramifications for hospitals' financial health and Medicaid and commercial rate setting. However, an analysis of this development is beyond the scope of this study.

Maryland's unique hospital rate setting system effectively neutralizes the role of insurer negotiating power in determining commercial hospital prices. In other states, larger insurers can use their negotiating power to demand lower prices for a particular service, at a particular hospital, relative to smaller insurers. This is not the case in Maryland, where all commercial payers at a given hospital pay the same amount for a service.

Finally, it is important to note that, while the HSCRC regulates hospital pricing in Maryland through global budgets and cost center-specific rates, there are limitations to its regulatory authority. Specifically, the HSCRC's regulatory authority applies to inpatient, outpatient, and emergency department services on the hospital campus but does not apply to physician fees. The HSCRC's authority does not extend to off-campus outpatient facilities that are owned by hospital systems but that are physically separate from the main hospital campus (Atlas, 2024).

Private Equity Ownership in Maryland

During the 2024 legislative session, the Maryland General Assembly passed legislation (Ch. 378, SB 1182/HB 1388) directing the MHCC to examine the role of private equity (PE) in Maryland's health care economy. The MHCC commissioned an external research team that put together *Private Equity Investments in Physician Practices in Maryland,* a report analyzing PE investments in Maryland (Singh et al., 2024). While there is no PE ownership of hospitals in Maryland, this study found that, between 2014 and 2021, PE affiliation among physicians in Maryland rose from 1.8% to 15.5%, with particularly high shares in urology (63.3%), dermatology (36.2%), and primary care (27.3%). They also reported significant geographic variation: PE penetration reached 53.2% in Prince George's County, while seven rural counties had none. In 2021, PE-affiliated physicians were more likely to be in-network with both commercial (99.8%) and Medicare Advantage (93.2%) plans than non-PE peers (96.1% and 84.5%, respectively). Participation in value-based care was also higher: 37.7% of PE-affiliated primary care physicians participated in MDPCP compared to 24.6% of their non-PE peers.

To contextualize these findings, the research team reviewed national literature on PE's broader effects in health care and reported that prior work has found that PE acquisitions are associated with higher commercial prices, as well as changes in prescribing practices and workforce composition. However, evidence on quality outcomes is mixed and often drawn from sectors like nursing homes, limiting generalizability to physician practices. In Maryland, communities with higher PE penetration were more urban and diverse: ZIP codes with greater racial diversity, higher rates of internet access, and lower deprivation levels were more likely to have PE-

affiliated physicians. Finally, based on their findings and model legislation from the National Academy for State Health Policy (NASHP), the research team outlined three potential policy options for PE oversight in Maryland: 1) enhance state authority to review and limit/block certain "material transactions," including PE transactions, 2) strengthen regulations surrounding the corporate practice of medicine (CPOM), and 3) introduce new legislation to increase transparency and reporting around ownership and control relationships in the health care sector.

Aim 1: Insurer concentration and prices for providers

This section uses a variety of data sources to better understand insurer concentration in Maryland, both at the state and sub-state level. Additionally, Hilltop used data to estimate how prices paid to Maryland providers compare to prices nationally.

Insurer Concentration

How does Maryland compare to other states?

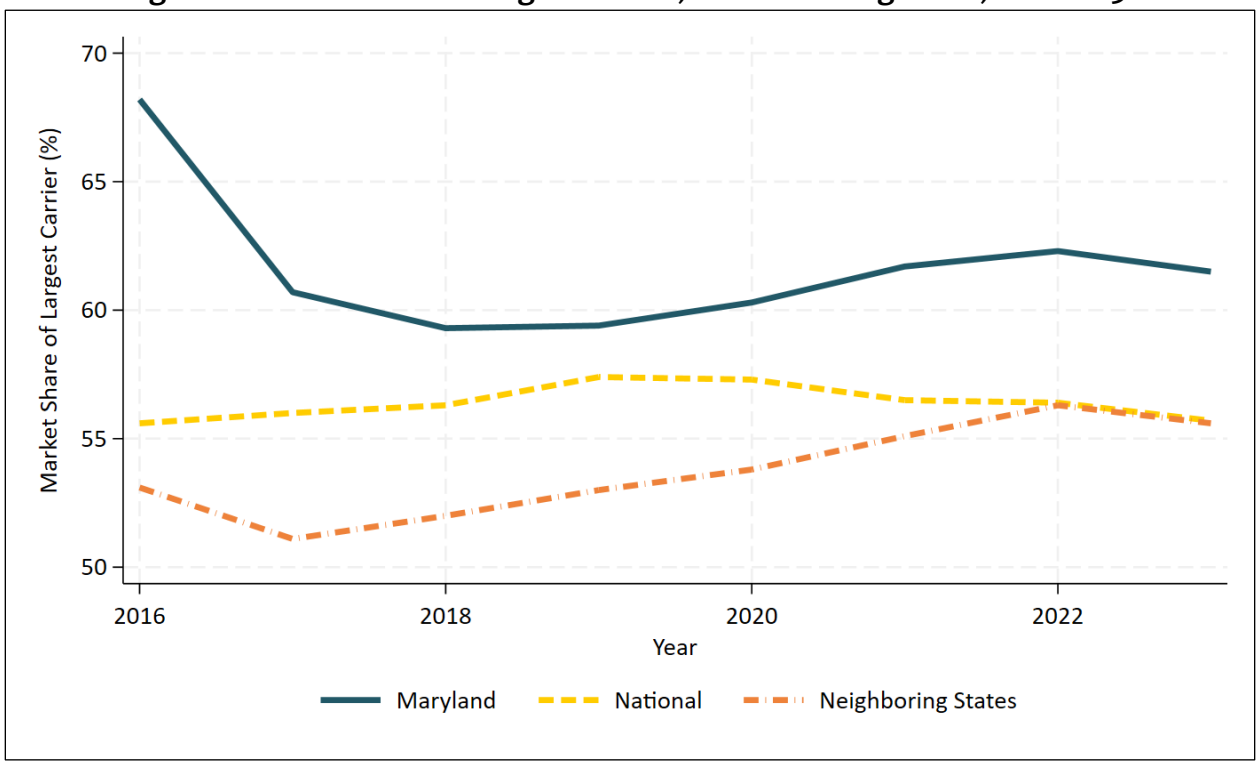
Hilltop used CMS MLR data to analyze insurer concentration at the state level, by market segment. As noted above, this is publicly available data that insurers are required to report and has been used in prior studies of insurer market concentration. Concentrated markets are characterized by a lack of competition; this, in turn, can reflect the presence of one dominant carrier. The MLR data include detailed, insurer-reported information on enrollment, total premium revenue, claims paid, and administrative costs, broken out by insurer, market segment (individual, small group, large group), and state. Insurers are required to report data at the legal-entity level, including all affiliated plans under common ownership, ensuring comprehensive capture of each carrier's activity in a given market. These data allowed us to calculate the market share of each insurer within each state and segment, based on enrollment, and identify the largest carrier in each market.

While several possible measures of concentration are possible, this section of the analysis focuses on the market share of the largest carrier. Markets characterized by lower levels of competition will, by definition, contain fewer participants than markets with higher levels of competition. While this could result in a small number of carriers sharing the market equally (for example, three carriers each with one-third of the market), we believe that the policy-relevant focus is the presence of a dominant carrier in a market. We conducted this analysis for all markets (individual, small group, and large group), and then for individual, small group, and large group markets separately. In order to provide national and regional context for trends for Maryland, we present this with the average across all states, and the average across states neighboring Maryland (Pennsylvania, Delaware, the District of Columbia, Virginia, and West Virginia). See figures below, as well as Table 1A in the Appendix.

Figure 1 presents the results for all market segments. Averaged across all states, the market share of the largest carrier rose from 55.6% in 2016 to 57.4% in 2019, then fell to 55.7% in 2023. In states neighboring Maryland, the average market share of the largest carrier ranged from

51.1% in 2017 to 56.3% in 2022. The market share of the largest carrier is consistently higher in Maryland than the national average or the average of neighboring states: from a high of 68.2% in 2016, down to 59.3% in 2018, with a slight upward trend to 62.3% in 2022, then down to 61.5% in 2023. As of 2023, Maryland is ranked 21st among all states and the District of Columbia in terms of the market share of the largest carrier across all market segments.

Figure 1. Market Share of Largest Carrier, All Market Segments, 2016-2023



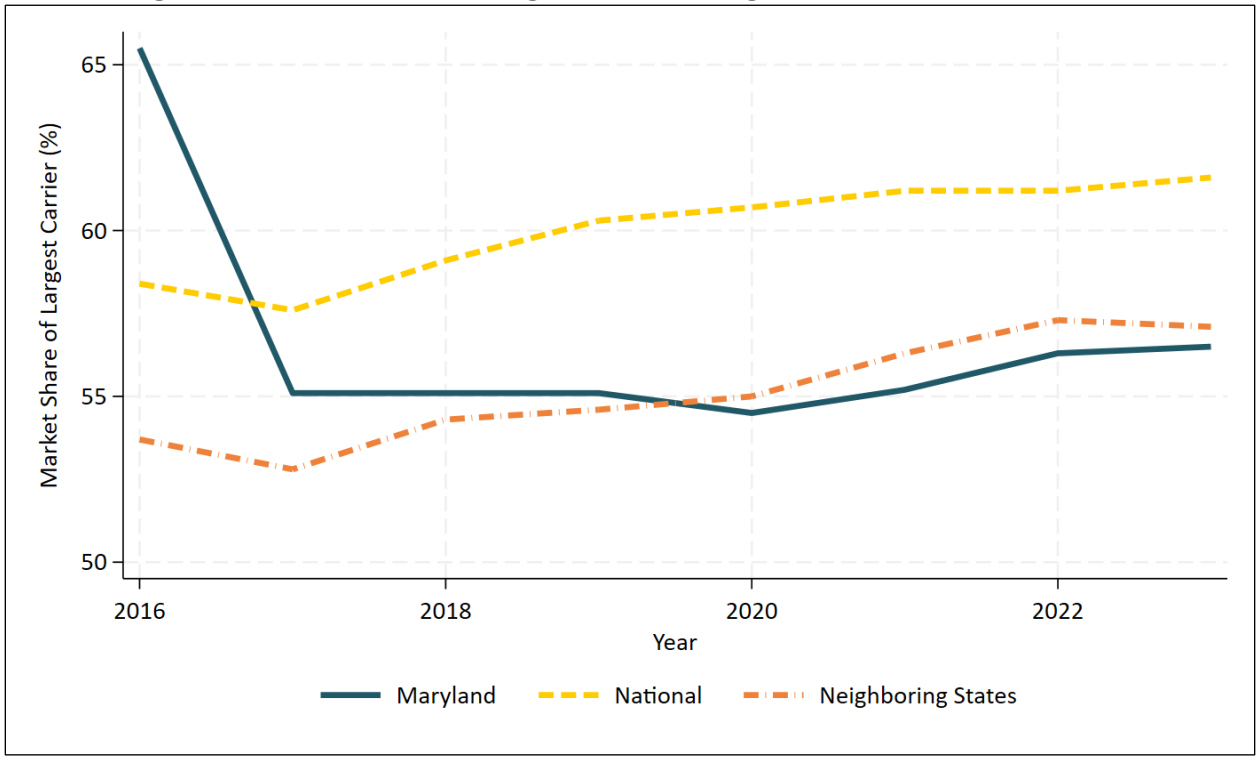
It is important to note that this analysis uses the market share of the largest carrier as a simple, policy-relevant indicator of concentration. That said, we tested alternative measures of market concentration (e.g., combined share of top-2 and top-3 carriers). These robustness checks show the same broad pattern as the results included in this report: Maryland displays relatively high carrier market concentration. Results using the top-2 and top-3 carriers are available upon request.

Hilltop replicated this analysis for the large group market in Figure 2, below. We found that the market share of the largest carrier averaged across all states grew from 57.6% in 2017 to 61.6% in 2023. The average level is lower in states neighboring Maryland but displays the same growth pattern: from 52.8% in 2017 to 57.1% in 2023. In Maryland, the market share of the largest carrier in this market segment was 65.5% in 2016 but fell to 55.1% in 2017 and grew modestly to 56.5% in 2023. As of 2023, Maryland is ranked 32nd among all states and the District of Columbia in terms of the market share of the largest carrier in the large group market.

Hilltop conducted further analysis to better understand the reduction from 2016 to 2017. In 2016, the largest carrier in the large group market was CareFirst, with 590,999 covered lives and

65.5% market share. Kaiser was the second largest carrier in this market, with 129,837 covered lives and 14.4% market share. In 2017, CareFirst had 581,210 covered lives, or 55.1% market share, but Kaiser's presence had grown considerably, to 269,196 covered lives and 25.5% market share. Thus, Kaiser's growth in this market from 2016 to 2017 led to the reduction of the market share of CareFirst, which remained the largest carrier in this market.

Figure 2. Market Share of Largest Carrier, Large Group Market, 2016-2023

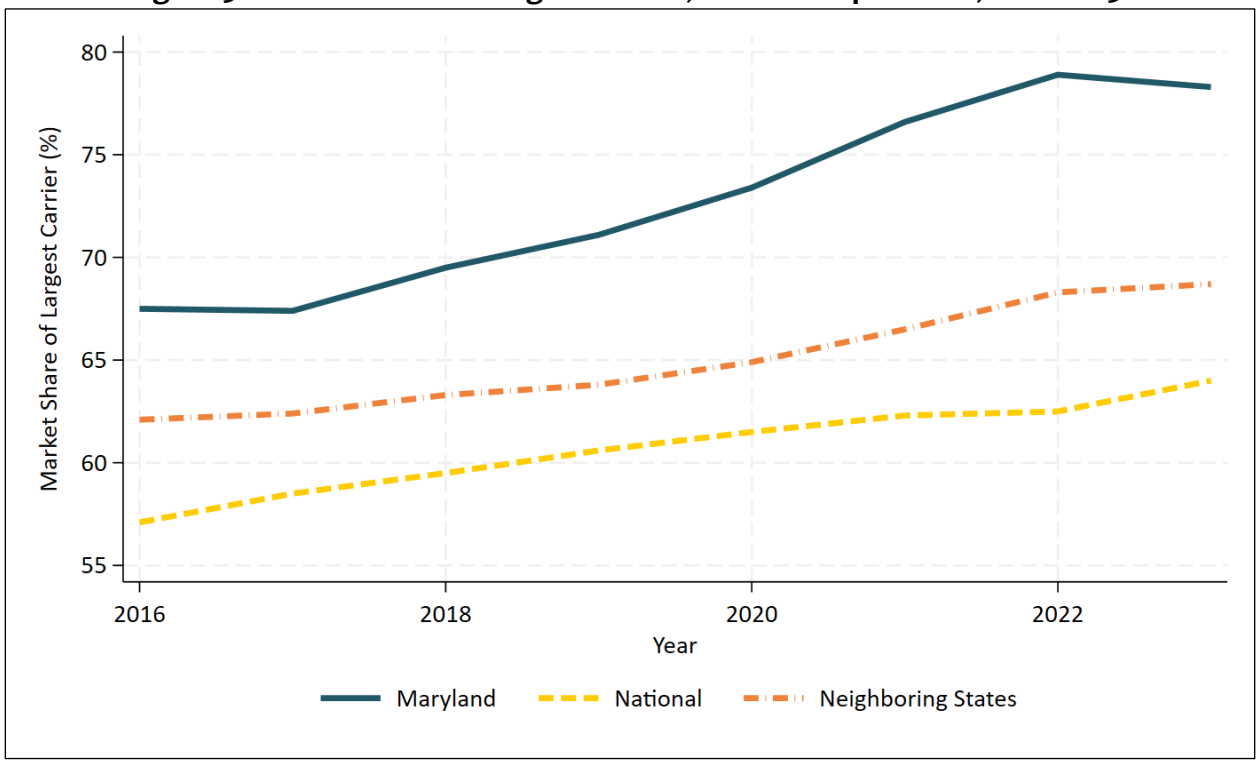


Hilltop replicated this analysis for the small group market in Figure 3, below. We found that the market share of the largest carrier averaged across all states has been growing: from 57.1% in 2016 to 64.0% in 2023. The average level is higher in states neighboring Maryland, but the trend displays the same growth pattern: from 62.1% in 2016 to 68.7% in 2023. In Maryland, the market share of the largest carrier in the small group market is relatively high and has grown strongly. The market share of the largest carrier was 67.4% in 2017, and grew to 78.9% in 2022, with a slight reduction to 78.3% in 2023.

Notably, while the market share of the largest carrier in the small group market in Maryland in 2023 (78.3%) significantly exceeded the average among neighboring states (68.7%) and the national average (64.0%), Maryland is not an outlier state. Maryland's value of 78.3% was 16th highest of all 50 states and the District of Columbia.[7]

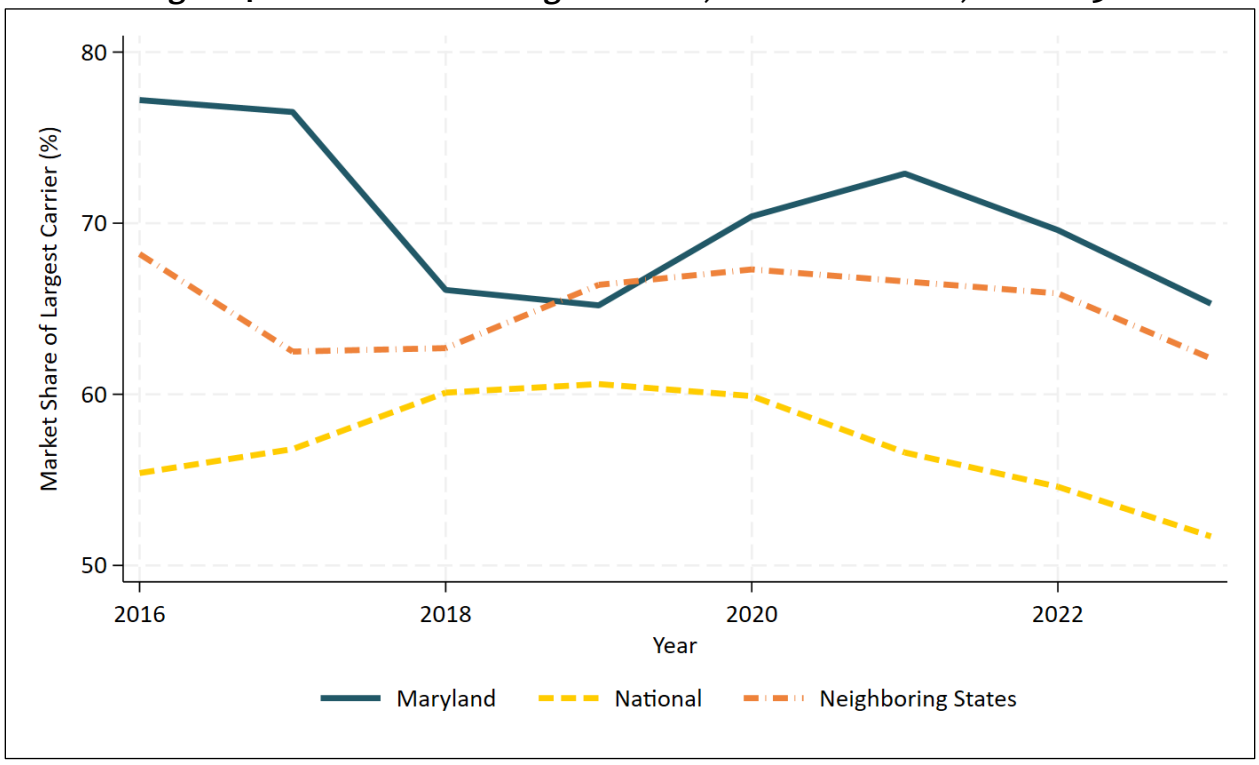
[7] The largest value was 98.0% in Alabama, followed by 92.9% in Louisiana, 92.4% in Alaska, and 91.0% in Mississippi.

Figure 3. Market Share of Largest Carrier, Small Group Market, 2016-2023



Finally, Hilltop replicated this analysis for the individual market in Figure 4, below. We found that the market share of the largest carrier averaged across all states has been falling since 2019, from 60.6% to 51.7% in 2023. The average market share of the largest carrier has also been falling in states neighboring Maryland, from 67.3% in 2020 to 62.1% in 2023. In Maryland, the market share of the largest carrier in the individual market has been declining from a high of 77.2% in 2016, with an upward trend from 2019 to 2021. In 2023, the market share of the largest carrier in the individual market in Maryland was 65.3%. As of 2023, Maryland was ranked 12th among all states and the District of Columbia in terms of the market share of the largest carrier in the individual market. However, as noted above, Wellpoint entered the individual market in 2025 in Maryland; as such, the market share of the largest carrier may fall in future years.

Figure 4. Market Share of Largest Carrier, Individual Market, 2016-2023



As a check on these results, Hilltop presents data from an additional source: the American Medical Association (AMA) *Competition in Health Insurance* studies (American Medical Association, 2024). This long-running series uses data from the Decision Resources Group Managed Market Surveyor and reports Herfindahl-Hirschman Indices by metropolitan statistical area (MSA) for the combined commercial market (consisting of the preferred provider organization [PPO], health maintenance organization [HMO], point of service [POS], and exchange markets). The Herfindahl-Hirschman Index (HHI) is a widely used metric of market concentration and measures the sum of squared market shares of market participants in an area. If a market is characterized by one dominant seller with 100% market share, the HHI would be 10,000 (the theoretical maximum); if a market, instead, is characterized by 100 sellers each with 1% market share, the HHI would be 100. The Department of Justice antitrust division considers markets with an HHI from 1,000 to 1,800 to be moderately concentrated and markets with an HHI over 1,800 to be highly concentrated.[8]

Hilltop found that for six of the seven Maryland-based metropolitan statistical areas in the AMA data, the HHI exceeded 1800 in 2023 (the year of the most recently available data), ranging from 1856-3284. The Washington-Arlington-Alexandria (DC-VA-MD-WV) metropolitan area alone had an HHI under 1800 in 2023. As with the MLR data, Maryland is not an outlier in terms of concentration: the average HHI for commercial health insurers is high across both neighboring states and nationally. See Table 4.

[8] For additional information on the HHI, see https://www.justice.gov/atr/herfindahl-hirschman-index.

Table 4. Commercial Health Insurance Market HHI by MSA, Maryland, Neighboring States, and Nationally, 2018-2023

MSA	Herfindahl-Hirschman Index (PPO + HMO + POS + EXCH)					
	2018	2019	2020	2021	2022	2023
Baltimore-Columbia-Towson (MD)	3197	3146	3168	3177	3125	3078
California-Lexington Park (MD)	4233	3986	3990	3119	3257	3284
Cumberland (MD-WV)	2567	2587	2375	2429	2259	2268
Hagerstown-Martinsburg (MD-WV)	1883	1880	1872	1878	1866	1856
Philadelphia-Camden-Wilmington (PA-NJ-DE-MD)	2444	2365	2343	2314	2281	2261
Salisbury (MD-DE)	2930	2846	2494	2555	2834	2842
Washington-Arlington-Alexandria (DC-VA-MD-WV)	1709	1686	1660	1675	1644	1599
Neighboring States	**3206**	**3112**	**3077**	**3096**	**3079**	**3179**
National	**3504**	**3473**	**3494**	**3504**	**3496**	**3458**

Notes: Data for this table are from the AMA Competition in Health Insurance Reports. Reports for each year contain data on MSA-level market share as of January 1 of the prior year; for example, the report from 2024 contains data on market share as of January 1, 2023. Reports are accessible here: https://www.ama-assn.org/topics/competition-health-insurance-study.

Within Maryland

In order to examine commercial insurer market concentration at the sub-state level, we use Maryland's All-Payer Claims Database (APCD) to analyze market share by county over time. The APCD is maintained by the MHCC and governed by state regulations (specifically, COMAR 10.25.06). This database collects claims and enrollment data quarterly from private insurers, HMOs, third-party administrators, and pharmacy benefit managers licensed in Maryland, as well as from Medicare and Medicaid. Claims from self-insured ERISA (Employee Retirement Income Security Act of 1974) plans were excluded starting in 2015, and claims from the Federal Employee Program were excluded starting in 2019, although the APCD still covers approximately 90–95% of the fully insured market and 25–30% of the self-insured market (Maryland Health Care Commission, 2024a). At the time of writing, data were available through 2023.

