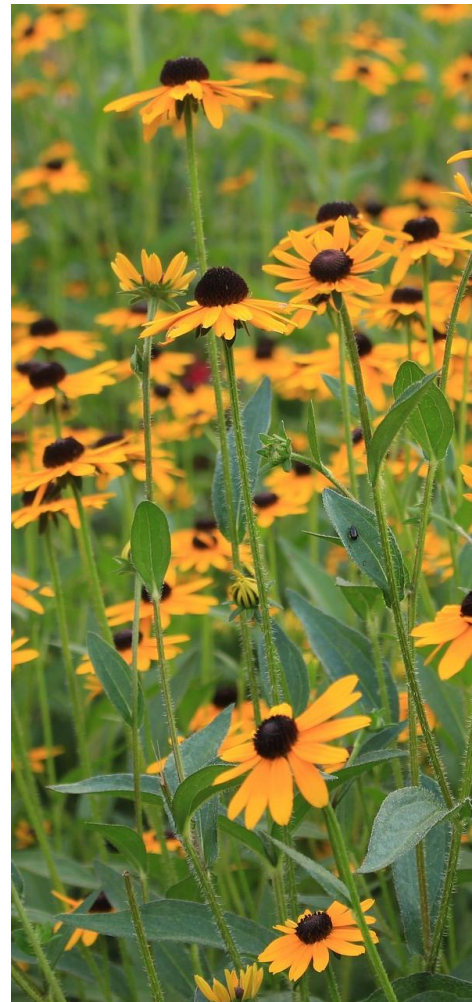




The Hilltop Institute

Insurer and Provider Concentration

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UMBC

Agenda

- Report aims
- Report conceptual approach
- High-level findings
- Detailed empirical findings
 - Appendix
- Policy recommendations

Report Aims

- Examine the changing health services landscape in Maryland, with a focus on market concentration
- General outline of report:
 - Insurer concentration and provider reimbursements
 - Insurer network analysis
 - Provider concentration
 - Review of evidence on effects of transactions
 - Policy options

Report Conceptual Approach

- Situate Maryland in regional and national context over time
- Transparent, data-driven, holistic, objective
 - Variety of data sources
- Awareness of limitations
- Solicit and incorporate feedback
 - Comments received from carrier stakeholder meeting, provider stakeholder meeting, MHCC, HSCRC, MIA, MHA, and MedChi

High-Level Findings

- Relatively high insurer concentration (fully insured)
- Relatively low provider reimbursements
- Insurers with more market share have *larger* networks
- Providers are increasingly affiliated with health systems
- Structural shifts in ownership patterns of providers

