Advancing Ambulatory Surgical Care in Maryland

Cost Efficiency, Quality Oversight, and Integration Under the AHEAD Model

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Introduction

The Senate Budget and Taxation Committee and House Appropriation Committee are interested in understanding individuals' access to services provided at ambulatory surgical facilities paid by private payers. The Committees included a request in the Joint Chairmen's Report 2024 that Maryland Health Care Commission (MHCC or Commission) conduct a comprehensive study of policies and procedures for including ambulatory surgical facilities in private payer plans.[1] The report is to include a detailed analysis of the cost differential between procedures performed in hospitals and the same procedures performed in freestanding facilities; and an assessment of the impact of integrating ambulatory surgical facilities with the Total Cost of Care Model or its successor model under the States Advancing All-Payer Health Equity Approaches and Development (AHEAD) Model administered by the Centers for Medicare and Medicaid Services. This report includes the requested information and analysis and will be presented to the Committees.

Background on Maryland Ambulatory Surgery Centers: Establishment, Operations, and Ownership

Maryland ranks among the top five states nationally in the number of ambulatory surgical centers (ASCs).[2] Although Maryland ranks high in the absolute number of ASCs, Maryland's ASCs tend to be small and most have two or fewer operating rooms (ORs). This is due in part to the state's Certificate of Need (CON) policy which exempts ASCs with two or fewer operating rooms from full CON review, instead subjecting them to a more streamlined "Determination of Coverage" review process. Under CON regulatory requirements, outpatient facilities with three or more operating rooms are defined as ambulatory surgical facilities (ASFs) and are subject to a full CON review. For this report, we use the term ASC to include both facility categories.

Smaller ASCs are also common in Maryland because most operators partner with small groups of surgeons that will also use the facility. There are about 344 licensed freestanding ambulatory surgery centers across the state. There are 206 facilities that have OR capacity. Table 1 shows the number of ORs for large and small facilities.

Table 1: Number of ORs Based on ASC Size Designation

Smaller facilities: = or <2 ORs (n=326)		**Total Number of ORs**
Procedure room only (no ORs)	138	0
1 OR	137	137
2 Ors	51	102
Larger facilities: > 2 ORs (n=18)		
3 Ors	7	21
4 Ors	8	32
5 Ors	2	10
6 Ors	1	6
TOTAL	344	308

[1] Joint Chairmen's Report 2024 Session, https://mgaleg.maryland.gov/Pubs/BudgetFiscal/2024rs-budget-docs-jcr.pdf.

[2] Definitive Healthcare. (2024). *States ranked by number of surgery centers*. Retrieved May 23, 2025, from https://www.definitivehc.com/resources/healthcare-insights/states-ranked-by-surgery-centers.

Maryland is unique in the nation in that Maryland hospitals are paid under global budgets. As a result, they have little incentive to deliver services in the outpatient services arena since it does not increase their total reimbursements. Elsewhere, hospitals can increase total reimbursements by diverting services that could be done in ASCs to the hospital outpatient departments (HOPDs). This incentive structure is credited to why Maryland has a better mix of services (ASCs vs HOPDs) compared to the nation.