Focusing on the fully insured plans in Maryland, we calculated the market share as each carrier's total enrollment (measured in person-months), divided by total enrollment. Table 5 displays the largest market share for each county in 2022 and 2023.

Table 5. Market Share of Largest Carrier, by County, 2022-2023

County	Population 2020	Largest Carrier Market Share	
		2022	2023
Montgomery County	1,060,856	50.0%	48.5%
Prince George's County	965,398	48.7%	49.4%
Baltimore County	853,338	61.6%	60.4%
Anne Arundel County	593,412	67.9%	67.2%
Baltimore City	583,189	56.7%	56.4%
Howard County	332,821	63.6%	62.2%
Frederick County	272,787	57.7%	55.7%

County	Population 2020	Largest Carrier Market Share	
		2022	2023
Harford County	261,245	67.3%	67.2%
Carroll County	172,910	75.1%	75.2%
Charles County	166,692	57.4%	54.7%
Washington County	154,677	71.0%	67.4%
St. Mary's County	114,006	76.6%	71.9%
Cecil County	103,805	73.0%	70.4%
Wicomico County	103,563	75.1%	73.4%
Calvert County	92,921	74.1%	71.9%
Allegany County	67,950	76.8%	71.1%
Worcester County	52,522	82.5%	79.6%
Queen Anne's County	50,033	79.2%	79.4%
Talbot County	37,522	79.3%	78.6%
Caroline County	33,277	75.2%	75.5%
Dorchester County	32,523	76.9%	76.3%
Garrett County	28,797	68.4%	64.8%
Somerset County	24,567	80.7%	81.5%
Kent County	19,124	70.8%	73.9%
Total	**6,177,935**	**61.5%**	**60.4%**

Notes: This analysis was conducted using the APCD for Maryland. The study team used the APCD eligibility files from 2022 and 2023 and applied several filters to focus on the commercially insured population in Maryland: coverage_class = "MEDICAL"; market_segment = (Individual Market (not sold on MHBE), Private Employer Sponsored or Other Group (i.e., union or association plans), Public Employee, Federal (FEHBP), Public Employee, Other (state, county, local/municipal government and public school systems), Small Business Options Program (SHOP) not sold on MHBE, Student Health Plan, Individual Market (sold on MHBE), Small Business Options Program (SHOP) sold on MHBE; plan_liability_code = "1" indicating Risk (Under Maryland contract); and out_of_state_flag = "N". Carrier is identified using the variable "submitter_id". County population (table CO-EST2024-POP) from 2020 is available here: https://www.census.gov/data/tables/time-series/demo/popest/2020s-counties-total.html. Market share is calculated as each carrier's total enrollment (measured in person-months), divided by total enrollment for that year.

The results from this analysis are consistent with those presented in the state-level analysis, above: across Maryland, the largest carrier had 61.5% market share in 2022 and 60.4% market share in 2023. Concentration at the county level displayed significant variation. In 2022, the largest carrier had 48.7% market share in Prince George's County, and the largest carrier had 82.5% market share in Worcester County. Similarly, in 2023, the largest carrier had 48.5% market share in Montgomery County, and the largest carrier had 81.5% market share in Somerset County.

In both years, we documented an inverse relationship between county population and market concentration: large counties tend to have lower market concentration (as defined by the market share of the largest carrier), while smaller counties tend to have higher market concentration. In both years, we found that an additional 100,000 population is associated with

a reduction of approximately 2.5 percentage points in terms of the market share of the largest carrier. See Figure 5 for a visualization of the data presented in Table 5 above.

Figure 5. Relationship between County Size and Market Share of Largest Carrier, 2022 and 2023

Health Service Prices in Maryland

The health services landscape comprises hospitals, professional services, prescription drugs, durable medical equipment, and more. For a given broad type of expenditure, underlying prices are typically determined at the provider-carrier level. That is, for the nation's approximately 4,500 acute care hospitals (with the exception of Maryland, as described above), underlying prices are separately determined at each hospital for each payer with which the hospital contracts. Thus, each hospital might have dozens or hundreds of separate contracts, each of which implies a separate price for a particular service. Underlying contracts often do not contain information on price; instead, they use formulas to determine the negotiated rate of a given item or service (Henderson & Mouslim, 2024b). Thus, unlike the insurer landscape in which CMS MLR public use files contain premium information for fully insured plans across the three market segments, no centralized database of "provider prices" exists. However, data from the Health Care Cost Institute (HCCI) can be used to better understand average prices in Maryland relative to other states, and newly available transparency in coverage pricing data can be used to better understand relative negotiated rates across carriers within Maryland.[9]

[9] For all states except Maryland, there is an additional source of provider pricing data: the RAND hospital pricing study. This is an ongoing, multi-round, employer-led study designed to measure and publicly report the prices that commercial payers (primarily employer-sponsored health plans) pay for hospital and outpatient services. Using large national claims data sets submitted by employers, health plans, and state all-payer claims databases, the study

HCCI is an independent, non-profit research institute focused on spending in the health care sector. The HCCI database contains claims from the employer-sponsored market for major insurers and includes over 55 million covered commercial lives annually.[10] To date, this is one of the best sources on the cost of health services for employer-sponsored coverage.

HCCI published three resources with pricing data aggregated to the state or sub-state level that allows for meaningful comparison. First, in 2020, HCCI published a report titled "Comparing Commercial and Medicare Professional Service Prices" that uses claims from employer-sponsored insurance plans to compare prices paid by commercial insurers for 500 common professional services to prices paid by Medicare (Health Care Cost Institute, 2020). This analysis is based on a sample of nearly 210 million claims from 2017. Crucially, this is not for hospital services—this analysis is for professional services.

The report documents significant variation across states. Average commercial rates were lowest in Alabama, at 98% of Medicare rates, and highest in Wisconsin, at 188% of Medicare rates. Maryland was the third lowest state, with average commercial prices at 104% of Medicare rates.

Table 6. Average Commercial Professional Reimbursements as a Percentage of Medicare, 2017, by State

State	% of Medicare (2017)	State	% of Medicare (2017)
AL	98%	IL	124%
DE	103%	TN	124%
MD	104%	DC	125%
KY	105%	NY	127%
AZ	105%	ME	128%
FL	106%	CA	129%
PA	107%	GA	131%
NV	108%	NC	131%
NJ	108%	CT	134%
IN	109%	NM	135%
MO	110%	WA	142%
OH	111%	VT	144%

calculates both standardized prices (adjusted for service mix) and relative prices (the ratio of commercial to Medicare reimbursement for the same service at the same facility). Prices are reported at the hospital, health system, and state levels, and the study includes both inpatient and outpatient settings. By using Medicare as a common benchmark, the study allows for direct comparisons of commercial price levels across providers and markets, while accounting for variation in case mix, wage index, and geography. The project's stated goal is to improve transparency for health care purchasers, particularly employers, by enabling them to compare the aggregate prices they pay with those paid by others in the same or different markets. Maryland is not included in the current version of the study because its hospital rates are established by the state's Health Services Cost Review Commission (HSCRC) and do not vary by payer. This administrative structure falls outside the scope of the current methodology, which is designed to analyze variation in privately negotiated prices. However, future versions of the study may include Maryland for comparison purposes, using published state-regulated prices in place of negotiated rates.

[10] Additional information about the HCCI is available here: https://healthcostinstitute.org/learn-more.

State	% of Medicare (2017)	State	% of Medicare (2017)
KS	111%	IA	145%
LA	112%	MA	146%
MI	113%	ID	148%
HI	114%	NH	148%
VA	115%	MT	151%
OK	116%	NE	157%
TX	116%	WY	161%
AR	117%	SD	166%
SC	118%	OR	170%
UT	119%	ND	176%
WV	119%	WI	189%
CO	121%	**National**	**122%**
MS	122%		

Source: https://healthcostinstitute.org/hcci-originals-dropdown/all-hcci-reports/comparing-commercial-and-medicare-professional-service-prices

While the data in Table 6 are based on claims from 2017, more recent data from the HCCI support the finding that negotiated commercial prices are relatively low in Maryland. In addition to releasing reports on a variety of topics, HCCI also publishes the Healthy Marketplace Index (HMI), a publicly available tool designed to report standardized measures of commercial health care market performance across MSAs. Using a national sample of employer-sponsored insurance claims from 2017-2021, the HMI provides indices for average service prices, utilization, spending, and service mix, each calculated at the MSA level and reported separately for inpatient, outpatient, and professional services.[11] The HMI is intended to facilitate consistent comparisons across local markets and over time; however, its scope is limited to the commercially insured population and does not capture all payers or all providers. While not designed for regulatory or antitrust purposes, the HMI offers one of the few sources of systematically reported commercial pricing and concentration data available at the sub-state level.

Table 7, below, displays average total health spending per person and relative prices both overall and by broad service line. Hilltop found that for the three metropolitan areas in Maryland, overall prices ranged from 1% below the national median (Salisbury, MD) to 13% below the national median (Baltimore, MD). Inpatient prices ranged from 9% below the national median to 12% above the national median, and outpatient prices ranged from 21% below the national median to 1% above the national median. For professional prices, all three Maryland metropolitan areas were below the national median. Table 7 also presents data for selected metropolitan areas from neighboring states and shows that prices for inpatient and outpatient services exhibit substantial variation by location.

[11] Additional information about the HCCI Healthy Market Index is available here: https://healthcostinstitute.org/hcci-originals/healthy-marketplace-index/hmi.

Table 7. Total Health Spending and Prices by Service Line Relative to National Median, 2021

Segment	Total Health Spending per Person	Prices Relative to the National Median (2021)			
		Overall	Inpatient	Outpatient	Professional
Maryland					
Baltimore, MD	$5,402	-13%	-9%	-21%	-9%
Hagerstown, MD	$5,771	-3%	+5%	-7%	-4%
Salisbury, MD	$6,999	-1%	+12%	+1%	-11%
Neighboring States					
Washington, DC	$5,832	-2%	+3%	-9%	+1%
York, PA	$7,613	+15%	+35%	+30%	-12%
Charleston, WV	$11,296	+36%	+60%	+63%	-1%
Charlottesville, VA	$4,543	+6%	+28%	-7%	+5%
Dover, DE	$8,288	+17%	+42%	+27%	-8%

Source: https://healthcostinstitute.org/hcci-originals/hmi-interactive#HMI-Summary-Report-Current-Spending

Finally, Hilltop used a third source of pricing data from HCCI: healthprices.org. This is an interactive platform that reports estimated commercial health care prices for common services at the state and metropolitan level. The site draws on billions of de-identified claims from HCCI's multi-payer data set, covering nearly 100 million people nationwide, and calculates average amounts actually paid to providers, including both insurer and patient payments, for specific services. These estimates, derived from historical payments, provide a transparent benchmark of price variation across markets, though actual costs may differ based on individual circumstances.[12]

Table 8 displays the price for selected services for Maryland-specific locations, as well as the national average, minimum, and maximum prices. We found that there is significant variation between average commercial prices across locations in Maryland—for example, the average price of an obstetrics and gynecology visit ranges from $153 in Salisbury to $204 in Baltimore—but that the prices in Maryland tend to fall below the national average prices for each service.

Table 8. Comparison of Average Negotiated Rates for Commercial Plans Relative to National Average

	Office Visit, Established Patient—Moderate Complexity	Office Visit, Established Patient—High Complexity	Obstetrics and Gynecology Visit	Wellness Visit, New Patient Age 5-11
Baltimore, MD	$82	$157	$204	$601
Hagerstown, MD	$73	$154	$159	$614
Salisbury, MD	$71	$157	$153	$597
Easton, MD	n/a	$148	$187	n/a
Cumberland, MD	n/a	$117	n/a	n/a
National Average	**$81**	**$170**	**$211**	**$614**
National Low	**$69**	**$107**	**$114**	**$544**
National High	**$103**	**$400**	**$586**	**$786**

Note: Data are from https://www.healthprices.org/ for selected procedures.

[12] Additional information is available from https://www.healthprices.org/.

These relatively low negotiated rates are mirrored by physician income data. May 2024 mean annual physician wages from the Bureau of Labor Statistics show that annual wages for physicians in Maryland were $216,910, 5th lowest in its sample of 47 states and the District of Columbia.[13] A second data source corroborates this finding. Recent research on physician earnings uses administrative tax data from 2005-2017 to better understand the earnings and labor supply of physicians. Across all 50 states and the District of Columbia, average total individual income for physicians aged 40-55 in Maryland ranked 45th (Gottlieb et al., 2025). While these physician income data sources are subject to certain caveats, they broadly align with the finding that negotiated rates—which can be the basis for physician compensation for non-employed physicians—are relatively low in Maryland.

Finally, Hilltop examined procedure-level prices for carriers within Maryland using newly available Transparency in Coverage (TiC) data. TiC files are published by carriers and are required by federal regulation to contain the negotiated rates for every procedure, for every provider with which the carrier contracts. Researchers have noted significant challenges in using these data, ranging from availability, to accessibility, to quality (Center on Health Insurance Reforms, 2025a). In this analysis, we calculated the practice-group level average prices for common primary care services for the two largest carriers in Maryland: CareFirst and Kaiser.[14] We downloaded and processed the files from July 2025 and calculated the average price for each available procedure code at the provider group level.

This resulted in a range of different prices, as different provider groups can negotiate different rates for a given procedure with a given carrier. To better understand the extent to which systematic differences in pricing exist between CareFirst and Kaiser, we calculated the average negotiated price across all provider groups in the data for each payer. See Table 9.

Table 9. Average Negotiated Rate by Carrier for Selected Primary Care Procedures, July 2025

Procedure Code	Average CareFirst Price	Average Kaiser Price	Procedure Code	Average CareFirst Price	Average Kaiser Price
90460	$17.86	$26.31	99375	$101.76	$123.17
90461	$8.46	$12.34	99377	$65.16	$82.10
90471	$23.38	$24.55	99378	$101.11	$123.41
90472	$12.93	$16.96	99381	$71.88	$129.10
90473	$18.11	$21.16	99382	$75.74	$135.94
90474	$11.56	$14.99	99383	$73.84	$140.00

[13] This analysis excludes anesthesiologists, cardiologists, dermatologists, emergency medicine physicians, family medicine physicians, general internal medicine physicians, neurologists, obstetricians and gynecologists, pathologists, pediatricians, physiatrists and radiologists. Additional information is available here: https://www.beckershospitalreview.com/compensation-issues/physician-pay-by-state-adjusted-for-cost-of-living-2025/.

[14] We used the 97 procedures listed in the "Core Primary Care Services" table (pages 23-25) from the Primary Care Investment Analysis and Reporting Plan accessible here: https://dlslibrary.state.md.us/publications/Exec/MDH/MHCC/SB734Ch667(2)(2022).pdf. Due to the technical challenged involved in processing this data, it was not feasible to include additional carriers in this study.

Procedure Code	Average CareFirst Price	Average Kaiser Price	Procedure Code	Average CareFirst Price	Average Kaiser Price
96160	$23.83	$4.77	99384	$87.59	$156.91
96161	$22.35	$4.65	99385	$86.72	$153.42
98966	$24.35	$16.19	99386	$105.03	$177.42
98967	$24.94	$30.31	99387	$120.07	$192.38
98968	$24.94	$42.83	99391	$65.54	$114.30
99173	$4.91	$4.27	99392	$65.43	$122.41
99202	$50.69	$89.06	99393	$65.42	$122.16
99203	$80.84	$135.56	99394	$74.63	$133.73
99204	$131.40	$202.17	99395	$77.89	$137.43
99205	$167.36	$262.15	99396	$85.19	$146.73
99211	$10.18	$30.45	99397	$95.95	$158.36
99212	$28.91	$67.04	99401	$20.39	$46.08
99213	$54.66	$106.71	99402	$41.45	$75.90
99214	$83.75	$150.74	99403	$64.32	$105.06
99215	$119.86	$208.94	99404	$85.55	$134.94
99242	$47.53	$102.82	99421	$24.35	$17.99
99243	$75.58	$146.74	99422	$24.35	$35.54
99244	$119.75	$210.52	99423	$24.35	$56.29
99245	$153.55	$266.53	99453	$25.80	$25.27
99341	$63.21	$62.93	99454	$84.65	$64.61
99342	$91.45	$96.46	99457	$39.18	$58.99
99344	$207.61	$188.32	99458	$37.91	$47.61
99345	$247.86	$248.46	99473	$14.25	$16.90
99347	$62.87	$59.18	99474	$10.33	$19.22
99348	$95.15	$95.74	99483	$226.94	$320.58
99349	$144.95	$152.23	99487	$106.91	$139.24
99350	$201.76	$217.42	99489	$58.92	$72.57
99358	$125.63	$116.58	99490	$59.29	$64.70
99359	$63.48	$51.95	99491	$90.32	$99.99
99360	$61.49	$71.65	99495	$140.97	$240.07
99366	$40.91	$49.93	99496	$207.05	$327.41
99367	$54.84	$65.37	99497	$76.08	$96.91
99368	$36.27	$43.06	99498	$76.50	$84.65
99374	$64.78	$81.80			

Notes: Data are from TiC files for each carrier as of July 2025. CareFirst TiC data are accessible here: https://individual.carefirst.com/individuals-families/mandates-policies/machine-readable-file.page. The analysis used the HMO table of contents file to identify the in-network file corresponding to the "BLUECHOICE_HMO" plan. There were four available in-network files corresponding to this plan; we randomly selected the "08C0" network for this analysis. The Kaiser TiC data are accessible here: https://healthy.kaiserpermanente.org/maryland-virginia-washington-dc/front-door/machine-readable. For both files, we conducted the necessary analysis to collapse prices to the provider group level. Additional details are available upon request.

There are 79 procedures in the analytic output. Of these, the average price is higher for Kaiser for 67 procedures and higher for CareFirst for 12 procedures. For the procedures in which

Kaiser's average negotiated rate exceeds that of CareFirst, the average difference is 55.2%. For the procedures in which CareFirst's average negotiated rate exceeds that of Kaiser, the average difference is 80.1%. These results indicate that CareFirst tends to negotiate lower average prices for primary care services with provider groups than does Kaiser. This does not necessarily imply that CareFirst uses its larger market share to command lower prices; as noted above, Kaiser's operating model uses employed physicians, implying that direct comparison of the negotiated rates may reflect both differential negotiating power and operating structure.

Finally, recent research indicates that, nationally, the average negotiated rate for CPT 99203 and 99213 were $145.20 and $101.60, respectively, as of the March 2024 Transparency in Coverage files (Wang et al., 2025). The negotiated rates for CareFirst and Kaiser for these codes are $80.84 and $135.26, and $54.66 and $106.71, respectively. Thus, the negotiated rates for CareFirst for these codes are substantially lower than the average national rates, while the negotiated rates reported by Kaiser are on par with the average national rates.

Limitations

There are several limitations to this analysis. First, the commercial health insurance market is highly fragmented: it operates in distinct market segments (large group, small group, and individual) and is regulated at the state level. As such, there is no single source of data that can be used to understand the dynamics of this market at the sub-state level, and it is necessary to use a variety of data sources to create a composite image of the landscape of insurer competitiveness and concentration in Maryland relative to other states, and within Maryland. Even so, this analysis excludes a large population: individuals with self-funded employer-sponsored coverage. Self-funded coverage is typically employer-sponsored coverage in which the employers opt to self-fund rather than contract with carriers to purchase plans, and this type of coverage is regulated at the federal—not state—level. This population is substantial: within Maryland, this constitutes 59.7% of the population of private-sector insurance enrollees (Kaiser Family Foundation, n.d.). Relatively little is known about the dynamics of self-funded coverage, although recent research indicates that many traditional insurance carriers also provide "administrative services only" (ASO) contracts to self-funded plans, and that negotiated prices are higher for individuals whose employer has an ASO contract with a carrier rather than full insurance (Abraham et al., 2024; Craig et al., 2021).

The second limitation applies to the pricing data. In general, there are two sources for prices of health services: claims databases and newly available price transparency data. Claims data are only available with a lag and thus do not capture recent changes in market dynamics. Additionally, while TiC is potentially a valuable new data source that sheds light on provider prices at a very granular level, researchers have noted concerns regarding availability, accessibility, standardization, quality, and utility of the data. In other words, this data source is challenging to use. For example, the CareFirst HMO data contain in-network files linked to 26 distinct plans and provides four different in-network files for the "BLUECHOICE_HMO" plan. The Hilltop team has experience processing and using these TiC files but had to make judgement calls when analyzing these data (Henderson & Mouslim, 2024a).

While the Hilltop research team acknowledges the limitations of the pricing data sources used in this study, the results presented here are supported by a recent report by MHCC on payments for professional services in Maryland. Specifically, this recent report documented that the ratios of private-to-Medicare payment rates in Maryland were 1.02, 1.05, and 1.09 in 2021, 2022, and 2023, respectively (Maryland Health Care Commission, 2023b). This report also found that these ratios were lower for large payers than for other payers, implying that carriers with a high market share negotiated relatively low reimbursement rates.

Conclusion

In this aim, Hilltop used a variety of data sources to examine insurer concentration and the negotiated prices that prevail in Maryland for selected services. To analyze trends in state-level insurer provider concentration, we used as a key metric the market share of the largest insurance company in the state across market segments and compared Maryland to neighboring states and nationally over time. Additionally, we used APCD data to examine this metric within Maryland by county over time. We used data based on commercial claims in order to compare provider prices between Maryland and other states and used newly available price transparency data to compare prices between CareFirst and Kaiser.

Hilltop found that Maryland has relatively high insurer market concentration compared to other states. Across all fully insured market segments, the largest health insurance company in Maryland had a 61.5% market share in 2023, compared to 55.6% in states neighboring Maryland and 55.7% nationally. This is most pronounced in the small group and individual markets, where the market share of the largest carrier in Maryland in 2023 was 78.3% and 65.3%, respectively. While Maryland is not an outlier, the market share of the largest carrier is high relative to other states: 21st overall, 16th largest in the small group market, and 12th largest in the individual market. However, recent entrants to the individual market in Maryland imply that market concentration should fall for this market segment in the future. Additionally, there is less concentration in larger counties within Maryland.

Additionally, Maryland has relatively low provider prices compared to other states. Maryland has a unique model of hospital price regulation, and prior research has found that inpatient hospital prices for commercial payers in Maryland are significantly lower than in other states. While the landscape of provider pricing information is highly fragmented, we used data from several different sources and found that Maryland has relatively low provider prices relative to other states. Based on data from 2017, commercial reimbursements in Maryland for selected professional services averaged 104% of equivalent Medicare rates, third lowest among all states and significantly lower than the national average of 122%. Data from 2021 support this: overall prices in Maryland ranged from 1% to 13% below the national median. Focusing on selected services in selected cities within Maryland, prices tended to fall below the national average. This aligns with recent research indicating that average physician earnings are relatively low in Maryland compared with other states. Finally, comparing prices for primary care services for CareFirst and Kaiser, we find that negotiated rates tended to be lower for CareFirst than for

Kaiser. While this may reflect CareFirst's significant market share, it may also be a consequence of Kaiser's unique staff operating model.

While Maryland's average commercial professional reimbursements may be lower than many other states', the causal pathway from lower reimbursements to shortages is complex and depends on a variety of factors (including, but not limited to, local labor markets, malpractice climate, and hospital compensatory practices). Therefore, we report the price comparisons but caution against assuming a direct, statewide shortage signal.

Aim 2: Insurer Concentration and Access to Care

The second part of this study seeks to analyze how insurance carrier market concentration may affect insurance carriers' provider networks. Hilltop implemented this in two parts. First, we conducted a survey of Maryland's five largest carriers (CareFirst, Kaiser, Aetna, United, and Cigna) to collect data on the count of in-network medical doctors by specialty and nurse practitioners. Second, we examined the peer-reviewed literature to analyze the evidence based on the relationship between insurer concentration and individuals' access to care.