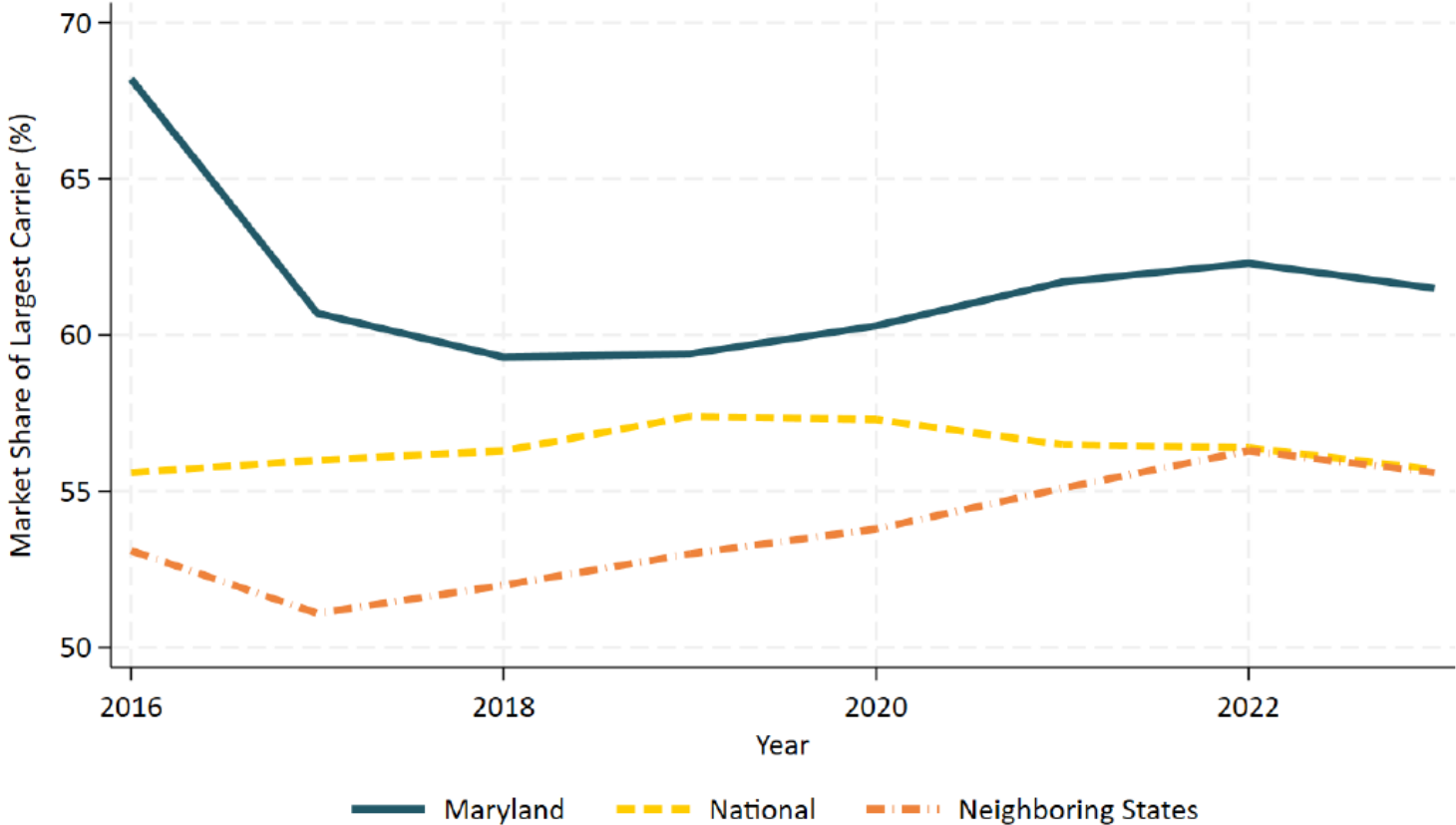
Results on Insurer Concentration and Provider Reimbursements

Conceptual Approach

- Use state-level data on carriers from CMS Medical Loss Ratio files
- Measure of market concentration: market share of largest carrier
- Use Maryland's All-Payer Claims Database (APCD) to examine county level concentration
- Use data from Health Care Cost Institute (HCCI) and Transparency in Coverage (TiC) data files to examine reimbursements for Maryland providers

Maryland has relatively high insurer market concentration relative to other states (fully insured)

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



Maryland has relatively low provider reimbursements compared to other states

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% |
| 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% | | |

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 |
| In 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% |
| From States Neighboring Maryland | | | | | |
| 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% |

Commercial carrier reimbursements to Maryland hospitals are 11-15% lower per inpatient admission in Maryland than other states (Haber et al., 2019)

Limitations

- This analysis is only for **fully-insured market**
- Lag in cross-state provider reimbursement data sources

Results on Insurer Concentration and Access to Care

Conceptual Approach

- Larger carriers could potentially:
 - Restrict networks in order to control costs
 - Have **smaller** networks
 - Be better able to handle administrative costs of creating and maintaining networks
 - Have **larger** networks
- Test this empirically using provider network survey data collected from carriers

Carrier Survey

- Designed in collaboration with MHCC, with feedback from MIA
- Five largest carriers in Maryland
 - Largest PPO and HMO networks
- Counts of active in-network providers by county
- Conducted from April 2025 – June 2025
- Anonymized
- Mapped to Area Health Resources Files (AHRF)

Carriers with higher market share have larger networks

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.

Additionally, no evidence of specialty-specific negative relationship between carrier market share and network density.