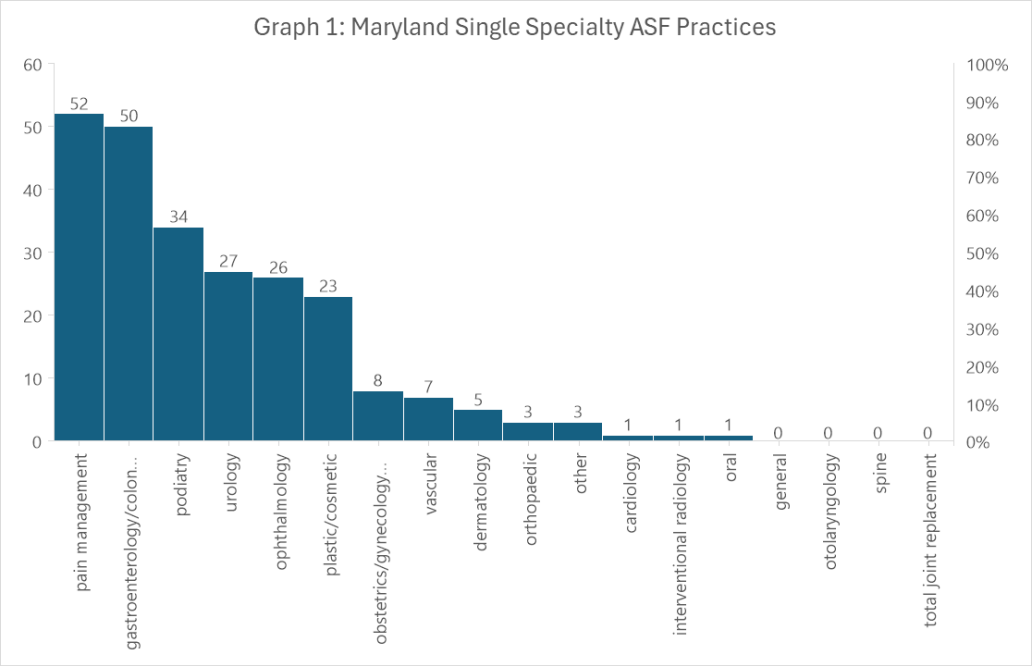
ASCs have been established in all Maryland jurisdictions except in Caroline, Garrett, Kent, and Somerset Counties. Table 2 shows the distribution of ASCs, ORs (HOPDs and ASCs), and procedure rooms by county. Capabilities vary significantly among ASCs; over 50 percent of ASCs in Calvert, Charles, Frederick, Harford, Howard, and Queen Anne's counties have no operating rooms. These centers, largely single specialty, are limited to performing simple minimally invasive surgeries, endoscopies, and certain other diagnostic procedures. These procedures do not require the use of general anesthesia [unless the patient has other associated comorbidities].

In Maryland, there are about 549 HOPD ORs and 308 ASC ORs. Some ORs combine traditional OR functions with advanced imaging technology to enable minimally invasive procedures to be performed when appropriate (i.e., mixed use or hybrid ORs). However, currently the Commission does not collect data to assess how many ORs in Maryland have this expanded capability.

Table 2: Distribution of ASCs and Operating and Procedure Rooms by County

County	# of ASCs	# of ASCs with no ORs	# of ASC ORs	# of Hospital ORs	# of ASC Procedure rooms	# of Hospital Procedure rooms
	ASCs		ORs		Procedure rooms	
Allegany	5	1	4	14	7	6
Anne Arundel	34	10	35	42	56	10
Baltimore City	7	3	4	212	11	96
Baltimore County	71	27	72	78	101	19
Calvert	7	4	3	6	7	4
Caroline	0	0	0	0	0	0
Carroll	9	4	5	10	13	3
Cecil	3	1	2	4	4	7
Charles	11	9	3	4	21	2
Dorchester	1	1	1	0	1	0
Frederick	22	14	14	11	37	3
Garrett	0	0	0	3	0	2
Harford	15	7	10	15	20	2
Howard	22	11	16	10	35	3
Kent	0	0	0	2	0	1
Montgomery	66	26	71	64	110	18
Prince George's	38	13	38	34	46	16
Queen Anne's	2	1	1	0	4	0
St. Mary's	4	1	3	6	5	2
Somerset	0	0	0	0	0	0
Talbot	6	2	4	6	11	1
Washington	10	1	11	11	11	3
Wicomico	9	1	11	13	16	4
Worcester	2	2	0	4	3	4
TOTAL	344	139	308	549	519	206

It is important to note that most of Maryland ASCs are single specialty facilities. In fact, 244 of the 344 ASCs in Maryland report that they are a single specialty facility. Graph 1 shows the distribution of single specialty ASCs by the specialty they support. Pain Management and gastroenterology account for the highest number of single specialty ASCs. In fact, 32% (n=109) of all ASCs support pain management services. Many of the gastroenterology ASCs offer a limited range of procedures such as colonoscopies. The remaining 97 facilities are considered multi-specialty and support various surgical disciplines.