Carrier Survey Analysis

This survey was conducted from April 2025 to June 2025 for the largest PPO and HMO plans of the five largest health insurance groups in Maryland (CareFirst, Kaiser, United, Aetna, and Cigna). This survey leverages existing Maryland regulations in which health insurance carriers are required to "have the ability to identify, by county and for the City of Baltimore, the number of participating providers" by facility, provider type, and specialty code.[15] Each respondent was asked to provide the count of active in-network medical doctors and nurse practitioners by county of primary practice location for 2023 and 2024, both overall and for 23 specialist categories. Respondents were also asked for the number of in-network nurse practitioners. The survey used standardized definitions for each specialty and was developed in consultation with staff at the MHCC and the Maryland Insurance Administration (MIA). For additional details on the survey, see Appendix 2.

Table 10 describes the overall number of medical doctors and nurse practitioners by respondent. Respondent 1 reported 9,252 medical doctors in-network, Respondent 2 reported 19,607, Respondent 3 reported 14,108, Respondent 4 reported 12,839, and Respondent 5 reported 23,394. Similar variation exists in the reported numbers of nurse practitioners. Respondent 1 reported 1,926 active nurse practitioners in network, Respondent 2 reported 7,671, Respondent 3 reported 5,846, Respondent 4 reported 7,920, and Respondent 5 reported 3,598.

Table 10. Total Number of Active Medical Doctors and Nurse Practitioners in 2024, by Respondent

Respondent	# Total Active Medical Doctors	# Nurse Practitioners

[15] Md. Code Regs. 31.10.44.03(A)(7)

1	9,252	1,926
2	19,607	7,671
3	14,108	5,846
4	12,839	7,920
5	23,394	3,598

Notes: Respondent names have been anonymized. Where carriers reported data for PPO and HMO separately, totals have been averaged.

Table 11 lists the 2024 provider counts for selected specialties, Family Practice/General Practice, Obstetrics and Gynecology (general), Pediatrics (General), Psychiatry and Neurology (general psychiatry), Total Active Medical Doctors, and Total Active Nurse Practitioners—for each of the top five largest counties in Maryland, as well as all other counties. Additionally, we list the equivalent provider totals from the 2023-2024 Area Health Resources Files. The Area Health Resources Files (AHRF) is a county-level health workforce and infrastructure data set maintained by the Health Resources and Services Administration. It compiles provider counts from the American Medical Association Physician Masterfile and the American Osteopathic Association for physicians, as well as from state licensure boards, the National Provider Identifier (NPI) registry, and nursing associations for nurse practitioners and other clinicians. The AHRF aggregates these sources to provide annual estimates of active, non-federal patient care providers by specialty and geography, making it a widely used resource for comparing provider supply across counties and states (U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, National Center for Health Workforce Analysis, 2024).

Comparing the carrier-supplied provider counts with the denominator totals from the AHRF allows for high-level validation of the provider responses: cases in which the carrier totals for a given specialty in a given county far exceed the denominator from the AHRF call into question the validity of the carrier survey responses. In general, we find that the carrier survey responses are largely consistent with AHRF denominators: of the 180 total responses listed in Table 11 (six provider specialties, six counties, five respondents), only nine total counts exceed 125% of the ARF denominator. We highlight these in bold font.

Table 11. Counts of In-Network Providers by Selected County and Selected Specialty, 2024

County	Respondent					AHRF Total
	1	2	3	4	5	
Family Practice/General Practice						
Anne Arundel	39 (35.8%)	134 (122.9%)	129 (118.3%)	105 (96.3%)	95 (87.2%)	109
Baltimore City	55 (41.0%)	159 (118.7%)	98 (73.1%)	96 (71.6%)	109 (81.3%)	134
Baltimore County	79 (53.4%)	183 (123.6%)	157 (106.1%)	144 (97.3%)	138 (93.2%)	148
Montgomery	61 (21.9%)	219 (78.8%)	193 (69.4%)	169 (60.8%)	190 (68.3%)	278
Prince George's	46 (25.4%)	203 (112.2%)	137 (75.7%)	112 (61.9%)	136 (75.1%)	181
All other counties	102 (24.2%)	**612 (145.0%)**	484 (114.7%)	362 (85.8%)	371 (87.9%)	422
Obstetrics and Gynecology (general)						
Anne Arundel	41 (64.1%)	56 (87.5%)	56 (87.5%)	57 (89.1%)	57 (89.1%)	64
Baltimore City	132 (83.5%)	**204 (129.1%)**	145 (91.8%)	150 (94.9%)	111 (70.3%)	158
Baltimore County	95 (63.8%)	108 (72.5%)	96 (64.4%)	125 (83.9%)	125 (83.9%)	149
Montgomery	93 (31.7%)	150 (51.2%)	194 (66.2%)	146 (49.8%)	168 (57.3%)	293
Prince George's	62 (91.2%)	41 (60.3%)	46 (67.6%)	39 (57.4%)	45 (66.2%)	68
All other counties	61 (28.6%)	195 (91.5%)	201 (94.4%)	177 (83.1%)	218 (102.3%)	213
Pediatrics (general)						
Anne Arundel	38 (43.7%)	**112 (128.7%)**	90 (103.4%)	89 (102.3%)	77 (88.5%)	87
Baltimore City	147 (65.9%)	**303 (135.9%)**	251 (112.6%)	218 (97.8%)	141 (63.2%)	223
Baltimore County	54 (32.9%)	143 (87.2%)	116 (70.7%)	123 (75%)	95 (57.9%)	164
Montgomery	112 (24.8%)	278 (61.6%)	267 (59.2%)	249 (55.2%)	234 (51.9%)	451
Prince George's	54 (47.4%)	111 (97.4%)	83 (72.8%)	104 (91.2%)	83 (72.8%)	114
All other counties	97 (26.5%)	337 (92.1%)	356 (97.3%)	265 (72.4%)	253 (69.1%)	366
Psychiatry and Neurology (general psychiatry)						
Anne Arundel	16 (43.2%)	35 (94.6%)	17 (45.9%)	21 (56.8%)	**102 (275.7%)**	37
Baltimore City	136 (46.7%)	264 (90.7%)	163 (56%)	183 (62.9%)	112 (38.5%)	291

County	Respondent					AHRF Total
	1	2	3	4	5	
Baltimore County	78 (47.6%)	171 (104.3%)	0 (0%)	97 (59.1%)	56 (34.1%)	164
Montgomery	43 (15%)	127 (44.4%)	151 (52.8%)	66 (23.1%)	150 (52.4%)	286
Prince George's	14 (30.4%)	26 (56.5%)	3 (6.5%)	23 (50%)	26 (56.5%)	46
All other counties	49 (25.7%)	192 (100.5%)	220 (115.2%)	130 (68.1%)	171 (89.5%)	191
Total Active Medical Doctors						
Anne Arundel	692 (54.4%)	1544 (121.4%)	1113 (87.5%)	981 (77.1%)	**1941 (152.6%)**	1272
Baltimore City	3264 (60.6%)	6107 (113.4%)	3762 (69.8%)	3905 (72.5%)	4954 (92%)	5386
Baltimore County	1323 (48.1%)	2441 (88.8%)	1622 (59%)	1881 (68.4%)	**3488 (126.9%)**	2748
Montgomery	1500 (25.5%)	3014 (51.2%)	2390 (40.6%)	1931 (32.8%)	3326 (56.4%)	5892
Prince George's	1224 (92.7%)	1465 (111%)	1142 (86.5%)	1010 (76.5%)	**2103 (159.3%)**	1320
All other counties	1249 (28%)	5038 (113%)	4079 (91.5%)	3133 (70.3%)	**7583 (170.1%)**	4459
Total Active Nurse Practitioners						
Anne Arundel	176 (25%)	597 (84.7%)	542 (76.9%)	591 (83.8%)	396 (56.2%)	705
Baltimore City	773 (39.6%)	1748 (89.5%)	1233 (63.1%)	2115 (108.2%)	463 (23.7%)	1954
Baltimore County	331 (27.1%)	1162 (95.2%)	650 (53.3%)	1274 (104.4%)	521 (42.7%)	1220
Montgomery	249 (19.8%)	1141 (90.9%)	777 (61.9%)	996 (79.4%)	645 (51.4%)	1255
Prince George's	112 (13.7%)	723 (88.5%)	426 (52.1%)	723 (88.5%)	461 (56.4%)	817
All other counties	285 (11.7%)	2301 (94.3%)	2218 (90.9%)	2223 (91.1%)	1113 (45.6%)	2439

Notes: Data are from carrier surveys submitted by the five largest health insurance companies in Maryland. We use the following variable definitions from the 2023-2024 Area Health Resources Files for each provider specialty: md_nf_fammed_gen_all_pc_22 for Family Practice/General Practice; md_nf_obgyn_gen_all_pc_22 for Obstetrics and Gynecology (general); md_nf_ped_gen_all_pc_22 for Pediatrics (general); md_nf_psych_all_pc_22 for Psychiatry and Neurology (general psychiatry); md_nf_all_pc_22 for Total Active Medical Doctors; and np_npi_23 for Total Active Nurse Practitioners. Responses with over 125% of the AHRF denominator are in bold. The 2023-2024 County-Level Area Health Resources Files is available here: https://data.hrsa.gov/data/download?data=AHRF#AHRF

There is not a clear theoretical reason why provider network density should vary with insurer concentration. Larger insurers—that is, those with more market share—may be better able to handle the administrative costs involved in creating and maintaining provider networks and thus tend to have larger networks. Conversely, insurers with more market share may have the ability

to exclude providers from their networks—that is, to create narrow networks—in order to control costs and thus have smaller networks. So, the question is empirical: do insurers with greater market share in a given county have smaller or larger networks relative to the AHRF denominator? While Maryland regulations have network adequacy standards for carriers, strategic network development above regulatory or statutory minimums is, in theory, possible.[16]

Hilltop tested this in two ways. First, we presented descriptive evidence for across counties on the extent to which carrier-plan combinations with higher market share have a higher share of total providers that are in-network. Second, we used regression analysis to test this hypothesis across all specialties and all counties.

Hilltop researchers combined three separate data sources for this analysis. First, we calculated market shares using the APCD for 2023. Unlike in Table 6, where we presented the largest market share by county, we calculated market share for each carrier in each county. We then linked on the results of the carrier survey described above. Finally, we linked on provider counts in the relevant specialties from the AHRF. The analytic data set for this analysis consists of 1,920 observations: counts of in-network providers by specialty for 4 carriers, across all 24 Maryland counties, for 20 specialties.[17] For each specialty, we had both provider counties from that carrier-plan combination, and the corresponding count of all non-federal patient care provider types from the AHRF. For addition detail on the construction and contents of this analytic data set, see Appendix 3.

In general, network density is high. In an initial analysis using this analytic data set, we restricted attention to county-specialty-carrier observations in which the market share of the carrier is at least 1%, indicating that the carrier is active in that county. We found that the median percentage of available providers that are in-network is 78.0%.

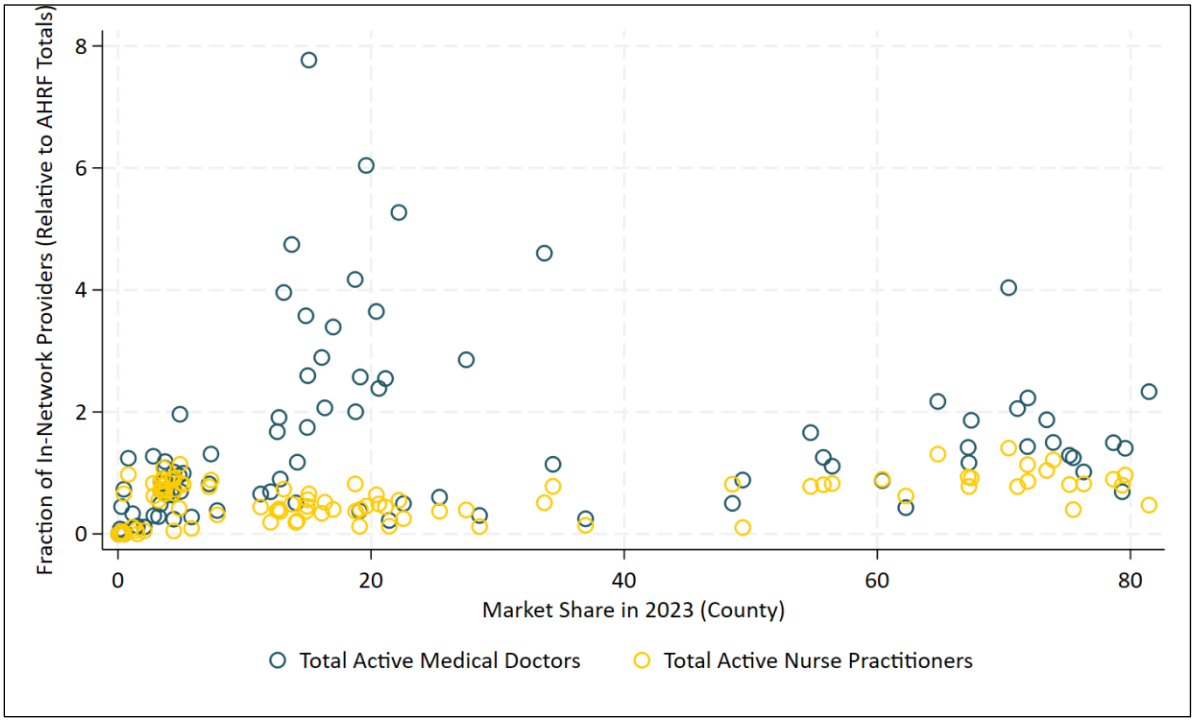
Additionally, larger market share is correlated with a higher fraction of available total active medical doctors and total active nurse practitioners. Figure 6, below, shows the relationship between the county-level market share and the county-level relative density of the total number of active medical doctors and total active nurse practitioners. Each point in the graph represents a carrier-county combination, where the axis represents the 2023 market share of that carrier in that county, and the y-axis measures the relative density of reported in-network providers, relative to the universe of providers as reported in the AHRF. We documented positive trends for both specialties: carriers with a higher market share in a given county for a given specialty tend to have larger networks as a fraction of the AHRF denominator.[18]

[16] Specifically, COMAR 31.10.44.03 requires carriers to "develop and maintain a network of providers in sufficient numbers, geographic locations, and practicing specialties to ensure enrollees have access to participating providers for the full scope of benefits and services covered under the carrier's health benefit plan."

[17] We were unable to locate claims for one carrier in the APCD.

[18] The coefficient on market share in the regression for total active medical doctors is 0.0091, with a p-value of 0.094. The coefficient on market share in the regression for total active nurse practitioners is 0.0059, with a p-value smaller than 0.001.

Figure 6. Relationship between Network Density of Total Active Medical Doctors and Total Active Nurse Practitioners and Carrier Market Share, 2023[19]



Hilltop then used linear regression to estimate the relationship between market share and in-network provider density across all specialties, counties, and carriers but controlling for specialty-specific effects, county-specific effects, and carrier-specific effects. Thus, this analysis examines whether a systematic relationship exists between insurer market share and the fraction of total possible providers. Each observation in the analytic data set is a carrier-specialty-county combination (for example, Respondent 5—Emergency (general)—Worcester County, and the outcome is the number of in-network providers for that specialty, in that county, reported by that carrier, scaled by the ARF denominator. The regressor of interest is the market share of a given carrier in a given county (for example, Respondent 5 in Worcester County). The baseline specification uses all county-carrier-specialty observations, including those where the fraction of providers that are in-network far exceeds the reported denominators from the AHRF. We also estimate two alternative models eliminating observations for which the reported number of in-network providers far exceeds the AHRF denominator. Results are presented in Table 12.

Table 12. Relationship between Market Share and In-Network Density, 2023

	All	Fraction AHRF < 2	Fraction AHRF < 1.25
Market Share	0.0163 (0.0059)**	0.0076 (0.0016)***	0.0048 (0.0012) ***
Observation count	1,672	1,436	1,254

Notes: All regressions include fixed effects for county, specialty, and carrier. Data for this analysis are from the Maryland All-Payer Claims Database from 2023, the carrier survey for 2023, and the Area Health Resources Files. For all regressions, standard errors are clustered at the county level to account for potential correlation in unobserved factors across observations within the same county that may affect both insurer market share and provider network composition. ** p < 0.05; *** p <0.01.

[19] Since two of the data sets underlying this analysis—the APCD and Carrier survey responses—are not publicly available, we do not provide the data underlying this figure in the appendix.

Hilltop found consistent evidence that carriers that have higher market share tend to have a higher proportion of total providers in-network. This result is robust to alternative trimming thresholds and is likely not due to the influence of outliers in our measure of in-network provider density.

Additionally, in response to stakeholder comments, we re-ran this analysis at the specialty level in order to understand whether the relationship between carrier market share and network density varies among different specialties. We found no statistically significant evidence of negative relationships between market share and network density for any of the specialties included in this study. Additional details are available upon request.

In summary, we found no evidence that greater insurer market concentration adversely affects provider networks.

Limitations

This section uses in-network provider count data by specialty and county collected from carriers to examine the relationship between carrier-specific county-level market share and the percentage of total providers that are in-network.

This work has three primary limitations. First, Hilltop relied on provider-supplied data on in-network provider counts by specialty and county. While, as noted above, carriers are required by Maryland regulation (COMAR 31.10.44.03.A.7) to "have the ability to identify, by county and for the City of Baltimore, the number of participating providers" by facility, provider type, and specialty, we note that certain provider counts substantially exceeded those listed in the AHRF. For the 180 data points presented in Table 12, only 5% of carrier-specialty-geography counts were greater than 125% of the corresponding provider count listed in the AHRF. For the entire analytical data set for the regression analysis, 24.1% of total observations were greater than 125% of the corresponding provider count listed in the AHRF. We used three different regression specifications in order to mitigate the impact of reporting error in this analysis.

Second, Hilltop used provider counts from the AHRF as "denominators" for this analysis in order to determine the fraction of "total" providers, by specialty and county, in a given carrier's network. However, the AHRF has limitations. First, the data are lagged by one year: in the most recently available version of the AHRF at the time of writing, almost all provider counts were from 2022, while the carrier survey data and market share data are both from 2023. While we do not believe that this introduced bias into the analysis, we acknowledge this data limitation. Additionally, there may be differences in provider categories between the AHRF and carrier survey. In order to mitigate potential differences, we used "patient care" provider counts from the AHRF as opposed to providers engaged in administration, teaching, or research, and requested that carriers supply counts for active medical doctors and nurse practitioners. However, ambiguities in the definition of "active" may contribute to variation in provider counts among carriers.

Finally, this analysis is correlational, not causal. The results do not indicate that if a carrier were to increase its market share in a given county then the carrier would—for whatever reason—be caused to increase its provider networks. Instead, this analysis shows that carriers that have a higher market share in a given county tend to also have larger provider networks. Teasing out the causal chain is beyond the scope of this analysis.

Stakeholders emphasized that carrier-reported provider counts may not distinguish between full-time, part-time, and inactive physicians, and often include clinicians who are affiliated with multiple networks or who limit patient panels (e.g., concierge or direct-pay models). Consequently, these counts may exaggerate apparent network breadth and understate the practical barriers patients face in obtaining appointments. Several participants also highlighted that the quantitative network measures presented here may not fully capture patient access challenges such as long wait times for both primary and specialty care, particularly in neurology, rheumatology, and behavioral health. They also noted that geographic disparities persist, with rural and some suburban counties reporting limited appointment availability despite nominal network inclusion. These concerns suggest that network breadth alone may be an incomplete indicator of true access to care.

Results of the Literature Review

Consumer access to health care services is shaped not only by the organization of provider markets, but also potentially by the degree of concentration among insurers. In markets where a small number of carriers control the majority of enrollment, these insurers may exercise substantial bargaining leverage in provider contracting, network design, and utilization management. While insurer market power can, in theory, facilitate cost containment, it can also influence the breadth and composition of provider networks, referral flows, and the geographic accessibility of care. Recognizing the potential for these effects to shape access, and at MHCC's request, Hilltop conducted a targeted review of the peer-reviewed literature to assess the relationship between insurer market concentration and consumers' access to health services.

The review was conducted in PubMed using search terms related to insurer consolidation and access to health services. Studies that primarily examined effects on prices, spending, or other non-access outcomes were excluded. To ensure relevance given the rapidly evolving health care environment, we restricted inclusion to studies published in the last ten years. Most empirical work on insurer concentration focuses on price effects (for patients, providers, or insurers) rather than on access. This likely reflects both the conceptual challenges in defining "access" and the empirical difficulty of measuring it consistently across settings.

Insurer market concentration is consistently found to be high across many different types of markets, with measurable implications for access to care, though the direction and magnitude vary by context, population, and market segment. While many studies find evidence that higher insurer concentration is associated with narrower networks and reduced provider choice, which may limit access despite potential gains in bargaining power, the evidence remains mixed and context-dependent.

For the Medicare Advantage population, Curto et al. (2021) document that local markets are highly concentrated, and competitive bidding primarily benefits plans rather than enrollees. Narrow networks lower premiums but reduce provider choice, illustrating a direct trade-off between affordability and network breadth. Ho and Lee (2017) similarly find that reduced insurer competition in large-group markets decreases plan choice and consumer welfare; their model simulations suggest that fewer insurers can raise premiums and, depending on market conditions, also affect hospital prices.

In Medicaid managed care, Marr et al. (2024) show that commercial insurer market power can shape Medicaid provider networks: insurers holding more than 30% of the commercial market had Medicaid networks that were 12.5 percentage points broader than those of less dominant insurers, with the effect observed for most specialties except psychiatry. In contrast, Meille et al. (2023) find that Medicare fee-for-service beneficiaries living in highly concentrated insurance markets report lower access to immediate care, underscoring that broader networks do not necessarily translate into better perceived access.

Several studies link insurer concentration to broader measures of utilization and access. Adia et al. (2025) find that increased market concentration is associated with a higher probability of preventable hospital admissions, with variation by insurance type and race/ethnicity. Erickson et al. (2017) document that despite an 8% decline in dialysis providers from 2001 to 2011, the number of dialysis facilities increased by 54%, and patients experienced a 10% increase in the number of local competitors on average. This suggests that consolidation does not always reduce the apparent availability of care, though effects on patient choice and travel time may differ.

Finally, the RAND (2022) synthesis of 172 studies concludes that insurer consolidation tends to lower provider prices but cost savings are rarely passed to consumers; instead, narrow networks and reduced provider choice are frequently observed. Taken together, these findings suggest that while dominant insurers may secure lower payment rates, the implications for consumer access are mixed and context-dependent.

Key findings from the literature are summarized in Appendix Table 5.

Conclusion

In this section, we collected data on in-network provider counts from the five largest health insurance carriers in Maryland. We analyzed the data and then linked it to market shares calculated from the APCD and provider specialty denominators from the AHRF in order to quantitatively assess whether carriers with a larger market share in a county tended to have larger, or smaller, provider networks in that county.

We found that most insurers contract with a large proportion of available providers across counties and specialties: restricting attention to county-specialty-carrier observations in which the market share of the carrier is at least 1%, indicating that the carrier is active in that county, and the median percentage of available providers that are in-network is 78.0%. Moreover, while

it is theoretically possible that insurers with higher market share may restrict their networks in order to control costs, we found that insurers with higher market share tend to contract with more—not fewer—providers within a given county and specialty. Thus, we found no evidence that insurer market concentration adversely affects provider networks.

Finally, we examined the literature to assess the relationship between insurer market concentration and consumers' access to health services. We observed that while dominant insurers may secure lower payment rates, the implications for consumer access are mixed and context-dependent.

Aim 3: Provider Concentration

A significant and growing body of literature has examined provider concentration, its causes, and its consequences. For this section, Hilltop used a variety of data sets to provide a state-level overview of provider concentration in Maryland—compared to neighboring states and nationally, and also within Maryland over time.

How Does Maryland Compare to Other States?