Limitations

- Carrier-supplied provider network data
 - Ambiguities possible
- Correlational analysis, not causal

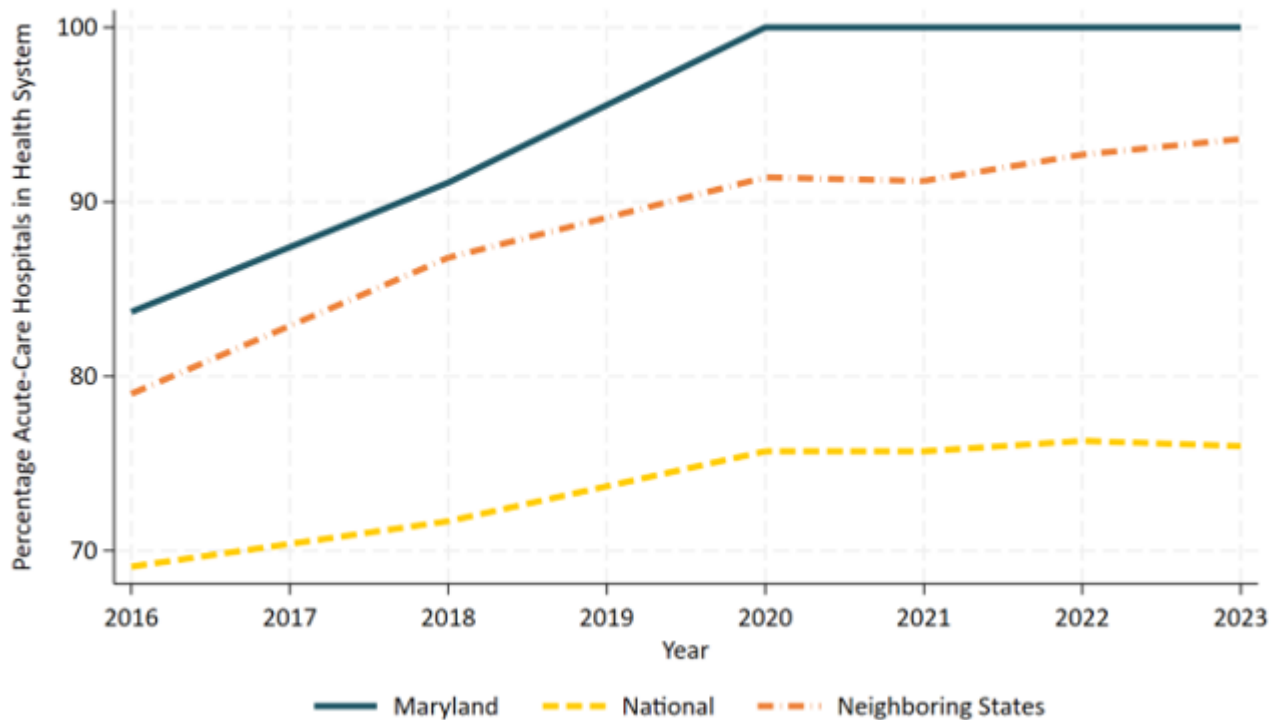
Results on Provider Concentration

Conceptual Approach

- **Part 1:** Examine changes in Maryland provider landscape relative to neighboring states and nationally
 - Different provider types
 - Measure: % of providers with health system affiliation (Agency for Healthcare Research and Quality)
- **Part 2:** Focus within Maryland
 - IQVIA data
 - Measure: ownership type and top owner share by county