An analysis of outpatient surgery, conducted by the Health Services Cost Review Commission (HSCRC), using Maryland's All-Payer Claims Database (APCD) data and nationally representative commercial claims data, found that Maryland performs more outpatient surgery than similar geographies in other states. In addition, Maryland performs a higher percentage of these surgeries at ASCs relative to comparable geographies. It is unclear to what degree the differences in the mix of services are due to better access in Maryland versus induced demand related to provider incentives towards increased number of surgeries and higher acuity of surgeries performed within the State.

Ownership of ASCs

Most ASCs in Maryland are owned by the surgeons who provide the services (i.e., surgical procedures) at those facilities. Physician ownership and control have been key factors in the growth of the ASC sector. As value-based payment models have gained momentum, insurance carriers have pursued more restrictive payment formulas, and staffing issues are proving ever more daunting, many ASCs have sought support from ASC management companies.

Large ASC management companies, like United Surgical Partners International (USPI), owned by Tenet Healthcare reports, have agreements with 46 Maryland ASCs. SCA Health, owned by Optum, itself a

subsidiary of United Health Group, is also active in Maryland with at least six affiliated Maryland ASCs including a University of Maryland ASC in Howard County and a Luminis ASC in Pasadena Maryland.

Private equity organizations have also shown increased interest in the last several years. Summit Ambulatory Surgery Centers, a subsidiary of Chesapeake Urology, now operates 18 ASCs in Maryland. Chesapeake Urology's expansion has been fueled in part through private equity investments, but not ownership control. Chesapeake Urology operates in several other states as United Urology. Clearway Pain Solutions operates 20 ASCs in Maryland focusing on pain management. Clearway also operates in several other states. Like Chesapeake Urology, Clearway Pain Solutions has attracted private equity investment, but not control. All but one Clearway Pain Solutions ASCs in Maryland have procedure rooms, but no ORs as most pain management procedures do not entail the use of general anesthesia or involve open surgical procedures.

Maryland health systems have taken a more active interest in owning and operating ASCs as the incentives under the hospital payment system have changed. University of Maryland Medical Systems (UMMS), Luminis, and MedStar expanded their ASC capacity in 2024 by establishing new ASCs or partnering with physician practices.

Utilization of Outpatient Surgeries in Maryland

Over time, MHCC and the HSCRC have utilized the APCD, national commercial claims data, and the HOPD database to analyze and compare volume and cost trends in outpatient surgeries performed in the ASC and HOPD settings. HOPDs have historically dominated the outpatient surgery market, benefiting from broader regulatory coverage and higher reimbursement rates under Maryland's unique hospital payment (all-payer) system. Preliminary reports found that while HOPDs have more extensive infrastructure and handle more complex procedures, they are also significantly more expensive—on average, about 38% higher in cost for common procedures compared to ASCs.

Policymakers have questioned differences in payment levels at ASCs and HOPDs and argued for gradual elimination of site of service differentials. Most outpatient procedures can be provided across multiple clinical settings, and as it currently stands, the choice of outpatient site for many services appears to have no identified effect on patient care, it may impact Medicare's and commercial carriers' payment for such services and patient cost-sharing expenses. Medicare, Medicaid, and commercial health insurance carriers pay higher rates for outpatient services performed in hospital facilities than to physician offices or ASCs for furnishing the same service to similar patients.[3] Some argue that one reason for these higher rates is that hospitals are expected to provide 24/7 services as a community resource, so some cost go towards expenses in keeping the hospital operational.

ASCs in Maryland are paid using a similar framework to what applies nationally --- Medicare pays according to the ASC payment system, Maryland Medicaid has its own payment system, and private payers set their payment levels for procedures delivered at ASCs. Medicaid and private payers often derive their ASC fee levels from the ASC payment framework established by Medicare. Medicaid Managed Care

[3] The site-of-service differential is a longstanding payment policy issue stemming from the Medicare programs and other payers use of separate payment systems for different sites of service such as an ASC versus a hospital outpatient department.