For this section, Hilltop used publicly available data for several different provider types to document provider market concentration in Maryland over time, relative to both neighboring states and nationally. This analysis relies on the Compendium of U.S. Health Systems published by the Agency for Healthcare Research and Quality (AHRQ). This data source identifies health systems and then links these health systems to hospitals, group practices, outpatient sites, and other provider types (Agency for Healthcare Research and Quality, 2024a). This is a standardized, national framework with which to examine the structure and scope of health systems across states and over time (Mathematica, 2023).

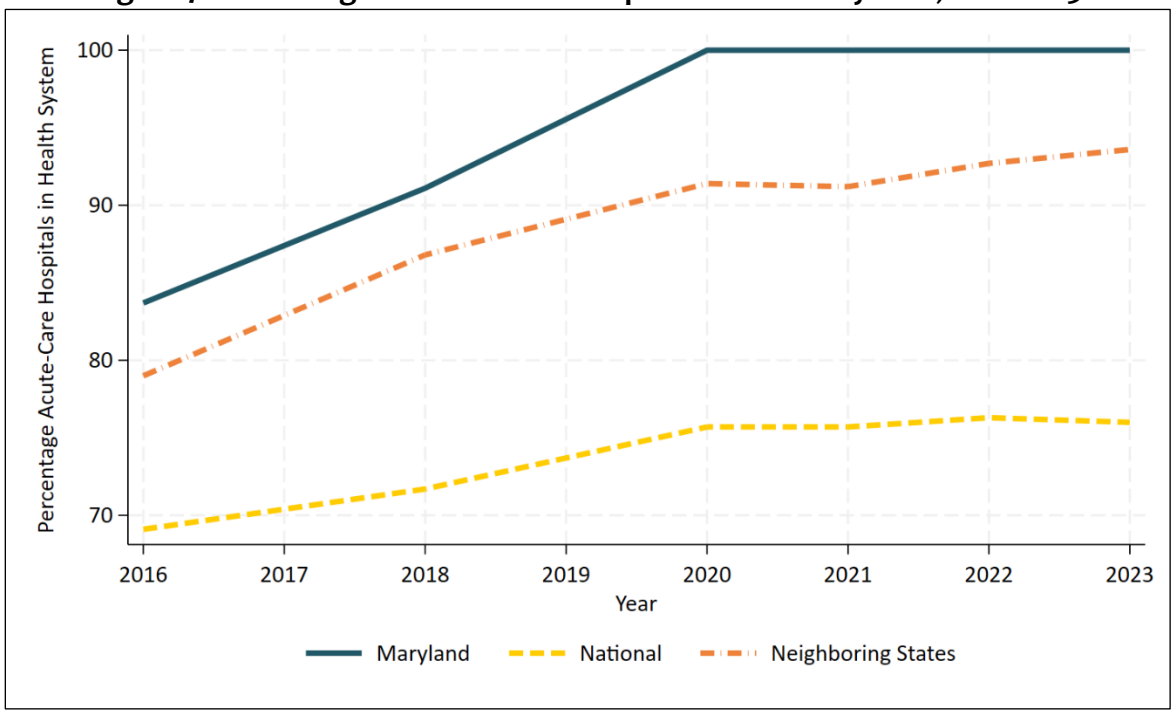
The key metric for this analysis is the percentage of providers—hospitals, group practices, or outpatient sites affiliated with a health system. For this analysis, health systems "includes at least one hospital and at least one group of physicians that provides comprehensive care (including primary and specialty care) who are connected with each other and with the hospital through common ownership or joint management" (Agency for Healthcare Research and Quality, 2024b). Health system affiliation does not necessarily imply greater hospital market concentration: if, for example, all hospitals in a state become affiliated with different health systems, then system affiliation would not necessarily increase the market power of any one hospital. However, health system affiliation is likely to result in increased negotiating power with payers and indicates changes in market concentration if health system affiliation is not uniform within the state.

Hospitals

Hilltop used the Compendium of U.S. Health Systems hospital linkage file published by AHRQ to estimate the percentage of acute care hospitals affiliated with a health system from 2016 to 2023.

As of 2023 (the most recently available year of data), Maryland had 45 acute care hospitals included in this database. We only considered acute care hospitals in this analysis. Figure 7 presents the results, and Appendix Table 2 provides the underlying data. We found that, nationally, the percentage of acute care hospitals affiliated with hospital systems grew from 69.1% in 2016 to 76.0% by 2023. The percentage of acute care hospitals in neighboring states that are system-affiliated rose from 79.0% in 2016 to 93.6% in 2023. Finally, in Maryland, the percentage of acute care hospitals that are system-affiliated rose from 83.7% in 2016 to 100.0% in 2020 and remained at that level through 2023.

Figure 7. Percentage of Acute Care Hospitals in Health System, 2016-2023



As noted above, while the percentage of hospitals with health system affiliation is an important metric, a higher percentage does not necessarily indicate greater market concentration. While we were unable to calculate the HHI for provider markets due to data limitations, which we further address in the limitations section, HCCI Healthy Marketplace Index reports that, as of 2021, the HHI for hospitals in the Baltimore area in 2021 was 1,411, indicating a low level of concentration. The HHI for Hagerstown was 2,430 in 2021, indicating a moderate degree of concentration.[20] Thus, while system affiliation has increased for acute care hospitals in Maryland, Maryland does not exhibit especially high levels of hospital market HHI.

Table 13 presents the health systems active in Maryland from 2016 to 2023. Hilltop found that over this period, 22 hospital health systems owned at least one hospital each, although 18 hospital systems were affiliated with acute care hospitals in Maryland in any given year. Many of

[20] For additional information, see the HCCI Health Marketplace Index available here: https://healthcostinstitute.org/hcci-originals/hmi-interactive#HMI-Concentration-Index.

the hospital systems active in Maryland as of 2023 are relatively small: ChristianaCare and Luminis Health both had only 2 system hospitals; TidalHealth, LifeBridge, and Adventist Healthcare had 3, 4, and 4 in-system hospitals, respectively; and Johns Hopkins Health System and the University of Maryland Medical System had 6 and 11 hospitals, respectively.

Hilltop also noted the presence of large, out-of-state health systems. Ascension Health, which owns St. Agnes Hospital, is headquartered in Missouri and had 104 acute care hospitals in its system in 2023; Trinity Health, which owns Holy Cross Hospital and Holy Cross Hospital Germantown, is headquartered in Michigan; UPMC, which owns UPMC-Western Maryland, is headquartered in Pennsylvania; and West Virginia University Health System, which owns Garrett County Memorial Hospital, is headquartered in West Virginia.

Table 13. Health Systems in Maryland, 2016-2023

Health System	# System Hospitals	2016	2018	2020	2021	2022	2023
Adventist Healthcare	4	2	2	3	3	3	3
Ascension Health	104	1	1	1	1	1	1
Atlantic General Health System	1	0	1	1	1	1	1
Bon Secours Health System	11	1	1	0	0	0	0
CalvertHealth	1	1	1	1	1	1	1
ChristianaCare	2	0	0	1	1	1	1
Dimensions Healthcare System	2	2	0	0	0	0	0
Frederick Regional Health System	1	1	1	1	1	1	1
GBMC Healthcare	1	1	1	1	1	1	1
Johns Hopkins Health System	6	4	4	4	4	4	4
LifeBridge Health	4	3	3	4	4	4	4
Luminis Health	2	1	1	2	2	2	2
MedStar Health	9	7	7	7	7	7	7
Mercy Medical Center	1	1	1	1	1	1	1
Meritus Health	1	1	1	1	1	1	1
TidalHealth Peninsula Regional	3	1	1	2	2	2	2
Trinity Health	97	2	2	2	2	2	2
UPMC	32	0	0	1	1	1	1
Union Hospital	1	1	1	0	0	0	0
University of Maryland Medical System	11	10	11	12	12	11	11
West Virginia University Health System	22	0	0	1	1	1	1
Western Maryland Health System	1	1	1	0	0	0	0
Not in hospital system		**8**	**4**	**0**	**0**	**0**	**0**
All Hospitals		**49**	**45**	**46**	**46**	**45**	**45**

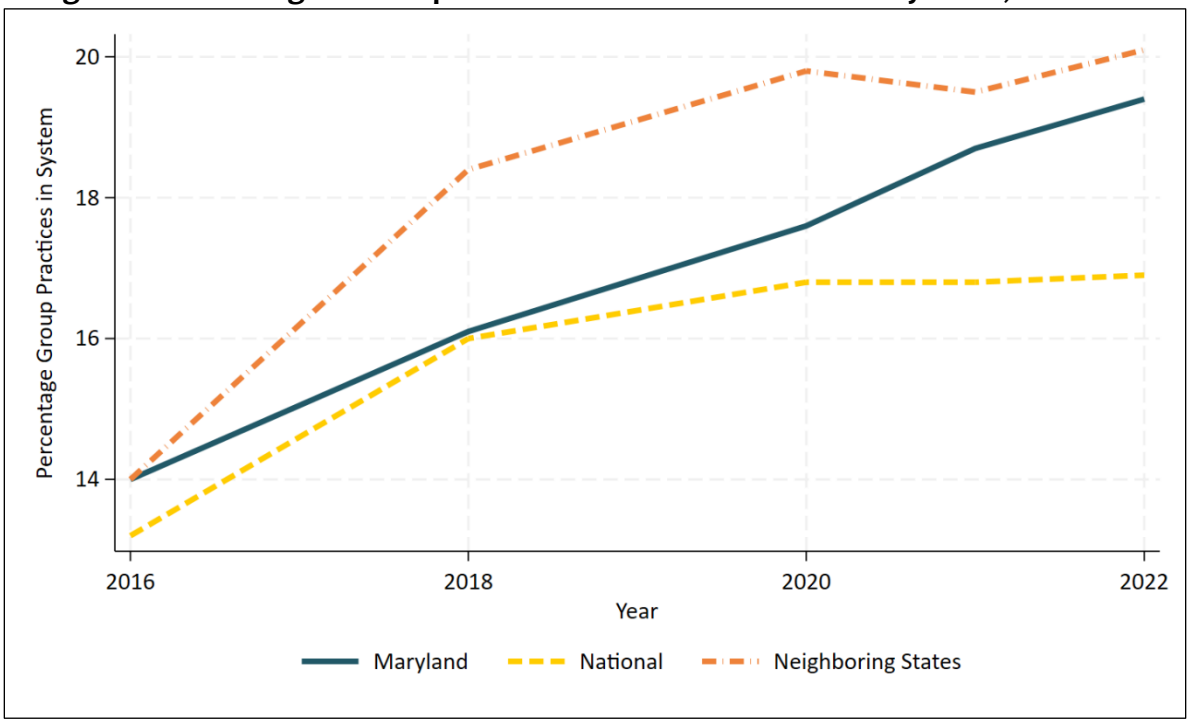
Notes: Data for this analysis are from the AHRQ Compendium of Health Systems 2016, 2018, 2020, 2021, 2022, and 2023. The sample is limited to acute care hospitals (acutehosp_flag = 1) and system affiliation is defined for hospitals that are linked to a health system based on AHRQ health system identifier (health_sys_id). We link on the most recently availably health systems names, and number of total acute care hospitals in the system, to health system identifiers.

Group Practices

For this analysis, Hilltop used the AHRQ Compendium of Health Systems group practice linkage file to estimate the percentage of group practices affiliated with a health system from 2016-2022. This data source is based on the Medicare Data on Provider Practice and Specialty (MD-PPAS) and identifies all practices that have submitted claims to Medicare. Group practices are restricted to those with two or more physicians.[21] As of 2022, the latest year of data, Maryland had 712 group practices in this database. We calculated the percentage of total practices in Maryland, neighboring states, and nationally that are affiliated with health systems. We used the same definition of health system as in the analysis above.

Figure 8 shows the results, and Appendix Table 3 provides the underlying data. Hilltop observed that the percentage of group practices in health systems grew strongly in Maryland, from 14.0% in 2016 to 19.4% in 2022. The equivalent metric also grew for neighboring states, from 14.0% in 2016 to 20.1% in 2022, whereas, nationally, this metric grew relatively slowly, from 2018 (16.0%) to 2022 (16.9%). Thus, Maryland exhibits relatively high and growing consolidation of group practices as defined by health system affiliation.

Figure 8. Percentage of Group Practices Affiliated with Health Systems, 2016-2022

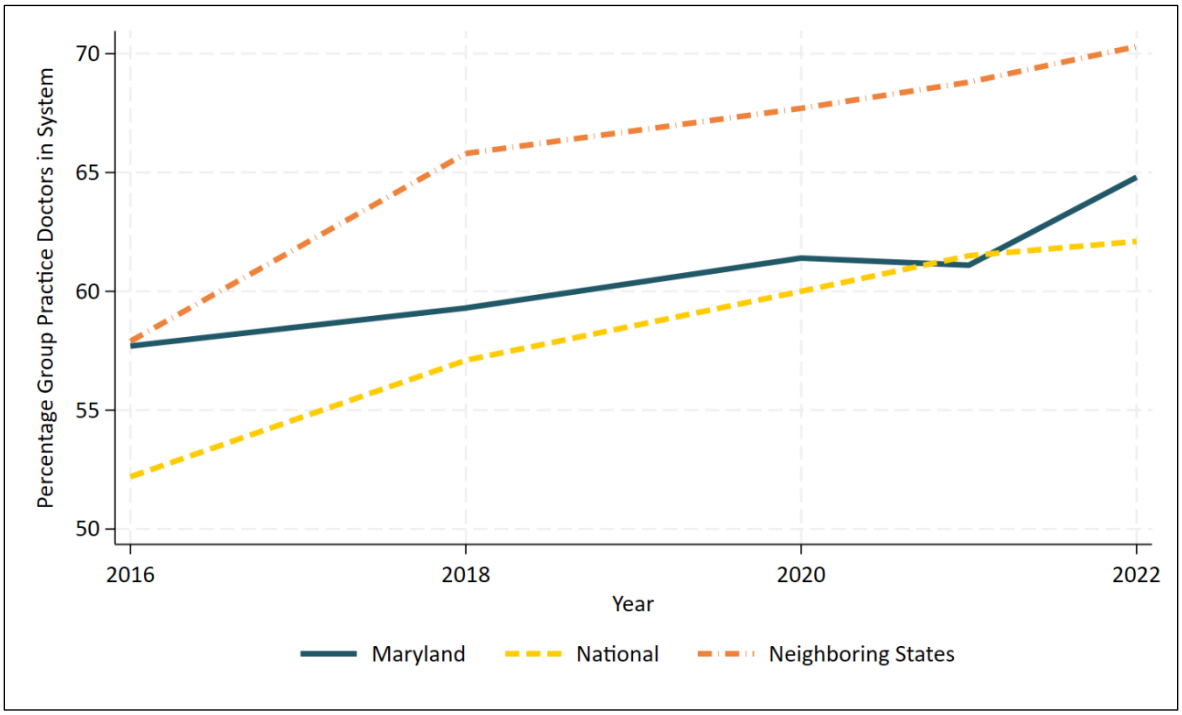


Hilltop's team conducted the same analysis focused on the percentage of doctors in group practices affiliated with health systems over time. As above, we used the AHRQ Compendium of

[21] For additional details on the file construction and underlying definitions, see the AHRQ Compendium of Health Systems Group Practice Linkage File Technical Documentation, available here: https://www.ahrq.gov/sites/default/files/wysiwyg/chsp/compendium/2022-group-practice-linkage-file-tech-doc.pdf.

Health Systems group practice linkage file for this analysis. Figure 9 presents the results, and Appendix Table 3 shows the underlying data. Nationally, the percentage of doctors in group practices affiliated with systems has risen over time, from 52.2% in 2016 to 62.1% in 2022. States neighboring Maryland have also experienced growth in the percentage of physicians at group practices affiliated with health systems: from 57.9% in 2016 to 70.3% in 2022. This measure grew modestly in Maryland from 2016 to 2021 (57.7% to 61.1%), with a recent uptick in 2022 to 64.8%.

Figure 9. Percentage of Physicians in Group Practices Affiliated with Health Systems, 2016-2022



Outpatient Sites

This analysis used the AHRQ Compendium of Health Systems outpatient site linkage file to estimate the percentage of group practices affiliated with a health system from 2022 to 2023. The data source is based on IQVIA OneKey data and identifies outpatient sites with a physician, nurse practitioners, or physician assistant, and then links them to affiliated health systems. All available types of outpatient sites are included in this analysis: alternative medicine, clinic, health department, imaging center, independent physician practice, medical group, medical spa, outpatient surgical center, and physical medicine and rehabilitation. As of 2023, the latest year of data, Maryland had 6,474 outpatient sites in this database. See Table 14 for the total percentage of outpatient sites affiliated with health systems for Maryland, neighboring states, and nationally, as well as Maryland's state rank for 2022 and 2023 compared to all other states in the data.

Table 14. Percentage of Outpatient Sites Affiliated with Health Systems, 2022 and 2023

Segment	% of Outpatient Sites Owned by Health Systems	
	2022 (rank)	**2023 (rank)**
Maryland	20.9% (40/51)	21.5% (40/51)
Neighboring states	24.6%	25.2%
National	**33.4%**	**34.4%**

Notes: The underlying files contain 283,138 observations for 2022 and 279,446 observations for 2023. Outpatient sites owned by a health system are defined as those for which the value of health_sys_id is not missing. Neighboring states are West Virginia, Pennsylvania, Delaware, the District of Columbia, and Virginia.

Hilltop found that, in 2022, 20.9% of outpatient sites in Maryland were affiliated with a health system, which compares to 24.6% for neighboring states and 33.4% nationally. In Maryland, there were 1,374 outpatient sites with system affiliation in 2022; of these, 87.6% (1,203) were medical groups. For the 1,203 system-affiliated medical groups in 2022, the most common specialties, as defined in this data source, were primary care (125 groups, or 10.4%), obstetrics/gynecology (89 groups, or 7.4%), and oncology (78 groups, or 6.5%). For the 3,714 non-system affiliated medical groups in Maryland in 2022, the most common specialties were behavioral health (380 groups, or 10.2%), pediatric medicine (292 groups, or 7.9%), and internal medicine (270 groups, or 7.3%). Notably, while 20.9% of outpatient sites overall were affiliated with health systems in Maryland in 2022, only 8.4% of behavioral health providers were affiliated with health systems, while 34.5% of primary care medical groups were affiliated with health systems.

The percentage of outpatient sites in Maryland affiliated with a health system grew marginally to 2023, with 21.5% of outpatient sites linked to a health system, compared to 25.2% for neighboring states and 34.4% nationally. In both years, Maryland was ranked 40th across states in terms of the percentage of outpatient sites that were affiliated with health systems (South Dakota was first in both years, with 45.4% and 46.3% in 2022 and 2023, respectively). These results indicate that Maryland has relatively low levels of vertical integration in terms of health system affiliation of outpatient sites compared with other states.

Within Maryland

This analysis used data from IQVIA's OneKey database to analyze trends in the number and ownership concentration of physician practices, medical groups, and ambulatory surgical centers in Maryland from 2018 to 2023. OneKey is a national provider-level data set that integrates multiple administrative and commercial sources to produce annual counts of health care facilities, including practice type, location, and affiliated ownership. For this analysis, we excluded non–MD specialties and focused on entities operating in Maryland. The data set allows for identification of unique owners across facilities, enabling calculation of county-level concentration metrics such as the share of facilities owned by the largest entity.

Hilltop found that, from 2018 to 2023, the number of independent physician practices in Maryland declined sharply, falling from 3,554 to 1,922, representing a 45.9% decrease. Over the same period, the number of medical group facilities increased by 17.5%, from 4,858 to 5,709, and the number of outpatient surgical centers rose by 27.0%, from 300 to 381. See Table 15.

Table 15 shows that ownership patterns also shifted, particularly among medical groups and surgical centers. The share of medical group facilities affiliated with corporate entities increased from 18.9% in 2018 to 36.0% in 2021 and then grew modestly to 37.4% in 2023. Over this same period, independent ownership of medical groups declined from 57.5% to 39.5%. Outpatient surgical centers followed a similar trend, with corporate ownership rising from 19.3% to 39.9% and independent ownership falling from 65.0% to 35.7%. In contrast, nearly all remaining independent physician practices continued to operate without a formal affiliation, with over 98% classified as independently owned.

Table 15. Trends in Health Service Provider Counts and Ownership Type in Maryland, 2018-2023

Characteristic	2018	2019	2020	2021	2022	2023
Independent Physician Practice						
Count	3554	2777	2445	2374	2182	1922
% corporate	0.00%	0.07%	0.04%	0.08%	0.09%	0.16%
% IDN	0.65%	0.61%	0.86%	1.26%	1.01%	0.99%
% Independent	99.35%	99.32%	99.10%	98.65%	98.90%	98.86%
Medical Group						
Count	4858	4854	4997	5492	5613	5709
% corporate	18.94%	23.69%	30.46%	35.96%	36.26%	37.41%
% IDN	23.57%	22.79%	23.31%	22.61%	23.02%	23.07%
% Independent	57.49%	53.52%	46.23%	41.42%	40.73%	39.52%
Outpatient Surgical Center						
Count	300	303	311	328	394	381
% corporate	19.33%	25.08%	29.26%	32.93%	39.09%	39.90%
% IDN	15.67%	17.82%	16.72%	17.38%	23.86%	24.41%
% Independent	65.00%	57.10%	54.02%	49.70%	37.06%	35.70%

Note: This table reports trends in the number and ownership composition of outpatient facility types in Maryland from 2018 to 2023, using IQVIA OneKey data. Facilities are restricted to three types of interest: independent physician practices, medical groups, and outpatient surgical centers, identified using cot_fclt_typ_desc. Non-physician specialties such as dentistry, podiatry, chiropractic, audiology, occupational therapy, and nutrition are excluded. Ownership status is derived from two OneKey variables: ownr_stat_desc and corp_par_cot_fclt_typ_desc. Facilities are classified as "IDN" if their corporate parent type is "INTEGRATED DELIVERY NETWORK (IDN)," indicating ownership or affiliation with a vertically integrated health system. "Corporate" refers to ownership by non-IDN entities such as private equity firms, retail chains, or management companies. Facilities with no listed corporate parent and flagged as "INDEPENDENT" are categorized as independent. All percentages are calculated as a share of the total number of facilities in each category and year. Each facility is counted once per year.

While this change in ownership structure occurred over all medical group specialties, the shift to corporate ownership was more pronounced in certain specialties than others. For example, the percentage of allergy/immunology medical groups with corporate ownership increased from 17.9% in 2018 to 68.8% in 2023; for pain management medical groups, from 23.3% in 2018 to 70.3% in 2023; for orthopedics, from 6.3% in 2018 to 51.0% in 2023; and for ophthalmology, from 22.6% in 2018 to 54.3% in 2023. However, not all specialties experienced a large increase in corporate ownership over this period. For example, the percentage of oncology medical groups with corporate ownership increased from 21.9% in 2018 to 25.5% in 2023; for neurology, 12.4% in 2018 to 15.0% in 2023; and for dialysis centers, 91.1% in 2018 to 92.9% in 2023.

These shifts in market structure are significant. Corporate ownership or ownership by an integrated delivery network (IDN) may lend a degree of negotiating power to providers that may in turn lead to higher negotiated rates. Recent research supports this: a study based on price transparency data from 174,561 primary care providers offering office visit services for commercial-insured patients from four national insurers finds that corporate ownership of primary care providers is associated with an 18% higher negotiated rate for level 3 new and established patient office visits (Wang et al., 2025). Recent work on private-equity acquisitions shows similar pricing effects: a 2022 difference-in-differences event-study found increases of 20.2% in charges and 11.0% in allowed amounts per claim following acquisition (Singh et al., 2022) while a 2025 study of gastroenterology practices documented a 28.4% increase in prices per claim following PE acquisition, driven largely by higher professional fees (Singh et al., 2025).