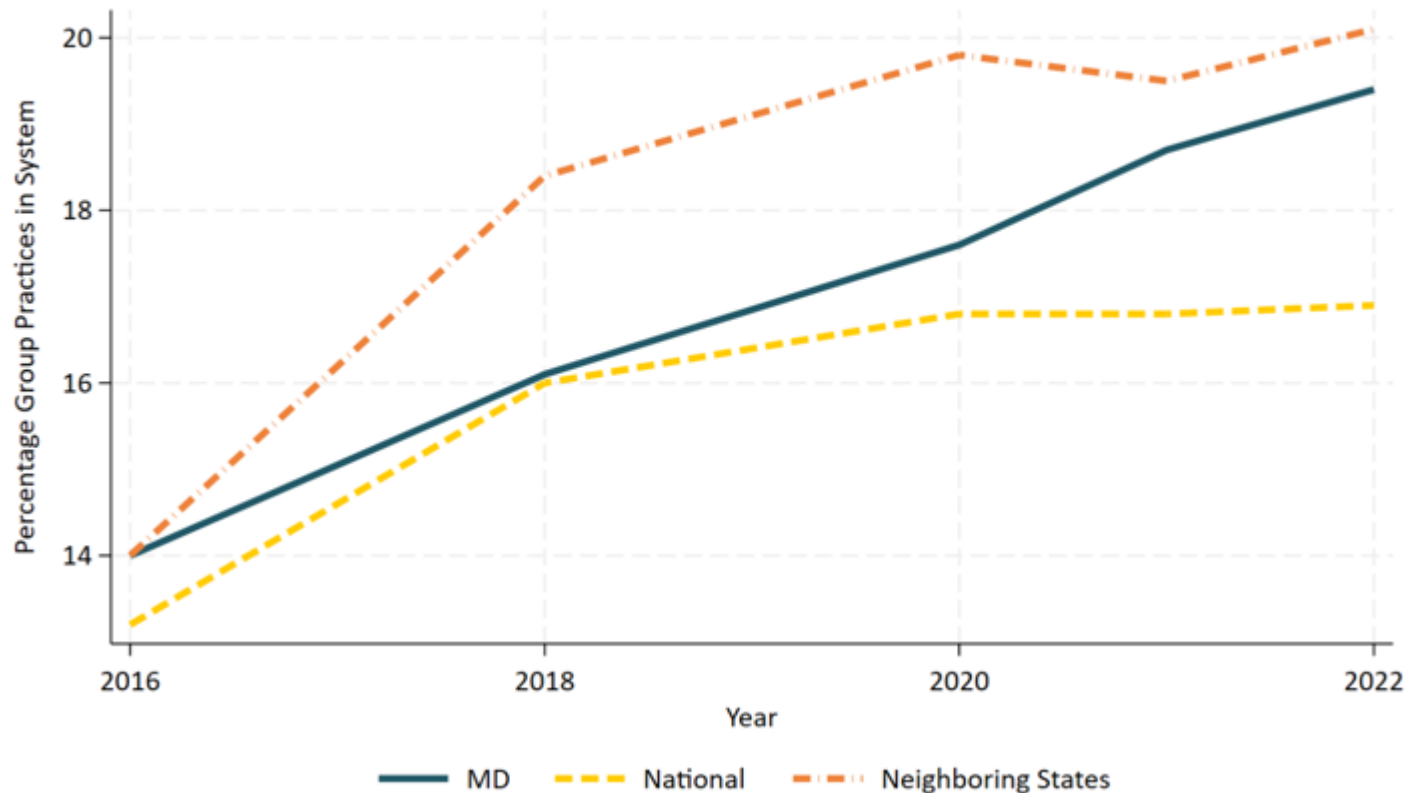
Hospitals in Maryland are increasingly affiliated with health systems

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



Group practices in Maryland are increasingly affiliated with health systems

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



Relatively few outpatient sites in Maryland are affiliated with health systems

Table 14: Percentage of Outpatient Sites that are 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.

Maryland's provider landscape is undergoing structural change in ownership

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% |

Limitations

- Fragmented provider landscape
 - Many provider types, ownership data scattered across multiple sources
- Differences in data definitions across sources
- Challenges in ownership classification

Literature Review on Costs and Benefits of Transactions

Key Findings (1/2)

- Prices and spending
 - Consistent increases after hospital/physician acquisitions and mergers.
 - Numbers from the literature: 14–47% higher physician prices; ~4% inpatient price increases; 30% anesthesia price increases.
- Quality and integration
 - Limited or mixed improvements.
 - Some declines in patient experience.
 - Isolated cases of gains (e.g., safety-net hospital merger).
- Spending shifts
 - Vertical integration often shifts care to higher-cost hospital settings.

Key Findings (2/2)

- Cost savings
 - Rare, limited to specific cases (e.g., out-of-market mergers, some post-acute care reductions).
- Additional harms
 - Reduced patient choice
 - Increased low-value or unnecessary care.
- Implications for Maryland
 - Unique hospital rate-setting model may mitigate risk of adverse consequences from hospital acquisitions
 - Significant changes in medical groups and outpatient surgical center ownership structure could indicate potential risks to consumers.

Policy Recommendations

Maryland-specific lens

- Only state with hospital rate-setting model
- Kaiser represents 21.3% of the fully-insured market
 - Unique operating model
- Significant investments in advanced primary care

Objective

- “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.”

Current Maryland Health Services Transaction Regulatory Landscape

- Review of nonprofit hospital transactions
- Review of HMO acquisitions
- Mature CON law
- Recent expansion of MHCC authority over nursing facility acquisitions

What do other states do?