Organizations (MCOs) set their own fee for ASC services. ASCs generally argue that these fee levels, which are generally less than what is paid under the Medicare ASC payment system for the same surgery, are not adequate. Generally, ASCs will contract with at least one MCO. Given eight MCOs operate in Maryland, many Medicaid beneficiaries may be more likely to use HOPDs. Hospitals do not experience fee reductions for treating Some Medicaid beneficiaries because unlike ASCs, hospitals are paid the same HSCRC authorized rates for providing outpatient surgical services to Medicaid, Medicare beneficiaries, and the commercially insured.

As Maryland transitions to the AHEAD Model under the Centers for Medicare & Medicaid Services (CMS), there is growing interest in more formally integrating ASCs into this new framework. This includes not only facilitating access to lower cost sites of service but also aligning their reimbursement structures and quality oversight mechanisms with the state's population health and cost-containment goals. It is important to note that Maryland is actively finalizing the terms of its participation in the AHEAD Model, with implementation scheduled to commence in January 2026.

In addition to the AHEAD Model, it is important to note that under the current Total Cost of Care model the HSCRC also maintains the Episode Quality Improvement Program (EQIP). EQIP is based on a trigger methodology that aligns payment incentives in the episode of care under Medicare Fee-for-Service towards improved health outcomes and efficiency. An example of an EQIP episode of care trigger is the removal of a polyp during a colonoscopy. Because the polyp may be benign, pre-cancerous, or cancerous, the diagnosis and follow up has clear quality-related impacts. EQIP explicitly encourages site of service redirection as the bundled services use site neutral pricing and numerous program triggers are focused on areas in which ASCs make sense. For 2024 EQIP had 14 episodes where an ASC was a valid trigger location. Over 2,000 Maryland physicians participated in these episodes, and they accounted for 63% of all EQIP episodes.

This report is structured to address the legislative directive articulated in the 2024 JCR and to better inform future regulatory and policy decisions. The report describes the data sources and analytic methods used, including detailed claims analyses, geographic access mapping, and stakeholder feedback. Study findings are presented across five thematic areas: the current ASC landscape, commercial insurance network participation, cost differential analysis, integration potential under the AHEAD Model, and opportunities for quality monitoring. The report outlines four actionable policy recommendations based on these findings. Finally, implementation considerations, including governance, phased rollout strategies, and resource needs are discussed. Overall, the report provides a comprehensive foundation for understanding the evolving role of ASCs in Maryland and offers a roadmap for integrating these facilities into the state's broader health system reform efforts.

Methods

Data sources

ASC data. For Calendar year (CY) 2023, MHCC extracted ASC claims data from the Maryland Medical Care Data Base (MCDB), which is Maryland's APCD, to analyze outpatient surgical services across the state. The analysis captures granular details across several key dimensions critical to evaluating service utilization, cost variation, and network participation. The data is organized by individual facility, allowing for facility-level comparisons and insights into service delivery patterns. To distinguish between different

provider specialties and organizational structures, MHCC further categorized each claim using provider taxonomy codes and entity types.

To achieve geographic differentiation, we grouped claims data by Core-Based Statistical Area (CBSA), providing a regional lens to examine patterns in access, pricing, and volume. To assess the surgical services delivered, the data is categorized by Current Procedural Terminology (CPT) codes, with each code corresponding to a specific surgical or diagnostic procedure. We used the associated bill type (83) to confirm the care setting and ensure that claims reflected services rendered in ASC environments rather than HOPD or other facilities.

MHCC identified network participation status for each claim, classifying services as either in-network or out-of-network based on the ASC's contractual relationship with payers. This distinction was essential for evaluating the financial implications of provider network inclusion. We calculated financial metrics at the procedure level, with total allowed amounts aggregated by CPT code to reflect payer-approved reimbursement for in-network services only. We captured service volume as the number of times each CPT-coded procedure was performed for a given patient, provider (facility) and same service date, and average cost per service was derived by dividing the total allowed amount by the number of services for each CPT code.