While this indicates substantial shifts in the landscape of health service providers from 2018 to 2023, the growing corporate ownership does not necessarily indicate the presence of anti-competitive consolidation that would be characterized by the *growth in the market share of a single owner* rather than class of owners. Thus, we next examined the county-level market concentration of independent physician groups, medical group facilities, and outpatient surgical center facilities in Maryland in 2023 (latest year of data available). In this analysis, we presented the number of facilities across counties, the number of owners, and then the percentage market share of the top owner defined as the percentage of facilities in a county operated by the single largest owner, excluding owners with only one facility. When no owner operates more than one facility in a given county, the "Top Owner Share" is marked as not available (N/A).

Table 16 shows the results of the distribution of independent physician groups. Across Maryland counties, the number of independent physician group facilities ranges from just 2 in Somerset County to over 600 in Montgomery County. In most counties, ownership is highly fragmented, with each facility operated by a different owner. As a result, no single owner accounts for a meaningful share of the market in the majority of counties. In a small number of more populous counties—for example, Prince George's County, Baltimore County, and Montgomery County—individual owners operate more than one facility; however, even in these counties, the top owner's share remains below 1.5%. These findings suggest that, as of 2023, independent physician group ownership remains relatively unconcentrated across Maryland.

Table 16. Market Concentration of Independent Physician Groups in Maryland

County	No. of Facilities	No. of Owners	Top Owner Share*
Allegany County	30	30	N/A
Anne Arundel County	151	151	N/A
Baltimore City	290	288	1.03%
Baltimore County	167	166	1.20%
Calvert County	18	18	N/A
Caroline County	6	6	N/A
Carroll County	40	40	N/A
Cecil County	19	19	N/A
Charles County	30	30	N/A
Dorchester County	7	7	N/A
Frederick County	53	53	N/A
Garrett County	4	4	N/A
Harford County	56	56	N/A
Howard County	120	120	N/A
Kent County	11	11	N/A
Montgomery County	607	605	0.49%
Prince George's County	216	214	1.39%
Queen Anne's County	4	4	N/A
Saint Mary's County	11	11	N/A
Somerset County	2	2	N/A
Talbot County	27	27	N/A
Washington County	17	17	N/A
Wicomico County	19	19	N/A
Worcester County	17	17	N/A
Total	**1922**	**1915**	**N/A**

Note: This table summarizes market concentration metrics for independent physician practices in Maryland counties using IQVIA OneKey data for 2023. Facilities are restricted to those classified as "INDEPENDENT PHYSICIAN PRACTICE" in cot_fclt_typ_desc, with non-physician specialties excluded. Ownership is defined at the facility level using corp_par_nm and ownr_stat_desc. Each facility owned by a corporate parent retains that parent name as the owner ID; facilities without a corporate parent and flagged as "INDEPENDENT" are each treated as having a unique, unrelated owner (i.e., one facility per independent owner). The number of facilities and owners are tallied at the county level. The "Top Owner Share" represents the percentage of facilities in a county operated by the single largest owner, excluding owners with only one facility. When no owner operates more than one facility in a given county, the "Top Owner Share" is marked as not available (N/A). The total number of owners across counties may include duplicates, as some owners operate in multiple counties and are counted once per county.

The Hilltop team then examined the distribution and market concentration of medical groups across counties in 2023. The number of medical group facilities varies widely, from just 5 in

Somerset County to over 1,100 in Montgomery County.[22] Compared to independent physician groups, medical group ownership is somewhat more concentrated in certain counties. In Worcester and Caroline Counties, the top owner accounts for over 20% of all facilities. However, in many of the state's most populous counties, including Montgomery, Prince George's, and Anne Arundel, the top owner's share remains below 1%, reflecting a less concentrated ownership structure. Overall, there is a wide variation in medical group consolidation across the state, with higher concentration in some rural counties and more fragmented markets in urban counties. See Table 17.

Table 17. Market Concentration of Medical Groups in Maryland in 2023

County	No. of Facilities	No. of Owners	Top Owner Share*
Allegany County	83	62	2.41%
Anne Arundel County	473	307	0.42%
Baltimore City	784	431	0.51%
Baltimore County	725	276	2.21%
Calvert County	80	60	2.50%
Caroline County	13	10	23.08%
Carroll County	132	94	1.52%
Cecil County	80	52	2.50%
Charles County	141	106	1.42%
Dorchester County	25	19	12.00%
Frederick County	258	182	1.55%
Garrett County	26	18	11.54%
Harford County	203	130	0.99%
Howard County	329	259	0.91%
Kent County	26	22	7.69%
Montgomery County	1128	742	0.27%
Prince George's County	670	442	0.30%
Queen Anne's County	37	27	13.51%
Saint Mary's County	59	35	3.39%
Somerset County	5	5	N/A
Talbot County	79	51	2.53%
Washington County	167	122	1.80%
Wicomico County	113	86	6.19%
Worcester County	73	34	28.77%
Total	**5,709**	**3,572**	**N/A**

Notes: This table summarizes market concentration metrics for medical groups in Maryland counties using IQVIA OneKey data for 2023. Facilities are restricted to those classified as "MEDICAL GROUP" in cot_fclt_typ_desc, with non-physician specialties excluded. Ownership is defined at the facility level using corp_par_nm and ownr_stat_desc. Each facility owned by a corporate parent retains that parent name as the owner ID; facilities without a corporate parent and flagged as "INDEPENDENT" are each treated as having a unique, unrelated owner (i.e., one facility per independent owner). The number of facilities and owners are tallied at the county level. The "Top Owner Share" represents the share of facilities in a

[22] As explained in greater detail in the "limitations" section, the IQVIA OneKey data uses a different methodology to identify providers as does the AHRQ Compendium of Health Systems group practice file. Thus, the counts cannot be directly compared.

county operated by the single largest owner, excluding owners with only one facility. When no owner operates more than one facility in a given county, the "Top Owner Share" is marked as not available (N/A). The total number of owners across counties may include duplicates, as some owners operate in multiple counties and are counted once per county.
Note on data source differences: The number of medical groups reported here reflects IQVIA OneKey's facility-level classification and ownership hierarchy. Counts may differ substantially from those based on the AHRQ group practice definition, which uses different units of analysis and grouping criteria. See manuscript text for further discussion.

Table 18 presents data on the distribution and ownership concentration of ambulatory surgical centers (ASCs) across Maryland counties in 2023. The number of ASCs ranges from 0 in several counties (including Caroline, Dorchester, Garrett, and Somerset) to a high of 73 in Baltimore City and 69 in Montgomery County. In most counties, no single owner operates more than one ASC, although a few counties show signs of a more consolidated ASC market: Calvert and Wicomico each have a top owner operating 22% of ASCs, while Charles and Baltimore counties have top owners controlling about 15% and 14% of facilities, respectively. While Maryland has more ASCs per capita than any other state, the degree of ownership concentration varies substantially by county, with no clear consistent pattern across urban or rural areas.

Table 18. Market Concentration of Outpatient Surgical Centers in 2023

County	No. of Facilities	No. of Owners	Top Owner Share*
Allegany County	4	4	N/A
Anne Arundel County	40	28	5.00%
Baltimore City	73	46	5.48%
Baltimore County	14	12	14.29%
Calvert County	9	8	22.22%
Caroline County	0	0	N/A
Carroll County	7	7	N/A
Cecil County	2	2	N/A
Charles County	13	11	15.38%
Dorchester County	0	0	N/A
Frederick County	23	22	8.70%
Garrett County	0	0	N/A
Harford County	19	19	N/A
Howard County	27	24	7.41%
Kent County	1	1	N/A
Montgomery County	69	49	2.89%
Prince George's County	43	35	4.65%
Queen Anne's County	3	3	N/A
Saint Mary's County	4	4	N/A
Somerset County	0	0	N/A
Talbot County	7	7	N/A
Washington County	11	11	N/A
Wicomico County	9	8	22.22%
Worcester County	3	3	N/A
Total	**381**	**303**	**N/A**

Notes: This table summarizes market concentration metrics for outpatient surgical centers in Maryland coun
using IQVIA OneKey data for 2023. Facilities are restricted to those classified as "OUTPATIENT SURGICAL CEN
in cot_fclt_typ_desc, with non-physician specialties excluded. Ownership is defined at the facility level using

corp_par_nm and ownr_stat_desc. Each facility owned by a corporate parent retains that parent name as th owner ID; facilities without a corporate parent and flagged as "INDEPENDENT" are each treated as having a u unrelated owner (i.e., one facility per independent owner). The number of facilities and owners are tallied at county level. The "Top Owner Share" represents the share of facilities in a county operated by the single larg owner, excluding owners with only one facility. When no owner operates more than one facility in a given cc the "Top Owner Share" is marked as not available (N/A). The total number of owners across counties may in duplicates, as some owners operate in multiple counties and are counted once per county.

Finally, Hilltop examined trends over time in the ownership distribution of independent physician practices, medical groups, and outpatient surgical centers for the five largest counties in Maryland, as well as the rest of the state, from 2018 to 2023. We found that the county-specific trends largely mirror the state-level trends: the number of independent physician practices is falling, and the number of medical groups is rising, across all geographies studied over this period. Furthermore, the trends in ownership distribution largely align with the state-level results: for medical groups, the percentage with corporate ownership rose over this period, although this was least pronounced in Baltimore City. Additionally, for outpatient surgical centers, the percentage with corporate or IDN ownership typically increased from 2018 to 2023. Table 19 presents these results.

Table 19. Ownership Trends for Health Services Providers in Maryland, by Geography, 2018-2023

Characteristic	2018	2019	2020	2021	2022	2023
Independent Physician Practice						
Montgomery County	**1,160**	**823**	**744**	**733**	**684**	**607**
% Corporate	0.00%	0.24%	0.13%	0.14%	0.15%	0.16%
% IDN	0.34%	0.36%	0.54%	0.55%	0.58%	0.66%
% Independent	99.66%	99.39%	99.33%	99.32%	99.27%	99.18%
Prince George's County	**370**	**303**	**274**	**262**	**238**	**216**
% Corporate	0.00%	0.00%	0.00%	0.38%	0.42%	0.93%
% IDN	0.54%	0.66%	0.73%	1.53%	1.68%	1.85%
% Independent	99.46%	99.34%	99.27%	98.09%	97.90%	97.22%
Baltimore County	**568**	**448**	**396**	**381**	**349**	**290**
% Corporate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% IDN	1.41%	1.56%	1.77%	2.10%	1.43%	1.03%
% Independent	98.59%	98.44%	98.23%	97.90%	98.57%	98.97%
Anne Arundel County	**250**	**213**	**186**	**187**	**173**	**151**
% Corporate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% IDN	0.40%	0.00%	0.00%	1.07%	0.58%	0.66%
% Independent	99.60%	100.00%	100.00%	98.93%	99.42%	99.34%
Baltimore City	**339**	**245**	**225**	**215**	**187**	**167**
% Corporate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% IDN	0.88%	1.22%	1.78%	2.79%	2.67%	2.99%
% Independent	99.12%	98.78%	98.22%	97.21%	97.33%	97.01%
All Other Counties	**867**	**745**	**620**	**596**	**551**	**491**
% Corporate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
% IDN	0.58%	0.27%	0.65%	1.01%	0.54%	0.41%
% Independent	99.42%	99.73%	99.35%	98.99%	99.46%	99.59%
Medical Group						
Montgomery County	**972**	**967**	**992**	**1,090**	**1,101**	**1,128**
% Corporate	17.08%	23.47%	32.96%	37.61%	38.87%	40.07%

Characteristic	2018	2019	2020	2021	2022	2023
% IDN	12.65%	11.48%	11.39%	11.56%	11.63%	11.44%
% Independent	70.27%	65.05%	55.65%	50.83%	49.50%	48.49%
Prince George's County	**550**	**547**	**570**	**635**	**663**	**670**
% Corporate	21.64%	25.78%	34.91%	41.26%	40.87%	43.58%
% IDN	12.18%	12.43%	14.56%	14.02%	14.18%	14.33%
% Independent	66.18%	61.79%	50.53%	44.72%	44.95%	42.09%
Baltimore County	**688**	**677**	**696**	**770**	**772**	**784**
% Corporate	21.37%	25.55%	30.17%	35.58%	34.59%	35.59%
% IDN	25.87%	26.00%	25.86%	25.71%	25.78%	25.51%
% Independent	52.76%	48.45%	43.97%	38.70%	39.64%	38.90%
Anne Arundel County	**401**	**412**	**417**	**466**	**468**	**473**
% Corporate	18.70%	24.27%	31.41%	35.84%	35.90%	35.73%
% IDN	22.19%	18.93%	20.86%	20.39%	21.37%	22.83%
% Independent	59.10%	56.80%	47.72%	43.78%	42.74%	41.44%
Baltimore City	**641**	**632**	**646**	**700**	**728**	**725**
% Corporate	18.41%	20.09%	23.37%	26.29%	26.10%	26.21%
% IDN	48.52%	48.89%	49.69%	47.71%	48.35%	48.28%
% Independent	33.07%	31.01%	26.93%	26.00%	25.55%	25.52%
All Other Counties	**1,606**	**1,619**	**1,676**	**1,831**	**1,881**	**1,929**
% Corporate	18.37%	23.59%	30.07%	37.03%	37.80%	39.09%
% IDN	23.47%	22.48%	22.73%	21.85%	22.28%	22.50%
% Independent	58.16%	53.92%	47.20%	41.13%	39.93%	38.41%
Outpatient Surgical Center						
Montgomery County	**63**	**62**	**64**	**67**	**73**	**69**
% Corporate	15.87%	20.97%	29.69%	34.33%	45.21%	46.38%
% IDN	9.52%	9.68%	6.25%	7.46%	17.81%	18.84%
% Independent	74.60%	69.35%	64.06%	58.21%	36.99%	34.78%
Prince George's County	**28**	**27**	**31**	**32**	**45**	**43**
% Corporate	14.29%	14.81%	16.13%	15.62%	24.44%	20.93%
% IDN	14.29%	18.52%	22.58%	21.88%	24.44%	25.58%
% Independent	71.43%	66.67%	61.29%	62.50%	51.11%	53.49%
Baltimore County	**57**	**58**	**57**	**60**	**74**	**73**
% Corporate	26.32%	29.31%	29.82%	30.00%	37.84%	36.99%
% IDN	15.79%	22.41%	22.81%	21.67%	29.73%	30.14%
% Independent	57.89%	48.28%	47.37%	48.33%	32.43%	32.88%
Anne Arundel County	**37**	**36**	**37**	**41**	**43**	**40**
% Corporate	16.22%	22.22%	27.03%	31.71%	32.56%	37.50%
% IDN	10.81%	13.89%	16.22%	19.51%	27.91%	25.00%
% Independent	72.97%	63.89%	56.76%	48.78%	39.53%	37.50%
Baltimore City	**15**	**15**	**16**	**16**	**16**	**14**
% Corporate	26.67%	20.00%	18.75%	25.00%	31.25%	35.71%
% IDN	20.00%	26.67%	25.00%	25.00%	25.00%	28.57%
% Independent	53.33%	53.33%	56.25%	50.00%	43.75%	35.71%
All Other Counties	**100**	**105**	**106**	**112**	**143**	**142**
% Corporate	19.00%	29.52%	34.91%	40.18%	44.06%	45.07%
% IDN	21.00%	20.00%	16.98%	17.86%	22.38%	23.24%
% Independent	60.00%	50.48%	48.11%	41.96%	33.57%	31.69%

Notes: Data are from IQVIA OneKey for 2018–2023. Facilities are classified into three categories using cot_fclt_typ_desc: "INDEPENDENT PHYSICIAN PRACTICE," "MEDICAL GROUP," and "OUTPATIENT SURGICAL CENTER." Non-physician specialties are excluded. Ownership type is defined at the facility level using ownr_stat_desc and

Characteristic	2018	2019	2020	2021	2022	2023

corporate hierarchy variables. "Corporate" refers to facilities owned by a corporate parent that is not part of an integrated delivery network (IDN); "IDN" refers to facilities affiliated with a health system or integrated delivery network; "Independent" refers to facilities flagged as independent and not affiliated with either a corporate parent or IDN. Percentages represent the share of facilities in each ownership category by county and year. Counties are listed as the five most populous in Maryland, followed by an aggregate category for all remaining counties.

Limitations

This analysis has three key limitations. First, as with the analysis of insurer concentration, the landscape of providers is fragmented: there are many different types of providers, and the ownership of different provider types is captured in disparate data sources at different levels of granularity.

For example, Hilltop used both AHRQ and IQVIA OneKey data to identify medical groups in Maryland (and, for AHRQ, in other states). These two data sources use different definitions and units of analysis to quantify medical groups in Maryland and, as such, diverge in their reported counts of medical groups. This is not an error but rather the reflection of a difference in approach between AHRQ and IQVIA. In AHRQ's group practice linkage file, a group practice is defined as a Tax Identification Number (TIN) billing Medicare, with two or more physicians (medical doctors or doctors of osteopathic medicine), regardless of specialty. AHRQ treats TINs as synonymous with group practices and links them to systems using multiple data sources (MD-PPAS, Medicare Advantage billing, PECOS, and IQVIA OneKey). This definition excludes solo-physician TINs and TINs without valid identifying information. In contrast, IQVIA's OneKey database defines a medical group as a distinct organizational entity providing health care services, typically associated with an organizational NPI and a corporate parent, and may include any number or mix of specialties, including single-physician entities. Thus, OneKey's scope is broader: it includes organizations regardless of whether they bill Medicare.

More broadly, the identification of provider ownership is often challenging. While recent federal transparency initiatives have made some progress, public data sources are still imperfect (Chen et al., 2024; Singh & Fuse Brown, 2023). While this study used multiple data sources to describe trends in health system affiliation and ownership for multiple different provider types over time, we acknowledge that classification of provider ownership is difficult.

Additionally, this analysis only addressed consolidation as defined by health system affiliation. Hilltop did not attempt to characterize other types of consolidation: for example, through private equity ownership or the consolidation of smaller practices that does not involve a health system. In Aim 5, we propose policy options that would record and track these types of transactions in Maryland.

Narrative Evidence on Recent Health Care Consolidations

This section provides narrative evidence on ownership trends of insurers and providers not captured in the national and state-level data sets used in the analysis above.

While (as noted above) the provider landscape in Maryland is characterized by increasing affiliations with health systems and corporate parents, as well as a reduction in the number of independent physician practices, there has been no recent evidence that Maryland-based insurers have been purchasing traditional physician practices or hospitals. However, insurers active in Maryland have significantly expanded their ownership footprints across the health care services spectrum.

UnitedHealth Group (UHG), while not the major insurer in Maryland, operates in the state and has significantly expanded its operations through its Optum subsidiary. As of 2023, almost 90,000 physicians (out of approximately 950,000 nationally) were either employed by or affiliated with Optum (Herman, 2023; Wilson, 2023). At the time of writing, Optum does not operate any physician practice locations in Maryland (Optum, n.d.), though UHG's Maryland operations includes ownership of home health and hospice agencies and other service lines, reflecting a growing presence in the state's health care market.

Recently, UHG has significantly expanded its home health and hospice care operations. In February 2023, Optum completed its $5.4 billion acquisition of LHC Group, a Louisiana-based provider of in-home health and hospice care services that operates nearly 1,000 locations across 37 states and the District of Columbia (Modern Healthcare, 2022). In June 2023, building on this expansion, UHG announced plans to acquire Amedisys, another major Louisiana-based provider of home health and hospice care. This prompted the U.S. Department of Justice (DOJ) and the Attorneys General of Maryland, Illinois, New Jersey, and New York to file an antitrust suit to block the proposed merger (U.S. Department of Justice, 2024). However, in August 2025, the DOJ announced a proposed settlement that would permit the merger to proceed subject to substantial divestitures, including the sale of 164 home-health and hospice locations across 19 states (U.S. Department of Justice, 2025).

As of October 2022, UHG also owned Change Healthcare, a major U.S. claims-clearing and health-care technology company, via its Optum subsidiary (Reuters, 2022). We note that this merger also faced antitrust opposition. In February 2022, the U.S. DOJ, together with the Attorneys General of Minnesota and New York, filed a civil suit, arguing that UHG's access to insurers' claims and data would reduce competition and innovation in insurance and claims-processing markets. However, after UHG divested a claims-editing business unit, the merger was approved by a federal court. In February 2024, Change Healthcare experienced a major ransomware/network-intrusion event that disrupted claims-submission, payment-processing, and pharmacy-fill systems across the U.S. health care system, causing significant operational and financial consequences.

Additionally, Aetna, which is also active in Maryland, was purchased by CVS Health in 2018 (CVS Health, 2018), representing the consolidation of one of the largest health insurer with one of the largest pharmacy benefits managers (PBMs) in the country. CVS Health recently expanded its footprint into the primary care market with the purchase of Oak Street Health in 2023 (CVS Health, 2023). Similarly, Cigna, which is also active in Maryland, purchased Express Scripts in 2018, representing another consolidation of a large health insurer with a large PBM (Cigna

Corporation, 2018). As part of the acquisition of Express Scripts, Cigna acquired EviCore, a medical benefits management company (USA Today, 2017).

CareFirst, Maryland's largest insurance carrier, entered the Maryland Medicaid managed care market in October 2020 by purchasing an existing managed care organization (MCO) (Hackett, 2020). While CareFirst's Medicaid managed care plan recently announced a partnership with "virtual-first, advanced primary-care practice" for its Medicaid beneficiaries, there is no evidence that CareFirst has engaged in recent activities consistent with vertical integration (CareFirst BlueCross BlueShield, 2023). Additionally, Kaiser is the second largest insurer in Maryland and, as noted above, has a unique integrated care operating model in which it both insures and directly provides care through its own medical group and facilities. While Kaiser is an example of tightly integrated care with close linkages between payor and providers, it is not a typical illustration of market-driven vertical integration strategies among traditional insurers**.** In sum, while Maryland has exposure to insurers that have recently undertaken large-scale acquisitions, there is no evidence that the two primary health insurers in Maryland have strategically sought to expand their footprints via vertical integration.

Currently, no acute care hospitals in Maryland have private equity (PE) ownership (Private Equity Stakeholder Project, 2025). However, there is growing PE activity within Maryland (Singh et al., 2025). For example, ENT Partners, LLC, a physician practice management company based in Minnesota backed by private equity investors, recently acquired two practices in the Baltimore area (ENT Partners, 2025; PitchBook, n.d.); APT Healthcare, which operates multiple physical therapy locations in Maryland (APT Healthcare, n.d.), partnered with a PE firm in 2022 (Business Wire, 2022) and subsequently acquired additional physical therapy clinics in April 2023; First Medical Associates, a primary care provider with 11 clinics across Maryland, received an investment from a PE firm in June 2025 (Buckley, 2025); Bloom Health Centers, which provides outpatient mental health services, was acquired by a PE firm in March 2022 (Avante Capital Partners, 2023); and U.S. Acute Care Solutions, which providers emergency department staffing and has received PE investment, expanded its footprint and, by June 2024, operated in 26 facilities around Maryland (Kelly, 2024). A large body of literature has examined the impacts of PE ownership of health services providers, and a recent review finds that "the preponderance of studies indicates worse or mixed (mostly worse) outcomes with PE ownership" (Unruh & Rice, 2025).

Conclusion

Hilltop utilized a variety of data sources to examine trends in provider ownership in Maryland over time. Using AHRQ data, we documented that hospitals and group practices are increasingly system-affiliated in Maryland, although these trends are occurring in neighboring states and nationally, so Maryland is not an outlier. Nationally, the percentage of acute care hospitals affiliated with a hospital system grew from 69.1% in 2016 to 76.0% by 2023. The percentage of acute care hospitals in neighboring states that are system-affiliated rose from 79.0% in 2016 to 93.6% in 2023. In Maryland, the percentage of acute care hospitals that are system-affiliated rose from 83.7% in 2016 to 100.0% in 2020 and remained at this level through 2023. The

percentage of group practices in health systems also grew strongly in Maryland, from 14.0% in 2016 to 19.4% in 2022—and in neighboring states, from 14.0% in 2016 to 20.1% in 2022. Nationally, this metric grew relatively slowly from 2018 (16.0%) to 2022 (16.9%).