- Many states go farther than Maryland to regulate health care transactions
 - Health service ownership registry
 - Indiana, Washington
 - State oversight of transactions
 - Notice
 - Review/approve/place conditions
 - Post-transaction monitoring
- Topic of recent state-level activity and interest
 - NASHP model law

Expanding regulatory oversight of consolidations

- Develop a registry of health service providers in Maryland
 - Based on public data sources
 - With ownership (as far as possible)
- Develop a public interest transaction review process
 - Data-driven
 - Link registry to APCD to develop Maryland-specific estimates of prior transactions
 - Use results to predict likely results of proposed transactions
 - Post-transaction monitoring

Incentivizing insurers to enter Maryland market

- Some evidence that competition among insurers can lead to lower premiums
- However, entry into the insurer market would lead to *smaller* insurers, with less negotiating power
 - Potentially lead to higher negotiated rates, and thus higher costs for patients
- State could build on success of Section 1332 waiver and related affordability initiatives in stabilizing the individual market

Fostering Innovation in the Delivery Model

- As part of Total Cost of Care model, Maryland launched Maryland Primary Care Program
 - Advanced primary care for ~350,000 Medicare FFS beneficiaries
- Two additional programs as part of the AHEAD model:
 - Medicaid Advanced Primary Care
 - PC AHEAD
- State could continue to support primary care and encourage commercial payer alignment

About Hilltop

The Hilltop Institute is a nonpartisan research organization at the University of Maryland, Baltimore County (UMBC) dedicated to improving the health and wellbeing of people and communities. We conduct cutting-edge data analytics and translational research on behalf of government agencies, foundations, and nonprofit organizations to inform public policy at the national, state, and local levels.

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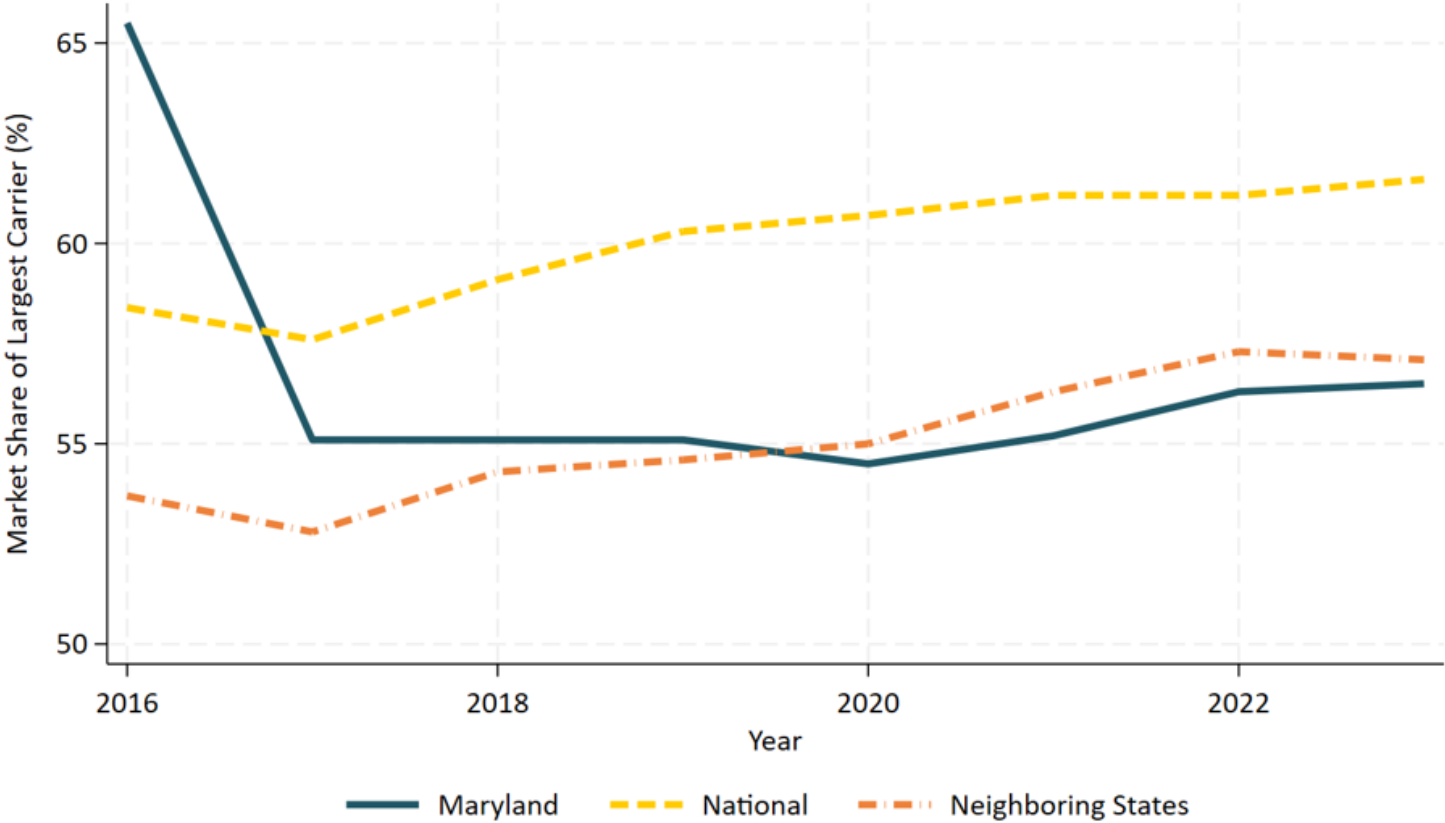
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Appendix

Additional Slides on Insurer Concentration and Provider Reimbursements

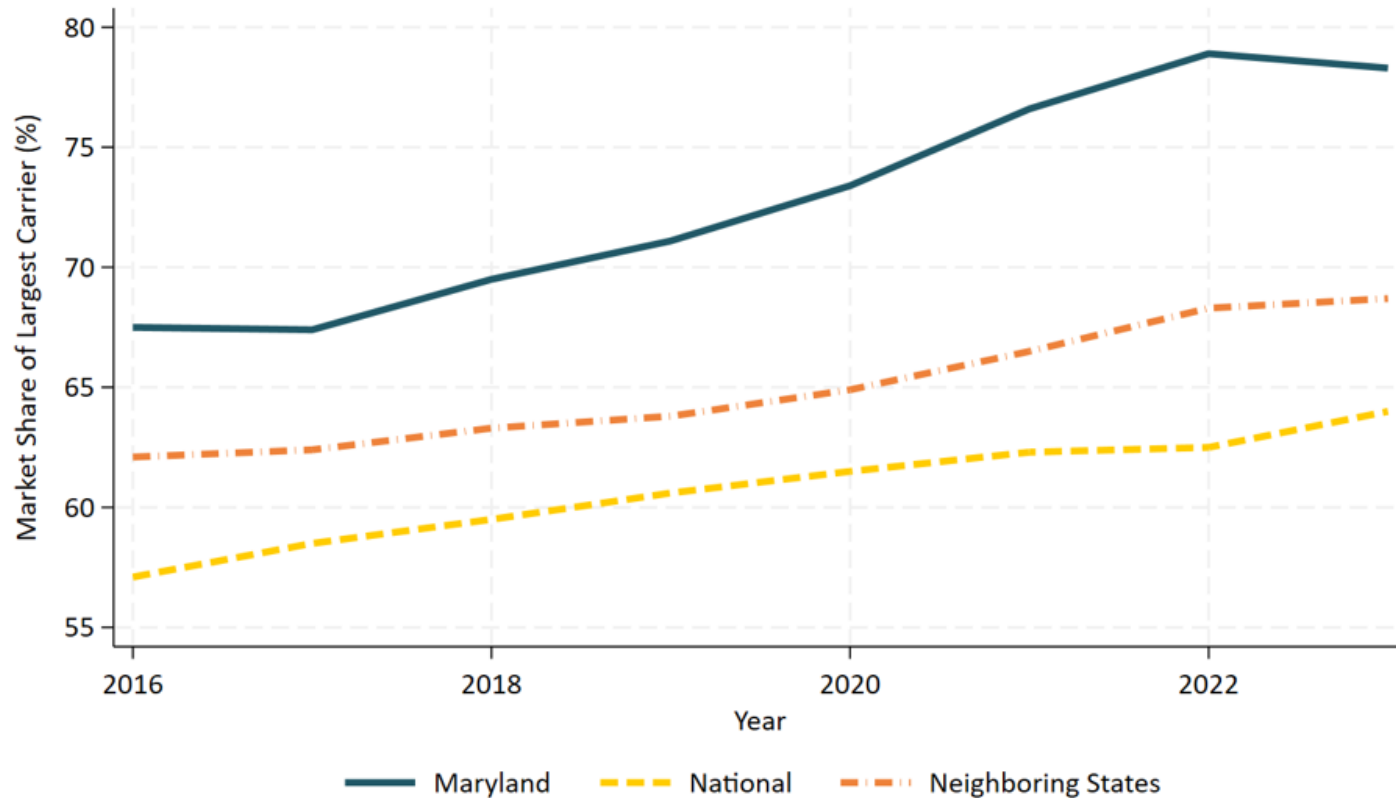
Maryland has relatively low concentration in large group market