It is important to note, however, that affiliation with a health system does not necessarily imply that the health services landscape is becoming more concentrated as defined by the increasing market share of individual providers. The trend toward health system affiliation could be a means of acquiring greater negotiating power in hospital-provider contracting; market concentration, however, is the presence of a single, large market participant. Hilltop researchers used provider data from IQVIA to examine provider markets in Maryland at a more granular level.

Using this Maryland-specific data, we found that the number of independent physician practices fell significantly in Maryland from 2018 to 2023, while the number of medical groups and outpatient surgical centers has increased over this same period. Among medical groups, corporate ownership increased significantly: from 18.9% in 2018 to 37.4% in 2023. Outpatient surgical centers followed a similar trend, with corporate ownership rising from 19.3% in 2018 to 39.9% in 2023.

Despite these broad structural shifts in ownership, Hilltop did not find systematic evidence of increasing market power from any particular owner. Examining the county-level distribution of facilities and ownership in 2023 across independent physician practices, medical groups, and outpatient surgical sites, we found that, in most counties, the top owner did not account for a significant share of the local market. Finally, we examined trends in ownership at the county level and found that the results from the state-level analysis also occurred in large counties in Maryland, although with a small degree of county-to-county variation.

Aim 4: Costs and Benefits of Investment and Acquisitions in Health Care

In this section, we assess the available empirical evidence to better understand whether investments and acquisitions in the health care sector yield measurable benefits for consumers: specifically, whether they lead to higher quality, lower costs, or better integrated care, and also the extent to which there are offsetting costs.

Hilltop conducted a targeted literature review of studies published between 2014 and 2025, a period chosen to reflect the decade following implementation of the ACA, which substantially reshaped the U.S. health care delivery and payment environment. Searches were performed in MEDLINE, Scopus, and Web of Science using combinations of terms related to insurer, hospital, and provider mergers or acquisitions, competition, and integration, in conjunction with terms related to consumer-oriented outcomes including quality, costs, access, value, and care coordination. Reference lists from identified studies were also reviewed to capture additional relevant work.

This review was designed to be policy-focused rather than exhaustive. Studies were selected based on methodological rigor, relevance to Maryland policy priorities, and direct examination of

consumer impacts. For each study, we extracted key information on transaction type, study population, geographic setting, study period, and principal findings, as well as whether the study reported evidence of higher quality, lower cost, better integrated care, reduced choice, or increased low-value care. Appendix Table 6 summarizes the resulting set of studies.

Literature Review Results

Across study designs and settings, the literature presents consistent evidence that many types of consolidation, both horizontal mergers and vertical integration, are associated with higher prices and spending, with limited evidence of quality improvement or integration gains.

Several studies quantify sizable post-acquisition price increases. For example, Capps et al. (2018) find that hospital acquisition of physician practices increases prices for the acquired physicians' services by 14.1% on average, while Carlin et al. (2017) report 32%–47% higher physician price indices four years after clinic systems were acquired by integrated delivery systems. In the inpatient setting, Arnold and Whaley (2020) estimate that within-market hospital mergers increase prices by 3.9% (about $703 per admission). In specialty physician markets, Asil et al. (2024) document roughly 30% price spikes following serial "roll-up" acquisitions of anesthesia practices, driven by reduced competition rather than efficiency gains.

Vertical integration is also linked to measurable shifts in site of care that raise spending without clear quality benefits. Whaley et al. (2021) find that after primary care group acquisitions, hospital-based imaging volumes increased by 26.3 per 1,000 beneficiaries and laboratory tests by 44.5 per 1,000, contributing to an additional $73 million in Medicare spending over the study period. Richards et al. (2022) show that vertical integration in outpatient procedure markets reduced ambulatory surgery center use, often a lower-cost option, and shifted care to hospital settings, raising charges without quality justification. Koch et al. (2017) similarly report that Medicare beneficiaries treated by vertically acquired physicians received higher-volume, higher-cost care, with no gains in quality, coordination, or efficiency.

Evidence of quality improvement is mixed and often context specific. Beaulieu et al. (2020) find no significant changes in mortality or readmission rates after hospital mergers, alongside declines in patient-experience scores. Short and Ho (2020) report minimal quality effects from vertical integration and reduced patient satisfaction in more concentrated hospital markets. By contrast, Wang et al. (2022) observe quality gains in a specific safety-net hospital merger, including lower mortality, improved patient experience, and fewer hospital-acquired infections, though such positive effects appear to be less frequently observed.

Integration-related benefits are more commonly observed in organizational stability than in direct patient outcomes. O'Hanlon et al. (2019) find that horizontal medical practice mergers improved the stability of physician referral networks over a four-year period, although network size and strength were unaffected. Harris et al. (2025) note some improvements in coordination for hospital–post-acute care integration, but hospital–physician integration more often raised costs without consistent quality benefits.

On the cost-savings side, evidence is limited to select transaction types. Schmitt (2017) reports that certain hospital–hospital mergers reduced per-discharge costs by 4% to 7%, with savings concentrated in out-of-market acquisitions. Diaz et al. (2025) find modest reductions in 30-day episode spending following hospital system affiliation, primarily via lower post-acute care costs, though quality outcomes were unchanged. Rahman et al. (2016) show that hospital-owned skilled nursing facilities were associated with shorter skilled nursing facility stays, more days in the community, and lower Medicare spending without adverse quality effects.

Finally, multiple studies document potential harms beyond higher prices, including reduced patient choice and greater use of low-value care. Richards et al. (2022) and Whaley et al. (2021) both find that vertical integration can limit access to lower-cost care settings. Saghafian et al. (2023) show that integration in gastroenterology reduced deep sedation use during colonoscopy and increased complication rates, while Post et al. (2023) find greater use of high-tech procedures for stable angina without quality improvement, both examples of more intensive, higher-cost care not clearly aligned with patient benefit.

In sum, the review finds that while provider consolidation can yield specific benefits under certain circumstances, the prevailing evidence suggests that these arrangements often fail to deliver on promised improvements in cost, quality, or access. On the contrary, they may exacerbate pricing pressures, restrict consumer choice, and increase the risk of overutilization. While the unique hospital rate setting system in Maryland likely insulates the state against the potential consequences of hospital mergers or changes in system affiliation, the results presented in this study indicate that Maryland's group practices have experienced significant increases in health system affiliation and the state's medical groups and outpatient surgical centers have demonstrated significant changes in ownership structure in recent years. Thus, the results of this literature review offer important context for Maryland policymakers weighing the potential benefits of consolidation against its demonstrated risks to consumers and to the broader health care system.

See Appendix Table 6 for a summary of key findings from the literature.

Aim 5: Policy Options

Maryland's unique regulatory and market structure requires a Maryland-focused lens in terms of potential policy interventions. While a significant body of research has examined various aspects of the consequences of consolidation in the health landscape, Maryland is an outlier in three ways. First, Maryland's hospitals are highly regulated, with the HSCRC setting global budgets for each hospital and also setting cost center-specific rates for each hospital. Maryland is currently the only state with this regulatory structure for hospitals. Second, the insurer market is unique. The second largest health insurance company in Maryland is Kaiser, with 21.3% market share, and Kaiser's business model is unique in that it operates in an integrated care model and thus may not be subject to the same market dynamics as traditional health insurance carriers. Third, the state has invested significantly in its primary care workforce through multiple large-scale

primary care programs and will continue to do so as a component of the AHEAD model (Maryland Department of Health, 2025).

This aim identifies policy options Maryland may take to promote competition, transparency, and accountability in the health care market. Given Maryland's current challenging budget environment, we focused on policy options that either leverage existing infrastructure and policies in Maryland or which could be implemented at minimal cost to the state. However, we acknowledge that any new policy will likely require resources such as staff, data analysis or infrastructure, and the ability to contract with consultants. For additional policy options relating to oversight for material health transactions, strengthening protections for health services practitioners, and increasing transparency of ownership and control, please see Singh et al., 2025 in the references section of this report.

Expanding Regulatory Oversight of Consolidations

While reporting and federal antitrust review is required for mergers and acquisitions over $126.4 million as of 2025 (Federal Trade Commission, 2025), many transactions in the market for health services—for example, a hospital system acquiring a provider group—likely fall below this reporting threshold. Maryland statute currently requires review of nonprofit hospital acquisitions and HMO acquisitions by the Attorney General and Maryland Insurance Administration, respectively, but Maryland does not currently require prior notice or review of health care transactions that involve physician organizations (Md. Code Ann., State Gov't §§ 6.5-101, 2024; Md. Code Ann., State Gov't § 6.5-307, 2024).

Recent legislative action has expanded Maryland's authority over certain types of transactions. Specifically, in 2024, the Maryland legislature passed SB1000, which requires (a) individuals seeking to acquire nursing homes to submit a request for acquisition from MHCC and (b) the executive director of the MHCC to review a completed request for application. Then, in consultation with the Secretary of Health (or their designee), the executive director of the MHCC may approve the transaction, approve the transaction with conditions, deny the transaction, or refer the acquisition to MHCC for a final decision (Md. Code Ann., Health-General § 19-120.2, 2024).

Prior to the promulgation of this statute, Maryland had only required formal notice for a nursing facility acquisition under its Certificate of Need (CON) regulations. Notably, an MHCC report indicates that, from 2019 to 2022, "nursing home transactions have averaged 20 each year" (Maryland Health Care Commission, 2024b). However, since the implementation of the 2024 statute, there have been no instances of a merger, acquisition, or change in ownership of a nursing facility in Maryland requiring approval through the new process. Further research may be warranted on the downstream impacts of this expanded regulatory authority in the nursing facility sector in Maryland.

Relatedly, health care providers must obtain CONs prior to establishing a new health care facility, adding new beds or services, making significant capital expenditure, and relocating or replacing facilities (Maryland Health Care Commission, 2023a). Maryland is 1 of 35 states and the District

of Columbia with a CON law (National Conference of State Legislatures, 2025). MHCC currently administers the CON process.

As part of the AHEAD model state agreement, Maryland will be required to implement "choice" and "competition" policies. One of these competition policies is "repealing certificate of need (CON) requirements for all non-hospital settings" (Health Services Cost Review Commission, 2025). Maryland's CON law currently applies to hospitals, limited service hospitals, related institutions, ambulatory care surgical facilities, inpatient facilities organized primarily to help in the rehabilitation of disabled individuals, home health agencies, hospices, freestanding medical facilities, comprehensive care facilities, and other health institutions, services, or programs that may be specified as requiring a CON under state law.[23] Mergers are also currently overseen through the CON process. Given the significant changes in the landscape of health services delivery that have been occurring in Maryland, including the growing presence of private equity, as well as the documented relationships between ownership structure and the prices of health care services, rolling back CON authority in Maryland may have negative downstream impacts on the affordability of healthcare.

While (as noted above) Maryland requires notice of nonprofit hospital acquisitions and HMO acquisitions, recently expanded authority over nursing facility transactions, and has a mature CON process, Maryland does not currently have any other authority over health care transactions. Several states have gone significantly farther than Maryland in regulating health services transactions, offering potential lessons for how Maryland might strengthen its own oversight framework.

Several states currently require notice of most health care transactions, with recent legislative activity in 2024.[24] Oregon currently has the most extensive health care transaction oversight authority: since 2022, Oregon has had the power to review and block—or impose conditions upon—material change transactions involving provider organizations (Rooke-Ley et al., 2024). Oregon is the first state with the authority to deny transactions, but other states may follow suit: for example, in 2024, New Mexico enacted a law to empower its health care authority to approve or disapprove transactions. In 2025, New Mexico strengthened this authority, with legislation that "requires prior approval from the state for hospital mergers, changes in hospital control, and acquisitions of health care practices by provider organizations affiliated with a health insurer" (Hostert, 2025).

Other states with robust merger review processes stop short of the authority to approve or deny transactions: California can review material change transactions but not prevent them, and Massachusetts has a robust and mature transaction review process but cannot prevent transactions or (as of 2024) review private equity-backed transactions (Stovicek, 2024).

[23] For additional detail, see COMAR 10.24.01.01, available here: https://dsd.maryland.gov/regulations/Pages/10.24.01.01.aspx.
[24] For additional detail, see https://www.sidley.com/en/insights/newsupdates/2024/01/state-healthcare-transaction-review-laws.

While the full effects of Oregon's health care market oversight program will not be known for years, there are early results. As of late 2024, the oversight authority had not rejected any transactions and rarely required a comprehensive review. However, parties in two proposed transactions withdrew their applications during the review process, which may be consistent with Maryland's experience with enhanced nursing home regulatory authority: even the presence of a robust review process may discourage certain transactions from occurring (Stovicek, 2024).

This is a topic of current interest and activity in state legislatures, with at least eight states considering bills to increase the transparency of ownership and control of health care entities in 2025 (Center on Health Insurance Reforms, 2025b). Additionally, the National Academy for State Health Policy (NASHP) recently updated model legislation to provide states with increased oversight of health market transactions (Veltri and Hensley-Quinn, 2024).

It is important to note that consolidation in and of itself does not necessarily lead to adverse outcomes for patients and providers. Moreover, while expanding regulatory oversight of consolidations may potentially prevent adverse patient and provider impacts, it is important to avoid discouraging innovation and investment in the health services landscape in Maryland. Thus, a phased approach, starting with greater transparency in the landscape of health care provision, including ownership status, would lay the groundwork for a data-driven public interest transaction review process. Below are additional details on each component.

Registry of Health Service Providers

MHCC may consider the creation of health services provider registry in Maryland including, to the extent possible, ownership information. Other states have taken this step: in 2025, Indiana "effectively established a health care provider registry to obtain and publicize ownership information about health care providers" and Washington State also passed a bill in 2025 that will "develop a plan and recommendations with the goal of establishing a complete and interactive registry that will allow for the monitoring and measuring of changes in the health care landscape to better understand trends in health care market consolidation, with the goal of improving access and affordability" (Hosert, 2025; Washington State Legislature, 2025). Massachusetts has a long-standing program to collect "information on corporate, contracting, and clinical relationships of provider organizations that meet certain revenue and patient thresholds" (Pogue and Stovicek, 2024). Additionally, in 2025, Massachusetts enacted legislation to extend reporting requirements related to private equity ownership (Commonwealth of Massachusetts, 2024).

Maryland's registry could be based on a variety of publicly available sources, including newly available hospital, skilled nursing facility, home health agency, and federally qualified health center ownership data from CMS; National Plan and Provider Enumeration System (NPPES) data files; Medicare fee-for-service public provider enrollment files; the Homeland Infrastructure Foundational-Level Database; state-level licensure data files; and news reports and other sources (Centers for Medicare & Medicaid Services, 2025a, 2025b, 2025c, 2025d). State agencies should

be encouraged to collaborate and exchange data in the development of this registry, and health service providers could also be required to report ownership status.

Crucially, this registry should have standardized identification codes for providers that would allow for linkage to the state's APCD. While it can be challenging to discern ultimate ownership of a health services provider—for example, if a provider is purchased by another provider, which is owned by a private equity firm—this registry would offer a starting point for monitoring the consequences of consolidations and acquisitions. Moreover, this would build analytic capacity beyond what is feasible today, as current data do not reliably capture ownership structure or permit systematic linkage of ownership to provider service/performance data. Automatic data feeds could be used to periodically refresh the data, and using primarily publicly available data sources may minimize reporting burden on industry participants.

Stakeholders have expressed strong support for a provider registry. Such a registry would be valuable in enhancing transparency, accountability, and oversight of health services providers, particularly in monitoring trends in mergers, acquisitions, and ownership changes. When linked to Maryland's APCD, it would allow policymakers, regulators, and researchers to examine associations between ownership changes and outcomes, pricing, and service patterns, supporting evidence-based decisions. In terms of feasibility, Maryland has access to multiple publicly available data sources, including federal CMS data, NPPES and Medicare enrollment files, state licensure databases, and news reports. Standardized identifiers, automated data feeds, and opportunities for providers to correct inaccuracies make the development and maintenance of the registry technically achievable with resources that are moderate relative to building a system from scratch.

While basing this registry on existing or publicly available data would minimize industry burden, the state could potentially require providers to disclose this information. The state would likely require authority by statute or regulation granting MHCC (or some other state agency) the authority to impose reporting requirements on health-services providers. Additionally, clear statutory authority would be needed to enable MHCC to use the provider registry not only for data collection but also for regulatory oversight.

Public Interest Transaction Review Process

The development of a comprehensive health services registry—including ownership information—could be used in the development of a public interest transaction and review process. This would have three distinct components.

First, analysis could link this registry to the state's APCD in order to understand the extent to which providers that have changed ownership in the past have systematically changed prices or service offerings relative to those that did not. This analysis could use statistical techniques designed to isolate the causal impact of consolidation by comparing procedure-level pricing between providers within a similar provider class in similar locations over time following ownership change. This could lead to Maryland-specific estimates of the impacts of mergers, acquisitions, or changes in ownership for different provider types.

While the above process would fundamentally be backward-looking in that it would be able to identify the cost and utilization impacts of material changes in ownership that have *already* occurred, the results of this analysis could be used in the development of a public interest transaction review process that could predict the *likely* results of *proposed* mergers, acquisitions, or consolidation.[25] Legislative action could then potentially establish the criteria that the state could use to approve, approve with conditions, or deny conditions on a material change in ownership, and this criteria could have an explicit focus on health system and consumer costs. Additionally, a separate review process could be developed based on potential consumer impact, with robust review for proposed material changes in ownership that are predicted to have negative consequences for consumers, as well as streamlined review for material changes in ownership that are not predicted to have negative consequences for consumers.

Finally, this review process could also be given the authority for post-transaction monitoring of approved transactions (potentially based on the data infrastructure from the outcome monitoring component, as suggested above). There is precedent for this: for example, the Oregon Health Authority is "required to conduct and publish post-transaction reviews 1, 2, and 5 years after they occur to analyze compliance with conditions, cost trends, and cost growth trends of the parties and the impact of the transaction on the health care cost growth target."[26]

As noted above, Maryland recently expanded its authority over nursing facility acquisitions. This offers a case study for a potentially broader expansion of MHCC's regulatory authority, in line with increased levels of regulatory oversight occurring in states across the country.

Any policy action likely entails implementation costs. By encouraging collaboration between Maryland state agencies and relying primarily on publicly available data sources and the state's existing APCD, the staff effort to maintain this registry should be relatively low. Data linkages and statistical analysis would be required to evaluate the price impacts of historical ownership changes in the APCD, but recent advances in data analysis tools mitigate the potential costs. While the state would likely require funding to support this work, required levels of funding should be relatively low.

Incentivizing Additional Insurers to Enter the Maryland Market

As of 2023, CareFirst was the largest carrier in Maryland, followed by Kaiser. United Health, Aetna, and Cigna had smaller presences, and there is also recent entry and exit: Wellpoint, a subsidiary of Elevance, entered the individual market in 2025, and Aetna entered the individual market in 2024 but is scheduled to exit the market in 2026.

[25] For a more up-to-date view of the impact of ownership changes, the state could potentially use Transparency in Coverage data instead of APCD claims; however, while this data source is publicly available, this step would entail substantial technical effort.

[26] For additional information, see the State Action on Health Market Oversight Chart from NASHP, available here: https://nashp.org/state-tracker/state-action-on-health-market-oversight-chart/.

As of the time of writing, Maryland has several programs designed to stabilize the insurance market and encourage coverage. Specifically, the Maryland Health Benefit Exchange (MHBE) currently administers the State Reinsurance Program (SRP), the Young Adult Subsidy (YAS), and the new Individual Subsidy. The Centers for Medicare & Medicaid Services (CMS) approved the SRP in 2018 through a §1332 waiver. The goal of the SRP is to stabilize rates in the state's individual health insurance market by reimbursing insurers for a portion of claims that fall within a certain range. As of 2025, the SRP paid 80% of the costs for claims within $21,000, $250,000. The SRP is funded through a combination of federal pass-through dollars and state funds (Maryland Health Benefit Exchange, 2024b). Per the 2023 SRP annual report, $473.1 million of program funding was from federal pass-through funds, and $94.8 million was from state funding. The SRP was re-approved in 2023 for an additional five years (Centers for Medicare & Medicaid Services, 2023). Hilltop also notes that, as of the time of writing, the SRP is funded exclusively through a tax on carriers in all market segments (Maryland Health Benefit Exchange, 2024c).

This SRP has been successful at stabilizing premiums in the individual marketplace: as of 2024, premiums were down 20% from 2018, and Maryland's lowest-cost plans were 25%-30% below U.S. averages (Maryland Health Benefit Exchange, 2024c). Additionally, as noted in Table 2, the individual market premiums for Maryland were among the lowest in the nation as of 2023. In addition to lowering premiums for individuals, this program has the added benefit of mitigating risk for carriers in the individual market. Costs within the attachment point range are shared between the insurer and program funds, thus reducing financial exposure for participating insurers.

MHBE launched the YAS program in 2022 at the direction of the General Assembly; it provides a state subsidy (from the state's portion of the reinsurance program fund) to young adults to reduce their premiums to encourage enrollment and strengthen the risk pool. In 2025, the program reduced the maximum expected contribution for adults aged 18-33 by 2.5%; for those aged 34-37, this reduction phases down by 0.5% with each year. Young adult enrollment increased by 46% since program inception, compared with a 30% all-age enrollment increase (Maryland Health Benefit Exchange, 2024d, 2025).

While the SRP and YAS have been successful in reducing premiums and improving the risk pool in the individual market, premiums are expected to rise in 2026 as federal enhanced premium tax credits are set to expire without further federal action. MHBE estimates that premiums would rise by an average of 68% for tax-credit eligible consumers without further action. In anticipation of this loss of the enhanced federal subsidies, the Maryland General Assembly passed HB 1082 during the 2025 legislative session, establishing the State-Based Individual Subsidy Program for 2026-2027. All three of the MHBE's affordability programs use the same funding source; this source is insufficient to fully replace the lost federal enhanced tax credits. As of the publication date of this report, the MHBE is working with MIA, actuaries, and other stakeholders to develop parameters for allocating funds between these programs: individual subsidies and reinsurance (Maryland General Assembly, 2025). Building on the SRP's success in stabilizing the market and reducing carrier risk, the state could further promote individual market stability by maintaining support for the §1332 reinsurance waiver and/or related affordability initiatives.

Finally, as noted above, it is not necessarily the case that additional insurance carriers in the market will result in lower costs for patients. Health insurers both smooth risk for individuals and negotiate rates with providers. While additional competition among health insurers might result in benefit design that is more advantageous to individuals, the lower market share of each insurer might lead to reduced negotiating power, which would lead to higher negotiated rates, thus mitigating the salutary effects of competition. Thus, it is not a priori clear that inducing additional insurers into the Maryland market would be beneficial to Maryland residents.

Fostering Innovation in the Delivery Model

As noted above, Maryland is unique among states in its investments in the primary care landscape. MDPCP, which began in 2019 as a part of the state's TCOC Model, offers participating practices enhanced payments, data tools, care management resources, and technical assistance to support comprehensive, coordinated, and person-centered care. MDPCP aims to strengthen the primary care infrastructure while reducing avoidable hospital utilization. Maryland has also recently implemented a companion primary care program in the Medicaid population—the Medicaid Advanced Primary Care Program (MAPCP)—and, as part of the AHEAD model, will be launching an additional primary care program—PC AHEAD, in the Medicare population starting in 2026.

Together, these programs have positioned Maryland as a national leader in primary care innovation and serve as a foundation for expanding value-based care across diverse provider settings. A recent evaluation found that MDPCP successfully reduced inpatient and ED admissions and, despite the generous funding to providers, generated enough savings to fully cover its operating costs (Goetschius et al., 2024).

Maryland could build upon its strong history of innovative advanced primary care programming by continuing to invest in the state's current and upcoming large-scale advanced primary care programs (MCPCP, MAPCP, and PC AHEAD). By supplying providers with data tools, guidance, and training—and with appropriate quality monitoring, targets, and funding—the state can reinforce, refine, and build on these programs. Administrative burdens for providers should be minimized wherever possible, and support such as care transformation organizations could be provided specifically for smaller and/or independent practices. Furthermore, the state could continue to develop incentive methodologies in these programs to reward the delivery of efficient, high-quality primary care. Finally, while CareFirst aligned with MDPCP as a payer in 2020, the state could continue to support integration and alignment for all commercial payers and these primary care programs (Centers for Medicare & Medicaid Services, 2023). This aligns with current recommendations from the MHCC, which include, for example, ensuring that all payers provide payment for advanced primary care management services to promote alignment and advancement of primary care (Maryland Health Care Commission, 2025). Specifically, the state could develop metrics to measure and determine commercial payer alignment with these programs.