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



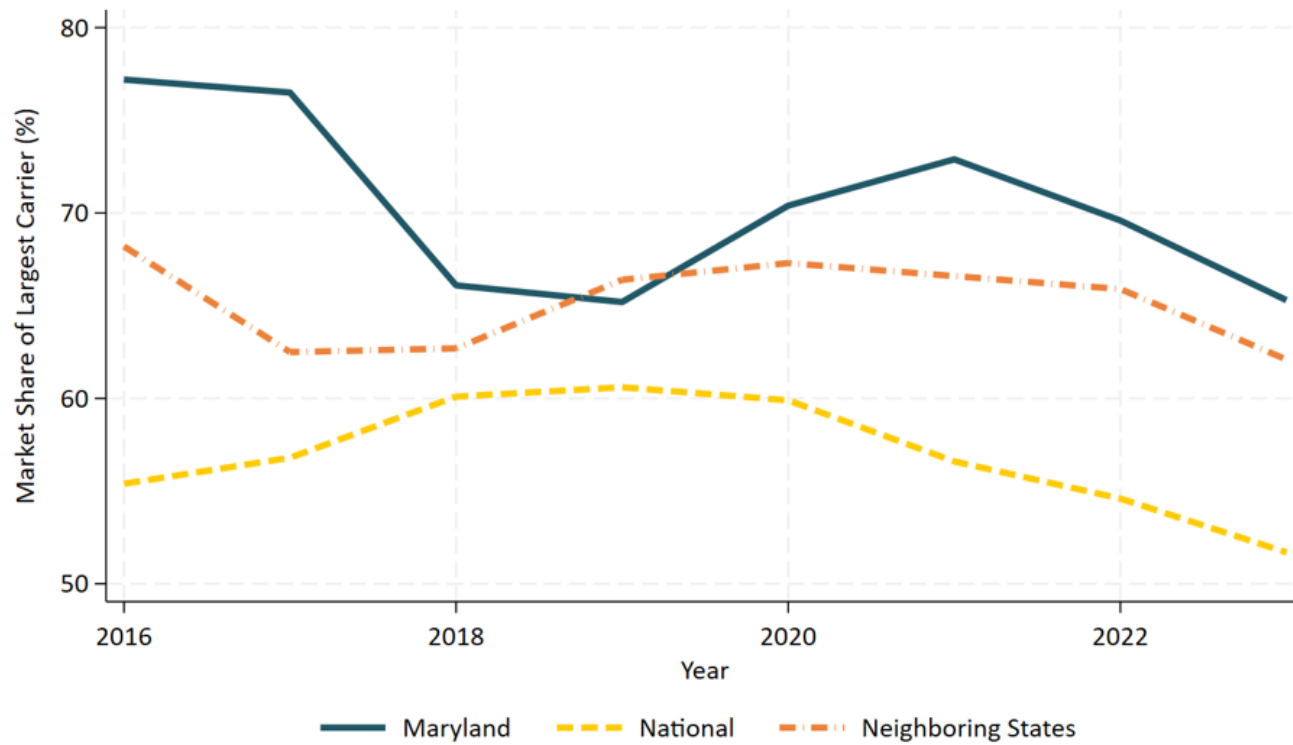
Maryland has relatively high concentration in the small group market

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



Maryland has relatively high concentration in the individual market

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



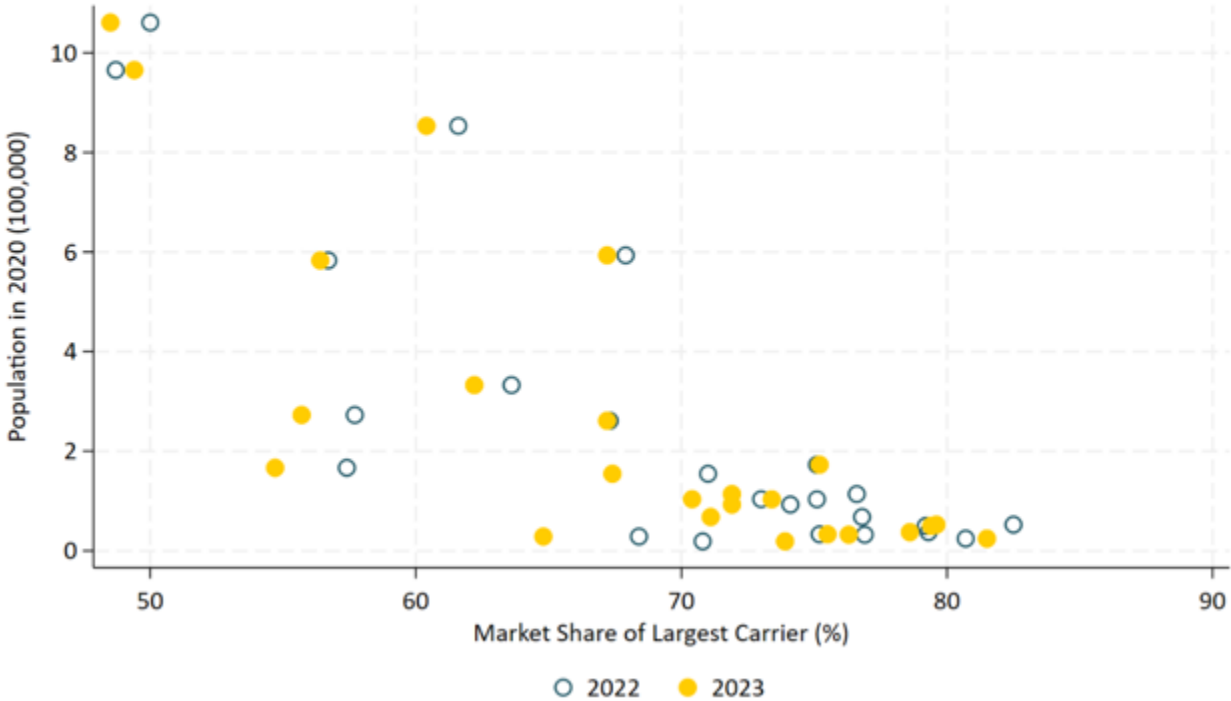
There is variation within Maryland (county)

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% |
| 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% |

Lower market concentration in larger counties

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



Negotiated reimbursements for CareFirst tended to be lower than those for Kaiser for primary care procedures

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 |
| 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 |

Additional Slides on Insurer Concentration and Access to Care

Carrier Survey Responses

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

| Respondent | # Total Active MDs | # Nurse Practitioners |
|-------------------|---------------------------|------------------------------|
| 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.

Carrier Survey Responses (Detail)

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 |
| <i>All other counties</i> | 102 (24.2%) | 612 (145.0%) | 484 (114.7%) | 362 (85.8%) | 371 (87.9%) | 422 |

Literature Review Results

- Targeted literature review to assess the relationship between insurer market concentration and consumers' access to health services
 - Peer-reviewed literature
 - Published within last 10 years
- Results:
 - Insurer market concentration is high across different types of markets
 - Some evidence that insurer concentration associated with narrow networks and reduced provider choice
 - Mixed and context dependent

Additional Slides on Provider Concentration

Mixed results on concentration of Medical Groups

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 |

Mixed results on concentration of Outpatient Surgical Centers

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 |

Additional Slides on Costs and Benefits of Transactions

Aims & Methods

- Purpose
 - Assess whether transactions (such as acquisitions/investments) improve quality, lower costs, or enhance integration
- Methods
 - Targeted review of studies (2014–2025) post-ACA
 - Databases: MEDLINE, Scopus, Web of Science and reference checks
 - Focus on consumer outcomes: quality, cost, access, value, care coordination
 - Studies selected for rigor, policy relevance, and direct consumer impacts