Conclusion

This study examined the health insurance and health delivery landscape in Maryland. This landscape is highly fragmented: insurers operate in several market segments, and many different provider types offer an array of services. Accordingly, the health landscape defies characterization from any one data source; as such, this study used a variety of data sources to describe the dynamics of insurer and provider concentration within Maryland.

Hilltop found that Maryland's health care market presents a distinctive case: it combines strong regulatory controls, such as all-payer hospital rate setting and global budgeting, with a market environment marked by relatively high insurer market concentration and recent structural shifts in ownership patterns and health system affiliation for providers. There is no evidence that consumers or producers in Maryland have been adversely impacted by these trends: provider prices in Maryland tend to be relatively low compared to other states, and while average physician compensation is, accordingly, relatively low in Maryland, the state ranks highly in terms of physicians per capita relative to other states. Thus, the relatively low provider prices do not appear to have led to a reduction in physician supply.

Additionally, there is no evidence that access to care has been affected by insurer market concentration. While carriers with large market share could, in principle, strategically restrict their networks as a means of negotiating with providers, we found that carriers with higher market shares tend to have more providers in network, not fewer.

However, the high degree of insurer concentration and recent structural shifts in provider ownership and health system affiliation raise important questions about long-term competition, affordability, and access. Policymakers are therefore well-positioned to act with foresight. By primarily leveraging diverse public data sets, Maryland could create a registry of health services providers that tracks ownership status; then, by linking this to the state's APCD, state officials could monitor the prices and services at providers that have undergone a change in ownership or affiliation in order to identify price increases or service offering reductions for a provider shortly after the ownership or affiliation change; finally, the state could use this information in a data-driven transaction oversight and review process. Additionally, the state could further promote individual market stability by maintaining support for the §1332 reinsurance waiver and/or related affordability initiatives. Finally, the state could foster innovation in the delivery model by building upon its recent large-scale investments in advanced primary care programs.

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Appendices

The appendices contain the text of the original legislative request to MHCC, the data underlying all figures, the instructions for the carrier survey, literature review results, and supplemental results not included in the analysis.

Appendix 1. Original Legislative Request

JOSELINE A. PEÑA-MELNYK
Legislative District 21
Prince George's and
Anne Arundel Counties

Chair
Health and Government
Operations Committee

Rules and Executive
Nominations Committee

Legislative Policy Committee

The Maryland House of Delegates
ANNAPOLIS, MARYLAND 21401

Annapolis Office
The Maryland House of Delegates
6 Bladen Street, Room 241
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District Office
P. O. Box 1251
College Park, Maryland 20741-1251

June 13, 2024

Ben Steffen, Executive Director
Maryland Health Care Commission
4160 Patterson Avenue
Baltimore, MD 21215
Subject: Request for Study of Maryland

Dear Director Steffen,

Recent news stories report that the U.S. Department of Justice has launched an antitrust investigation into a leading health insurer, citing concerns over acquisitions of health-care providers and other health care companies. These concerns are very similar to the concerns raised by this Committee and the Maryland Health Care Commission to tighten the oversight of acquisitions of and by certain health care facilities.

In order to make appropriate health care policy, the Committee needs to understand the changing health insurance landscape in Maryland and how market concentration as well as the acquisitions/ownership of other health care services and businesses affect competition, affordability, and accessibility and how these then affect consumers and health care practitioners. It is also crucial to address potential inequities in the health insurance market to ensure fair access to affordable and quality care for all Maryland residents.

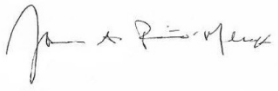
Therefore, I am writing to request that the Maryland Health Care Commission study the dynamics of these issues. In light of these considerations, we recommend that the Maryland Health Care Commission prioritize the following actions in conducting the study:

1. Analyze how market concentration at both the regional and product level affects competition. In analyzing this issue, we would like information on how market concentration in Maryland may be affecting practitioner payment rates and how Maryland's practitioner payment rates compare nationally. In addition, how market concentration may be affecting provider networks and whether consumers have the full range of choice in services or are being directed to services that may be beneficial to an insurer.

2. Consider and report on the increasing vertical and horizontal integration within the health insurance market, especially in purchases and investments of physician groups, technology companies and other related industries and if consumers benefit from increased access to services and lower costs and how Maryland currently regulates or receives notice of these purchases/investments.
3. Explore policy interventions to promote competition, transparency, and accountability in the health care market, such as enhancing regulatory oversight, encouraging insurer diversity, and fostering innovation in care delivery models.

In conclusion, we encourage the Commission to work collaboratively with the Maryland Insurance Administration in studying these issues. As always, we thank you for your work and any recommendations to ensure proactive measures are taken to address health insurer concentration and increasing vertical and horizontal integration so we can work towards a more equitable and sustainable health care system that meets the needs of all Maryland residents. We respectfully request that you provide us with your findings and recommendations by December 1, 2024.

Sincerely,



Joseline A. Peña-Melnyk

Appendix 2. Carrier Survey Instructions

MARYLAND Health Care Commission

Randolph S. Sergent, Esq., Chairman
David Sharp, Acting Executive Director

INSURANCE MARKET CONCENTRATION STUDY SURVEY

The Maryland Health Care Commission (MHCC), in conjunction with The Hilltop Institute at UMBC, requests carriers in Maryland to complete the following template **(attached Excel file**) relating to their provider networks. Specifically, carriers are requested to provide the counts of active in-network providers for their largest HMO and PPO networks for 2023 and 2024 by selected primary specialty and county of primary practice location. For example, the number of in-network pediatricians in Baltimore County in 2023 for their largest HMO network.

For each sheet in the **Excel file**, please provide the number of in-network providers for the specified primary specialties, organized by county of primary practice location:

- Insert carrier name in 3B in each sheet, where specified.
- Insert network name in cell 3D in each sheet, where specified.
- Each sheet corresponds to a specific network type (PPO or HMO) and year (2023 or 2024)
- Only count active Medical Doctors or active Nurse Practitioners, where specified.
- Count the providers for each primary specialty listed below in each county by primary practice location.
- Please use the codes provided in Table 1, below, for each specialty. These are based on NUCC taxonomy codes (https://taxonomy.nucc.org/); and
- For "Total Active Medical Doctors," count all active MDs regardless of specialty.

Providers should never be double counted. For example, for a provider with multiple specialty codes, only the primary specialty code should be used; additionally, for providers with practice locations in multiple counties, only the primary practice location should be used.

Please complete and return this template to Tracey DeShields (tracey.deshields2@maryland.gov) by May 30, 2025. In case of questions, please contact mmouslim@hilltop.umbc.edu and mhenderson@hilltop.umbc.edu.

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Table 1. Primary Specialty Mapping

Description	NUCC Taxonomy Code
Anesthesiology (general)	207L00000X
Anesthesiology (sub-specialty)	207LA0401X, 207LC0200X, 207LH0002X, 207LP2900X, 207LP3000X, 207LP4000X
Cardiovascular Disease	207RC0000X
Dermatology (general)	207N00000X
Dermatology (sub-specialty)	207NI0002X, 207ND0900X, 207ND0101X, 207NP0225X, 207NS0135X
Emergency (general)	207P00000X
Emergency (sub-specialty)	207PE0004X, 207PH0002X, 207PT0002X, 207PP0204X, 207PS0010X, 207PE0005X
Family Practice/General Practice	208D00000X, 207Q00000X, 207QA0401X, 207QA0000X, 207QA0505X, 207QB0002X, 207QG0300X, 207QH0002X, 207QS0010X, 207QS1201X, 207QP0002X
General Surgery (general)	208600000X
General Surgery (sub-specialty)	2086H0002X, 2086S0120X, 2086S0122X, 2086S0105X, 2086S0102X, 2086X0206X, 2086S0127X, 2086S0129X, 2086P0122X
Internal Medicine (general)	207R00000X

Description	NUCC Taxonomy Code
Internal Medicine (sub-specialty)	207RA0401X, 207RA0000X, 207RA0002X, 207RA0001X, 207RA0201X, 207RC0000X, 207RI0001X, 207RC0001X, 207RC0200X, 207RE0101X, 207RG0100X, 207RG0300X, 207RH0000X, 207RH0003X, 207RI0008X, 207RH0002X, 207RH0005X, 207RI0200X, 207RI0011X, 207RM1200X, 207RX0202X, 207RN0300X, 207RB0002X, 207RP1002X, 207RP1001X, 207RR0500X, 207RS0012X, 207RS0010X, 207RT0003X
Obstetrics and Gynecology (general)	207V00000X
Obstetrics and Gynecology (sub-specialty)	207VC0300X, 207VC0200X, 207VF0040X, 207VX0201X, 207VG0400X, 207VH0002X, 207VM0101X, 207VB0002X, 207VX0000X, 207VE0102X
Ophthalmology	207W00000X
Orthopedic Surgery	207X00000X, 207XS0114X, 207XX0004X, 207XS0106X, 207XS0117X, 207XX0801X, 207XP3100X, 207XX0005X
Pediatrics (general)	208000000X

Description	NUCC Taxonomy Code
Pediatrics (sub-specialty)	2080A0000X, 2080C0008X, 2080I0007X, 2080P0006X, 2080H0002X, 2080T0002X, 2080N0001X, 2080P0008X, 2080B0002X, 2080P0201X, 2080P0202X, 2080P0203X, 2080P0204X, 2080P0205X, 2080P0206X, 2080P0207X, 2080P0208X, 2080P0210X, 2080P0214X, 2080P0216X, 2080T0004X, 2080P1004X, 2080S0012X, 2080S0010X
Psychiatry and Neurology (general psychiatry)	2084P0800X
Psychiatry and Neurology (general neurology)	2084N0400X
Psychiatry and Neurology (addiction medicine)	2084A0401X, 2084P0802X
Psychiatry and Neurology (all sub-specialties)	2084A0401X, 2084P0802X, 2084B0040X, 2084P0301X, 2084P0804X, 2084N0600X, 2084D0003X, 2084E0001X, 2084F0202X, 2084P0805X, 2084H0002X, 2084A2900X, 2084P0005X, 2084N0402X, 2084N0008X, 2084B0002X, 2084P2900X, 2084P0015X, 2084S0012X, 2084S0010X, 2084V0102X
Urology	208800000X, 2088F0040X, 2088P0231X

Description	NUCC Taxonomy Code
Total Active Medical Doctors	**All codes**
Total Active Nurse Practitioners	**363L00000X, 363LA2100X, 363LA2200X, 363LC1500X, 363LC0200X, 363LF0000X, 363LG0600X, 363LN0000X, 363LN0005X, 363LX0001X, 363LX0106X, 363LP0200X, 363LP0222X, 363LP1700X, 363LP2300X, 363LP0808X, 363LS0200X, 363LW0102X**

Appendix 3. Data Appendix for Market Share and Network Analysis

This analysis relies on three separate data sources: responses from the carrier surveys, market share data from the All-Payer Claims Database, and provider count data (by specialty and county) from the Area Health Resources Files. The data sources and processing are described in greater detail below.

This survey was conducted from April 2025—Jun 2025 for the largest PPO and HMO plans of the five largest health insurance groups in Maryland (CareFirst, Kaiser, United, Aetna, and Cigna). Each respondent was asked to provide the count of active in-network medical doctors and nurse practitioners by county of primary practice location for 2023 and 2024, both overall and for 23 specialist categories. Respondents were also asked for the number of in-network nurse practitioners. The survey used standardized definitions for each specialty and was developed in consultation with staff at the MHCC and MIA.

The responses for the survey consist of 6,250 data points: provider counts for 25 specialties, for 25 geographies (all 23 Maryland counties, Baltimore City, and all Maryland), for five carriers, for 2023 and 2024. While carriers were asked to supply provider counts for their largest PPO and HMO networks separately, we calculate the average provider counts at the specialty-geography level for carriers that reported both PPO and HMO provider counts.

We then linked this to 2023 carrier-specific market share derived from the All-Payer Claims Database (APCD), for which we calculated market share, by carrier. We were able to link four of the five carriers from the carrier survey. The resulting data set comprised 2,400 observations: 4 carriers, 24 counties, and 25 specialties.

Finally, we linked on provider specialty denominators by county from the AHRF. We were able to link 20 specialties using the following mapping of specialty name in the AHRF to specialty from the carrier survey presented in Appendix Table 1. The final analytic data set consists of 1920 observations: four carriers, 24 counties, and 20 specialties.

Table A1. Details of Linking Carrier Survey to Area Health Resources Files

Specialty Name (Carrier Survey)	Specialty Name (AHRF)
Anesthesiology (general)	md_nf_anesth_all_pc_22
Cardiovascular Disease	md_nf_card_dis_all_pc_22
Dermatology (general)	md_nf_derm_all_pc_22
Emergency (general)	md_nf_emerg_med_all_pc_22
Family Practice/General Practice	md_nf_fammed_gen_all_pc_22
General Surgery (general)	md_nf_gen_surg_all_pc_22
General Surgery (sub-specialty)	md_nf_all_surg_spec_all_pc_22
Internal Medicine (general)	md_nf_genintmed_all_pc_22
Internal Medicine (sub-specialty)	md_nf_intmed_subsp_all_pc_22
Obstetrics and Gynecology (general)	md_nf_obgyn_gen_all_pc_22
Obstetrics and Gynecology (sub-specialty)	md_nf_obgyn_subsp_all_pc_22
Ophthalmology	md_nf_ophth_all_pc_22

Specialty Name (Carrier Survey)	Specialty Name (AHRF)
Orthopedic Surgery	md_nf_ortho_all_pc_22
Pediatrics (general)	md_nf_ped_gen_all_pc_22
Pediatrics (sub-specialty)	md_nf_ped_subsp_all_pc_22
Psychiatry and Neurology (general neurology)	md_nf_neuro_all_pc_22
Psychiatry and Neurology (general psychiatry)	md_nf_psych_all_pc_22
Total Active Medical Doctors	md_nf_all_pc_22
Total Active Nurse Practitioners	np_npi_23
Urology	md_nf_urolgy_all_pc_22

Notes: The 2023-2024 County-Level Area Health Resources Files is available here: https://data.hrsa.gov/data/download?data=AHRF#AHRF

Appendix 4. Data Underlying Figures

In this section, we present the data underlying each figure in the main report.

Table A2. Data for Figures 1-4
(Market Share of Largest Carrier, by Market Segment, 2016-2023)

Geographic Segment	Year	All Markets	Large Group	Small Group	Individual
Maryland	2016	68.2%	65.5%	67.5%	77.2%
Maryland	2017	60.7%	55.1%	67.4%	76.5%
Maryland	2018	59.3%	55.1%	69.5%	66.1%
Maryland	2019	59.4%	55.1%	71.1%	65.2%
Maryland	2020	60.3%	54.5%	73.4%	70.4%
Maryland	2021	61.7%	55.2%	76.6%	72.9%
Maryland	2022	62.3%	56.3%	78.9%	69.6%
Maryland	2023	61.5%	56.5%	78.3%	65.3%
Neighboring States	2016	53.1%	53.7%	62.1%	68.2%
Neighboring States	2017	51.1%	52.8%	62.4%	62.5%
Neighboring States	2018	52.0%	54.3%	63.3%	62.7%
Neighboring States	2019	53.0%	54.6%	63.8%	66.4%
Neighboring States	2020	53.8%	55.0%	64.9%	67.3%
Neighboring States	2021	55.1%	56.3%	66.5%	66.6%
Neighboring States	2022	56.3%	57.3%	68.3%	65.9%
Neighboring States	2023	55.6%	57.1%	68.7%	62.1%
All States	2016	55.6%	58.4%	57.1%	55.4%
All States	2017	56.0%	57.6%	58.5%	56.8%
All States	2018	56.3%	59.1%	59.5%	60.1%
All States	2019	57.4%	60.3%	60.6%	60.6%
All States	2020	57.3%	60.7%	61.5%	59.9%
All States	2021	56.5%	61.2%	62.3%	56.6%
All States	2022	56.4%	61.2%	62.5%	54.6%
All States	2023	55.7%	61.6%	64.0%	51.7%

Notes: Data for this analysis are from Medical Loss Ratio (MLR) public-use data files accessible here: https://www.cms.gov/marketplace/resources/data/medical-loss-ratio-data-systems-resources. For this analysis, we use the "Number of Life Years" to measure enrollment.

Table A3. Data for Figure 7
(Percentage of Acute care Hospitals in Health System, 2016-2023)

Geographic Segment	Year	% System Affiliated
Maryland	2016	83.7%
Maryland	2018	91.1%
Maryland	2020	100.0%
Maryland	2021	100.0%
Maryland	2022	100.0%
Maryland	2023	100.0%
Neighboring States	2016	79.0%
Neighboring States	2018	86.8%

Geographic Segment	Year	% System Affiliated
Neighboring States	2020	91.4%
Neighboring States	2021	91.2%
Neighboring States	2022	92.7%
Neighboring States	2023	93.6%
All States	2016	69.1%
All States	2018	71.7%
All States	2020	75.7%
All States	2021	75.7%
All States	2022	76.3%
All States	2023	76.0%

Notes: Data for this analysis are from the AHRQ Compendium of Health Systems Hospital Linkage Files from 2016, 2018, 2020, 2021, 2022, and 2023. The sample is limited to acute care hospitals (acutehosp_flag = 1) and system affiliation is defined for hospitals that are linked to a health system based on AHRQ health system identifier (health_sys_id). ARHQ compendium data are available here: https://www.ahrq.gov/chsp/data-resources/compendium.html.

Table A4. Data for Figures 8 and 9 (Percentage of Group Practices Affiliated with Health Systems and Percentage of Physicians in Group Practices Affiliated with Health Systems, 2016-2022)

Geographic Segment	Year	% Practices System Affiliated	% Doctors System Affiliated
Maryland	2016	14.0%	57.7%
Maryland	2018	16.1%	59.3%
Maryland	2020	17.6%	61.4%
Maryland	2021	18.7%	61.1%
Maryland	2022	19.4%	64.8%
Neighboring States	2016	14.0%	57.9%
Neighboring States	2018	18.4%	65.8%
Neighboring States	2020	19.8%	67.7%
Neighboring States	2021	19.5%	68.8%
Neighboring States	2022	20.1%	70.3%
All States	2016	13.2%	52.2%
All States	2018	16.0%	57.1%
All States	2020	16.8%	60.0%
All States	2021	16.8%	61.5%
All States	2022	16.9%	62.1%

Notes: Data for this analysis are from the AHRQ Compendium of Health Systems Group Practice linkage files from 2016, 2018, 2020, 2021, and 2022, and 2023. System affiliation is defined as having a non-missing value of health_sys_id. ARHQ compendium data are available here: https://www.ahrq.gov/chsp/data-resources/compendium.html.

Appendix 5. Literature Review Results

Table A5. Sample of Literature on the Relationship between Insurer Market Concentration and Access to Health Services

Citation	Population/Insurance Market	Study Design/Data	Main Findings
Adia, A. C., Hsuan, C., & Rodriguez, H. P. (2025). Health Equity and Hospital Markets: Differences in the Association of Market Concentration and Quality of Care by Patient Race/Ethnicity and Payer. Medical care, 10-1097.	Medicare, Medicaid, commercial, and self-pay	Multilevel linear probability models. 2017 Healthcare Cost and Utilization Project State Inpatient Databases, all-payer hospital discharge data, AHA survey	Increased market concentration associated with increased probability of preventable hospital admission. Effects vary across insurance and racial/ethnic groups.
Curto, V., Einav, L., Levin, J., & Bhattacharya, J. (2021). Can health insurance competition work? evidence from medicare advantage. Journal of Political Economy, 129(2), 570-606.	Medicare Advantage (MA); national and county-level markets	Structural model of plan bidding, using full MA enrollment and plan data (2006–2011); simulations and welfare analysis	Local insurance markets are highly concentrated. Competitive bidding benefits plans more than enrollees. Narrow networks trade off lower premiums for less provider choice.
Erickson, K. F., Winkelmayer, W. C., Ho, V., Bhattacharya, J., & Chertow, G. M. (2019). Market consolidation and mortality in patients initiating hemodialysis. Value in Health, 22(1), 69-76.	Medicare patients receiving in-center hemodialysis	Descriptive analyses. 2001–2011 US Renal Data System Database linked to census data, Dartmouth Atlas, CMS Dialysis Facility Compare	Despite an 8% provider drop, dialysis facilities increased 54%. Patients saw 10% more local competitors on average.
Hanson, C., Herring, B., & Trish, E. (2019). Do health insurance and hospital market concentration influence hospital patients' experience of care?. Health services research, 54(4), 805-815.	Commercial insurance & hospital markets	Regression analyses; 2008–2015 patient experience, hospital, and insurance market data	Insurer consolidation may improve satisfaction via stronger bargaining, especially in markets with higher hospital concentration.
Ho, K., & Lee, R. S. (2017). Insurer Competition in Health Care Markets.	Large-group employer-sponsored private health insurance (CalPERS)	Structural model of insurer-employer and insurer-hospital bargaining; demand estimation using 2004 CA data; simulations	Reduced insurer competition raises premiums and may raise or lower hospital prices. Fewer insurers reduce plan choice and consumer welfare.
Marr, J., Polsky, D., & Meiselbach, M. K. (2024). Commercial insurer market power and Medicaid managed care networks.	Medicaid Managed Care, commercial insurance	Two-way fixed effects models; 2019 provider directory and enrollment data	Insurers with >30% commercial market share had 12.5 pp broader Medicaid networks. Effect seen across most specialties except psychiatry.
Mead, M., Sheckter, C., & Ibrahim, A. M. (2025). Insurer market competition and negotiated prices for elective hospital-based procedures. Surgery, 188, Article 109714.	Commercial	Cross-sectional study using 2024 price transparency and Kaiser Family Foundation Insurer Market Share data.	High-competition insurer markets display less price variation than low-competition markets, where dominant insurer typically negotiates significantly lower prices.
Meille, G., Koch, T., Wendling, B., & Zuvekas, S. (2023). The consequences of firm scope and scale...	Medicare fee-for-service	Linear probability models. 2008–2019 Medicare FFS claims and Medical Expenditure Panel Survey data	Respondents in highly concentrated areas report lower access to immediate care.

Citation	Population/Insurance Market	Study Design/Data	Main Findings
RAND (2022). Environmental Scan on Consolidation Trends...	Commercial, MA, Medicaid	Synthesis of 172 studies; graded evidence	Insurer consolidation lowers provider prices, but savings are not typically passed to consumers. Narrow networks and reduced choice observed; mixed effects on access/quality.
Roberts, E. T., Chernew, M. E., & McWilliams, J. M. (2017). Market share matters...	Commercial insurance, physician services in office setting	Linear regression analyses; 2014 commercial claims data	Insurers with higher market shares negotiate lower office visit prices, potentially improving affordability.
Starc, A., & Town, R. J. (2020). Externalities and benefit design in health insurance.	Medicare Advantage and Medicare Part D (PDP and MA-PD plans), 2006–2009	Structural equilibrium model of insurer premium-setting and benefit design using Medicare Part D data	Insurer concentration influences benefit generosity and prescription drug access. Integrated plans internalize cost offsets, affecting access.
Wang, Y., Meiselbach, M., Wang, X., Bai, G., & Anderson, G. (2025, October 3). Commercial prices for primary care physician office visits. Journal of General Internal Medicine.	Commercial: Blue Cross Blue Shield, Cigna, Elevance Health, and United Healthcare	Cross-sectional study using 2024 Transparency in Coverage data	Primary care physicians (PCPs) with corporate ownership and in organizations with more than 100 physicians negotiated higher office visit prices. Family medicine PCPs and those in poorer counties negotiated lower prices.

Notes: This table summarizes findings from a targeted literature review conducted by Hilltop at the request of the Maryland Health Care Commission. The purpose of the review was to assess how insurer market concentration affects consumers' access to health care services. While prior research has frequently examined the impact of insurer consolidation on pricing, this review focused specifically on access-related outcomes, such as provider network breadth, choice, availability of services, and geographic accessibility. The search was conducted in PubMed using terms related to insurer consolidation and health care access. Studies were included if they were published within the past ten years and reported empirical findings directly related to consumer access. Studies focused primarily on price, cost, or spending effects were excluded. For each included study, we extracted information on population, market type, insurer concentration measures, and key access-related findings. The table presents a synthesis of the selected evidence, with particular attention to variations by market segment, insurance type, and population subgroups.

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
Arnold D, Whaley C. Who Pays for Health Care Costs? The Effects of Health Care Prices on Wages. RAND Working Paper; 2020. RAND Corporation.	Horizontal hospital merger	Commercial insurance enrollees	United States (national sample)	2009–2016	Within-market mergers led to a 3.9% price increase ($703 per admission).	No	No	No	Yes	N/A
Capps C, Dranove D, Ody C. The effect of hospital acquisitions of physician practices on prices and spending. J Health Econ. 2018;59:139-152. doi:10.1016/j.jhealeco.2018.04.001	Vertical hospital physician merger (hospital acquisition of physician practices)	Commercial insurance enrollees	United States (national sample)	2007-2013	Prices for the services provided by acquired physicians increase by an average of 14.1% post-acquisition.	N/A	No	N/A	N/A	N/A
Carlin CS, Feldman R, Dowd B. The impact of provider consolidation on physician prices. Health Econ. 2017;26(12):1789-1806. doi:10.1002/hec.3502	Vertical and horizontal: clinic system acquisition by integrated delivery system	Commercial insurance enrollees	Minneapolis-St Paul	2006-2011	four years after the acquisitions (2011), average physician price indices in the acquired clinic systems were 32–47% higher than expected	N/A	No	N/A	N/A	N/A
Godwin J, Arnold DR, Fulton BD, Scheffler RM. The association between hospital-physician vertical integration and outpatient physician prices paid by commercial insurers: new evidence. INQUIRY. 2021;58:1-10. doi:10.1177/004695802199127	Vertical integration	Commercial insurance enrollees	United States (national sample)	2012-2016	A 10-percentage-point increase in vertical integration was associated with a 1.0% price increase for primary care, a 0.6% increase for orthopedics, and a 0.5% increase for cardiology; no such association was found for obstetrics/gynecology or oncology. No	N/A	No	N/A	N/A	N/A

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
					addition of facility fees after acquisition.					
O'Hanlon CE, Whaley CM, Freund D. Medical practice consolidation and physician shared patient network size, strength, and stability. *Med Care*. 2019;57(9):701-706. doi:10.1097/MLR.0000000000001167	Vertical (hospital and health system practice acquisitions) and horizontal (medical group membership and practice-practice mergers)	US-based physicians whose practices underwent consolidation (2009–2014)	United States (national sample)	2009-2014	Practice-practice horizontal mergers increased network stability significantly for up to 4 years post-merger. No significant effect on network size or strength. Consolidation may improve organizational effectiveness through more stable physician networks	N/A	N/A	Yes, through network stability	N/A	N/A
Scheffler RM, Arnold DR, Whaley CM. Consolidation Trends In California's Health Care System: Impacts On ACA Premiums And Outpatient Visit Prices. *Health Affairs*. 2018;37(9):1409-1416. doi:10.1377/hlthaff.2018.0472	Horizontal concentration (e.g. hospital mergers), vertical integration (hospital acquisition of physician practices)	Physicians, hospitals, and insurers in California	California	2010–2016 (with outcomes measured through 2017 for premiums)	Vertical integration increased from ~25% to >40% of physicians between 2010–2016. In highly concentrated hospital markets, vertical integration was associated with a 12% increase in ACA premium, a 9% increase in specialist prices and a 5% increase in primary care prices.	N/A	No, costs increased (premiums and physicians prices)	N/A	Not directly measured - implied through increased market concentration	N/A
Short, M. N., & Ho, V. (2020). Weighing the Effects of Vertical Integration Versus	Vertical integration between hospitals and physicians; hospital	Medicare-certified	United States (national sample)	2008-2015	Vertical integration had minimal impact on most quality	Vertical integration: minimal	N/A	N/A	N/A	N/A

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
Market Concentration on Hospital Quality. Medical Care Research and Review, 77(6), 534–545. https://doi.org/10.1177/1077558719835303	mergers (market concentration)	hospitals (n = 4,438)			measures. Increased market concentration was significantly associated with reduced patient satisfaction.	effect Market concentration: strong negative effect				
Asil A, Ramos P, Starc A, Wollmann TG. Painful Bargaining: Evidence from Anesthesia Rollups. NBER Working Paper No. 33217. National Bureau of Economic Research; November 2024.	Rollups—serial add-on acquisitions of anesthesia clinician practices by a financial sponsor	U.S. anesthesia clinicians and their affiliated hospitals; employer-sponsored insurance enrollees under age 65	United States (multiple metropolitan markets and hospital referral regions)	2012-2021	Rollups consolidate geographically dispersed markets, Add-on acquisitions are followed by ≈30% price spikes ("buy-and-build" strategy). Price rises attributable to reduced competition (internalized business-stealing), not quality or bargaining skill. Structural model suggests antitrust remedies could correct these harms	No effect on quality	No,	N/A	Yes, consolidation reduces competition in local anesthesia markets	N/A
Richards MR, Seward JA, Whaley CM. Treatment Consolidation After Vertical Integration: Evidence from Outpatient Procedure Markets. J Health Econ. 2022;81:102569. doi:10.1016/j.jhealeco.2021.102569	Vertical integration (hospital acquisition of physician practices)	Medicare and commercially insured patients treated by integrated vs. non-integrated physicians	Florida	2009–2015	Vertical integration led to significant "foreclosure" of ASC use, shifting care to higher-cost hospital settings without quality justification. Evidence of increased charges, no change in intensity or output. Behavior likely	No	No	N/A	Yes, ASC access reduced; patients likely faced fewer lower-cost options	Yes, site-of-care shift with no clinical justification points to lower-value care

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
					increases costs without patient benefit.					
Koch TG, Wendling BW, Wilson N. (2017). How vertical integration affects the quantity and cost of care for Medicare beneficiaries. J Health Econ. 52:19–32. https://doi.org/10.1016/j.jhealeco.2016.12.007	Vertical integration (hospital acquisition of physician practices)	Medicare fee-for-service beneficiaries treated by acquired and non-acquired physicians	United States (national sample)	2005–2010	Vertically acquired physicians shifted care in ways that increased Medicare spending and service volume. No evidence of improved quality, coordination, or system-wide efficiency. Some evidence of physician exit post-acquisition.	No	No	No	Yes, physician exit and site-of-care shifts may reduce access	Yes, increased billing and service volume with no outcome improvements
Whaley CM, Zhao X, Richards MR, Damberg CL. (2021). Higher Medicare Spending On Imaging And Lab Services After Primary Care Physician Group Vertical Integration. Health Affairs, 40(5), 702–709. https://doi.org/10.1377/hlthaff.2020.01006	Vertical integration (hospital/health system acquisition of primary care groups)	Medicare fee-for-service beneficiaries attributed to primary care physician groups	United States (national sample)	2013–2016	Hospital-based imaging increased by 26.3 per 1,000 beneficiaries; lab tests increased by 44.5 per 1,000. Corresponding non-hospital use fell. Medicare spending rose by $73.1 million over study period. Changes occurred immediately after vertical integration.	No	No	No	Yes, referrals shifted away from lower-cost settings	Yes, more testing, higher cost, no quality improvement
Saghafian S, Song LD, Newhouse JP, Landrum MB, Hsu J. The Impact of Vertical Integration on Physician Behavior and Healthcare Delivery: Evidence from Gastroenterology Practices.	Vertical integration (hospital acquisition of GI physician practices)	Medicare fee-for-service patients undergoing GI procedures	United States (national sample)	2008–2015	Integration led to ~3.7 fewer deep sedations per 100 colonoscopies; complications rose by 3.3–5.0 per 1,000; per-procedure	No	No	No, care coordination not observed, quality declined	N/A	Yes, reduced sedation, increased adverse outcomes

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
Management Science. 2023;69(12):7158–7179. https://doi.org/10.1287/mnsc.2023.4886					spending increased ~$127 (48%); throughput increased. Behavioral changes driven by financial incentives.					
Beaulieu N, Dafny L, Landon B, Dalton J, Kuye I, McWilliams M. Changes in Quality of Care after Hospital Mergers and Acquisitions. The New England Journal of Medicine. 2020;382(1):51–59. doi:10.1056/NEJMsa1901383	Horizontal hospital merger	Medicare beneficiaries; hospitals (n=2,232: 246 acquired, 1,986 controls)	United States (national sample)	2007–2016	Decline in patient-experience scores post-acquisition; no differential change in mortality or readmission; improvements in process measures not attributable to acquisition	No	No	No	No	No clear mechanisms isolated; findings challenge assumptions that consolidation improves quality
Wang E, Arnold S, Jones S, Zhang Y, Volpicelli F, Weisstuch J, Horwitz L, Rudy B. Quality and Safety Outcomes of a Hospital Merger Following a Full Integration at a Safety Net Hospital. JAMA Netw Open. 2022;5(1):e2142382. doi:10.1001/jamanetworkopen.2021.42382	Vertical integration (full-integration merger)	Non-psychiatric, non-rehabilitation, non-newborn patients (n=181,252)	United States (urban safety net hospital)	2010–2019 (pre: 2010–2016; post: 2016–2019)	Full integration linked with improved mortality, no significant readmission improvement after trend adjustment, better patient experience, fewer hospital-acquired infections, strategic and value-driven merger	Yes	N/A	Yes	N/A	N/A
West J, Johnson G, Jha A. Trends in acquisitions of physician practices and subsequent clinical integration: A mixed methods study. J Eval Clin Pract.	Vertical integration	Hospitals and physician practices	United States (national sample)	2006–2013	Physician practice acquisitions increased, peaking in 2011. Motivations were mainly financial (increased referrals, negotiating power).	N/A	No	No	N/A	N/A

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
2017;23(6):1444-1450. doi:10.1111/jep.12820					Integration focused on health IT, but clinical integration was limited. Financial benefits driven by market power and revenue capture.					
Schmitt. Do hospital mergers reduce costs? J Health Econ. 2017;52:74-94. doi:10.1016/j.jhealeco.2017.01.007	Horizontal hospital-hospital merger	Hospitals that underwent mergers 2000-2010	United States (national sample)	2000–2010	Acquired hospitals realized significant cost savings averaging 4-7% post-merger (per adjusted discharge). Cost reductions persisted up to 4 years post-merger and were robust to multiple controls. Cost savings concentrated in out-of-market acquisitions.	N/A	Yes	N/A	N/A	N/A
O'hanlon. Impacts of Health Care Industry Consolidation in Pittsburgh, Pennsylvania: A Qualitative Study. Inquiry: The Journal of Health Care Organization, Provision, and Financing. 2020: 57,1-10. doi: 10.1177/0046958020976246	Mixed: horizontal (hospital mergers), vertical (payer-provider integration)	Community and health system stakeholders ("boundary-spanning" interviewees)	Pittsburgh, Pennsylvania	2017	Stakeholders perceived both positive and negative outcomes of health care consolidation. Positives included increased financial stability, enhanced innovation, and care model transformation. Negatives included reduced access for some patients, loss of nonprofit mission,	N/A	N/A	Partially, new care models and facility conversions	Yes, some reported reduced access and fewer referral options	N/A

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
					decreased collaboration between systems, lower physician autonomy, and weaker community accountability.					
Harris A, Philbin S, Post B, Jordan N, Beestrum M, Epstein R, McHugh M. Medical Care Research and Review. 2025: 82(1), 3-42. doi: 10.1177/1077558724124768 2	Vertical integration: hospital-physician and hospital–post-acute care (PAC)	Patients affected by hospital-physician or hospital–PAC integration	United States (national sample)	2010–2023	Hospital-physician integration was consistently linked to higher costs, driven by higher prices and site-of-care shifts. Quality effects were mixed. For hospital-PAC integration: Hospital-HHA integration reduced episodic Medicare costs; hospital-SNF and IRF integration results were mixed across cost, quality, and utilization outcomes.	Mixed, of 23 studies, 9 showed improvement, 11 showed no effect, 7 showed harm (e.g., ↑ mortality, ↓ satisfaction)	No	Mixed, some evidence of improved coordination in PAC	N/A	N/A
Levin JS, Zhao X, Whaley CM. Impact of Hospital Physician Vertical Integration on Physician Administered Drug Spending and Utilization. Health Econ. 2025;34(2):345–367. doi:10.1002/hec.4909	Vertical integration of physician groups or individual physicians by hospitals or health systems	Medicare fee-for-service beneficiaries receiving Part B physician-administered drugs	United States (national Medicare sample)	2013-2017	Vertical integration shifted care from office to HOPD, increased spending per procedure and total Part B drug spending (hematology-oncology), while reducing number of infusions per patient; spending increased	N/A	No	Integration evident, but care coordination not measured	Likely, as site shift suggests fewer care options	Not measured; spending increases without volume gain imply inefficiency

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
					despite decreased treatment volume					
Post B, Kitsakos A, Alinezhad F, Young GJ. Hospital-Physician Integration and Medicare Spending: Evidence from Stable Angina. Health Aff (Millwood). 2023;42(3):325-333. doi:10.1377/hlthaff.2022.01436	Vertical integration: hospitals employing cardiologists	Medicare fee-for-service beneficiaries newly diagnosed with stable angina	United States (national sample)	2013–2020	Integration led to greater use of high-tech procedures (especially catheterization, often without prior stress test) but no improvement in quality. Total Medicare spending was not significantly different between groups.	No	No	N/A	N/A	Yes, inferred from increased procedural intensity without quality improvement
Rahman M, Norton EC, Grabowski DC. Do Hospital-Owned Skilled Nursing Facilities Provide Better Post-Acute Care Quality? J Health Econ. 2016 Sep 3;50:36–46. doi:10.1016/j.jhealeco.2016.08.004	Vertical integration: hospitals acquiring/owning SNFs	Medicare FFS beneficiaries discharged to SNFs	United States (national sample)	2009	Hospital-based SNF patients spent ~5 more days in community, 6 fewer days in SNF in 180 days post-discharge; no significant mortality or readmission differences; Medicare spent ~$2,900 less per patient at 30 days post-discharge	Yes	Yes,	Yes,	N/A	N/A
Diaz A, Nuliyalu U, Ryan A, Dimick J, Ibrahim A, Nathan H. Association of Hospital System Affiliation With Spending and Postoperative Outcomes: A longitudinal Study of Hospital Mergers	Horizontal hospital integration (hospital mergers and acquisitions)	Medicare fee-for-service beneficiaries undergoing elective surgery (CABG, colon	United States (national sample)	2010-2018	Hospital system affiliation associated with modest reductions in 30-day episode spending driven by post-acute care cost decreases.	N/A	Yes	N/A	N/A	N/A

Table A6. Data for Literature Review Assessing Consumer Benefits and Harms of Provider Investments and Acquisitions

Citation	Type of Investment or Acquisition	Population Studied	Geographic Setting	Study Period	Key Findings	Higher Quality?	Lower Cost?	Better Integrated Care?	More Limited Choice?	Increased Low-Value Care?
and Acquisitions from 2010 to 2018. Ann Surg. 2025;281(6):952-959. doi:10.1097/SLA.0000000000006431		resection, lung resection, hip/knee replacement)			No significant changes in serious complications, 30-day mortality, or readmission rates after joining a system. Substantial heterogeneity noted across hospitals.					

Notes: This table summarizes findings from a targeted literature review conducted by Hilltop on behalf of the Maryland Health Care Commission during the 2025 legislative session. The review was designed to inform policymakers about the consumer impacts of investments and acquisitions in the health care sector, with a focus on outcomes related to cost, quality, and care integration.
The review included empirical studies published between 2014 and 2025, a period selected to capture developments following implementation of the ACA. Searches were conducted in MEDLINE, Scopus, and Web of Science using terms related to insurer, hospital, and provider mergers or acquisitions, competition, and integration, combined with terms related to consumer outcomes such as cost, quality, access, value, and care coordination. Studies were selected based on methodological rigor, relevance to Maryland policy priorities, and direct examination of consumer impacts. For each study, we extracted information on transaction type, study population, geographic setting, study period, and principal findings. The table presents a synthesis of these results.

Appendix 6. Comments from Stakeholders

Please see below for a summary of comments provided by various stakeholders. A copy of author responses is available upon request.

Stakeholder Meeting Feedback (October Meeting)

1. Limit Group Recommendations: Stakeholders warned against collective solution-setting due to antitrust concerns. Implication: avoid making broad, collaborative policy recommendations that appear to stem from a consensus of carriers or providers. Instead, consider reframing recommendations as independent, research-based options.
2. Add Discussion of Private Equity and Provider Consolidation: Multiple commenters raised concerns about private equity involvement and unchecked consolidation in physician practices. Implication: expand or strengthen analysis of provider consolidation, particularly smaller acquisitions not visible in claims data, and consider highlighting regulatory blind spots or enforcement gaps.
3. Clarify and Contextualize the 1332 Waiver: Stakeholders support including the waiver's stabilizing role but emphasize unintended consequences, notably, that the carrier tax used to fund it may be inflating premiums in other markets (like small group). Implication: adjust language to acknowledge these trade-offs and include a footnote or section clarifying funding mechanisms and downstream effects.
4. Broaden the Conversation on Funding Responsibility: The League of Life and Health Insurers and others urged shifting away from carrier-only taxes and toward broader-based funding solutions (e.g., including hospitals). Implication: consider referencing alternative funding models like MHIP and noting stakeholder support for a more diversified approach.
5. Support for a Provider Registry: Multiple participants voiced support for creating a provider registry to improve transparency and accountability. Implication: consider adding a recommendation or section discussing the value and feasibility of a provider registry.
6. Flag Data Gaps on Network Adequacy: Allison Taylor noted consistent network gaps across carriers and suggested more attention to this issue. Implication: clarify that current data may underrepresent actual access issues, and consider recommending improved tracking or auditing.
7. Clarify Differences Among Carrier Models: Kimberly Robinson emphasized that not all carriers operate the same way, using CareFirst and Kaiser Permanente as examples. Implication: adjust any generalizations about carrier behavior or market participation to reflect this variability.

Stakeholder Meeting Feedback (September Meeting: Providers)

8. Stakeholders raised concerns that self-reported provider counts overstate actual physician availability, as many physicians work part-time, are in concierge practices, or are not actively seeing patients. They recommended using full-time equivalent (FTE) data and site-of-service information to improve accuracy.
9. Several participants emphasized the need to better reflect patient access challenges in the report, including long wait times for both primary care and specialties (e.g., neurology, rheumatology), and geographic disparities in provider availability.
10. There were multiple requests to include more detail on specialist types in the provider distribution analysis, and to clarify definitions used for group vs. large practices.
11. Participants urged the report to include or acknowledge patient access by specialty, particularly for OB/GYN and Medicaid patients, and questioned how reflective the report is of real-world clinical experience.
12. Stakeholders supported leveraging Transparency in Coverage (TiC) data to show wide disparities in negotiated payment rates between independent providers and system-owned grops.
13. Some participants encouraged the development of user-friendly tools or dashboards to make TiC or other data more accessible to providers. While noted to be resource-intensive, this was viewed as a valuable potential policy recommendation.
14. Attendees requested that the final report clearly include these meeting comments in the appendix, which the team confirmed.

Comments from Commissioner Mark Jensen, received 10.05.25 via email from Tracey DeShields

15. The analysis focuses primarily on changes in pricing, with very little analysis of impacts of concentration on quality, and health equity , both of which were mentioned in the Chair's letter.
16. The draft notes the unique nature of Maryland with the HSCRC , but most of the analysis is based on a market not regulated by HSCRC.
17. There is a good chance rate regulation as we have known it in Maryland is going away, and this is not factored into the report.
18. Several key issues in Health Care in Maryland which directly impact concentration are not mentioned, or are not adequately incorporated into the analysis e.g. , our largest insurer is a non profit, all Maryland hospitals are non profits, the uniquely hard malpractice market is a key factor in driving practitioners to hospitals , health care systems and large groups.
19. I question basing analysis on the Largest Insurer. Why not the top 2 , or 3? How might this change the results ?
20. The geographic breakdown of data between different regions in Maryland could be more widely used and analyzed.
21. The report in several places suggests there is no shortage of physicians in Maryland even though physician reimbursements are low in Maryland. This runs counter to what we

have been told in several previous reports , which suggest that low reimbursements is leading to a shortage of Physicians. Perhaps a more granular geographic analysis of this issue would tease this out.

22. I agree with the recommendation that more and better data be collected and analyzed.

Summary of comments from Deborah Rivkin, Director, Government Affairs, Health Services Cost Review Commission:

23. Incorporation of HHI Data: Emphasized the importance of incorporating hospital-level Herfindahl-Hirschman Index (HHI) data into the evaluation to more accurately assess market consolidation.
24. Concern about Misleading TCOC Narrative: HSCRC noted that current findings may create a misleading narrative that suggests that the Total Cost of Care Model contributes to consolidation. Meanwhile HHI data suggests that Maryland has lower hospital market concentration and greater competition compared to peer and neighboring states.
25. Metrics Recommendation: HSCRC highlighted that the analysis should consider both the number of hospitals in systems and market concentration metrics like HHI, as commonly done in similar studies (e.g., by Kaiser and HCCI).
26. Independent Hospitals: Requested clarification on the reported number of independent hospitals in 2016, expressing concern that the count of 17 may be inaccurate.
27. Follow-up Expected: Noted that additional comments would be submitted later in the week.

Summary of Comments from Maryland Hospital Association (MHA)

28. Low Physician Reimbursement: MHA emphasized the unsustainable nature of low physician reimbursement in Maryland (averaging 104% of Medicare vs. 122% nationally), noting the financial strain it places on hospitals and the lack of a mechanism to offset physician subsidies under the state's global budget model.
29. Rising Costs in Hospital-Based Specialties: MHA cites significant increases in physician staffing costs across specialties like anesthesiology, emergency medicine, and hospitalists.
30. Impact on Access and Workforce: MHA warned that inadequate reimbursement affects hospitals' ability to recruit and retain physicians, potentially reducing access to care and exacerbating workforce shortages, particularly in underserved areas.
31. Private Equity Concerns: MHA raised concerns about the growing presence of private equity in physician practice ownership, noting that such acquisitions are linked to increased service costs in multiple specialties, which further burden hospitals.
32. Call for Policy Solutions: MHA urged the development of policy solutions to address hospital losses from low reimbursement rates and monitor the evolving role of private equity to preserve access, affordability, and sustainability in Maryland's health system.

Summary of Comments from MedChi (The Maryland State Medical Society)

33. Concerns about Review Timeline: MedChi noted that the short review window (August 25–September 4), which included a holiday weekend, limited the physician community's ability to provide comprehensive input. They suggested a follow-up call with providers to better understand the report's methodology and findings.
34. Need for More Detail on Practice Impact: While the report acknowledged that Maryland has the lowest commercial negotiated rates and physician wages in the U.S., MedChi recommended expanding the analysis to include how these factors have affected the viability of independent physician practices.
35. Access to Care Issue: MedChi raised concerns that the report inadequately addresses consumer access to care. Specifically:
    - The survey used for assessing access only involved carriers, not physicians, other practitioners, or patients.
    - The survey instrument was not included in the draft, making evaluation difficult.
    - Ongoing issues such as providers being denied in-network status and patients struggling to access specialty care were cited as important but unaddressed.
    - Suggested a meeting with physicians and other health professionals to provide a clearer understanding of the issue
36. Policy Recommendation Gaps: MedChi felt the policy recommendations did not directly respond to the core issues identified, namely, high insurer concentration and low reimbursement rates. They called for stronger, more targeted policy options to address these structural concerns, beyond just data collection and promoting market entry for new insurers.

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