HOPD data. MHCC extracted HOPD data from the HSCRC Case Mix dataset, for CY 2023, to analyze surgical and procedural services delivered in hospital-based outpatient settings. We focused on identifying and aggregating data to evaluate utilization patterns, cost structures, and provider-level variation. MHCC linked each record to a specific hospital through its unique hospital identifier, allowing for facility-level comparisons and insights into differences in service delivery across institutions. To further refine provider-level analysis, we captured the attending physician's National Provider Identifier (NPI), enabling the assessment of service volumes and reimbursement at the individual clinician level.

We accounted for geographic variation by mapping each claim to its corresponding CBSA region, which facilitated regional analyses of access, cost, and utilization trends. Each outpatient service was classified by its CPT code, ensuring precision in identifying specific procedures performed and supporting the aggregation of volume and cost data at a standardized procedural level. We derived financial metrics by summing the total allowed amount associated with each CPT code—representing the amount reimbursed by payers and patients combined—across all relevant claims. In parallel, the number of services provided was counted for each CPT code, and the average cost per service was calculated by dividing the total allowed amount by the number of services rendered.

MHCC Survey of Private Payer Coverage. The MHCC staff developed and administered a survey to ASCs to understand how ASCs interact with commercial insurance networks in Maryland. The survey consisted of seven questions aimed at gathering information on network participation status, ease of access to commercial networks, challenges experienced, denial history, and suggestions for improving the inclusion process.

Analytic Approach

Our approach to compare costs between ASCs and HOPDs focused on evaluating reimbursement differences between the two settings. We began the analysis by identifying a common set of CPT codes that were frequently performed in both ASCs and HOPDs to ensure comparability across settings. Claims were

then aggregated by service setting, CPT code, and CBSA region. For each procedure, key metrics were calculated such as the total number of services, total allowed amounts (which include both payer and patient payments), and average allowed amount per service.

MHCC used descriptive statistics to summarize average and median costs per procedure by site of service, and inferential statistical tests—such as t-tests or non-parametric methods—were applied to determine whether observed cost differences are statistically significant. We conducted sensitivity analyses to evaluate the robustness of the findings, such as by excluding low-volume procedures, focusing on commercially insured patients, or stratifying by facility ownership and health system affiliation.

Observed spending variation may be primarily driven by differences in reimbursement rates (price effect) or by differences in service volume and procedural mix (case mix effect). We decomposed cost differences between ASCs and HOPDs using a counterfactual-based arithmetic decomposition method, commonly applied in healthcare services research to isolate price and quantity (case mix or volume) effects.[4] This method is analogous to approaches used in Oaxaca-Blinder-type decompositions and health services studies evaluating expenditure differences across populations or settings.[5] The distinction between price and case mix effect is critical for informing targeted policy interventions—such as site-neutral payment reforms or procedural migration strategies—that can most effectively reduce healthcare expenditures without compromising access or quality.

Limitations

Several limitations and data gaps should be acknowledged when interpreting the findings of cost differences between ASCs and HOPDs based on the 2023 combined claims dataset. The APCD dataset lacks detailed patient-level clinical information, including severity of illness and functional status. This limits the ability to assess whether cost differences reflect differences in case complexity or appropriateness of site selection. Variations across payer contracts (e.g., Medicare vs. commercial) and site-specific incentives are not captured in the APCD data, potentially biasing the attribution of differences to unit prices. While the analysis accounts for CBSA regions, it does not incorporate factors such as local market competition, ASC penetration rates, or health system consolidation, which may influence both utilization patterns and pricing power.

The analysis focuses solely on direct procedural charges and does not consider downstream costs, such as readmissions, complications, or ancillary services, which could differentially affect the total cost of care by setting. The study is based on a single year of data (2023) and may not capture temporal trends or pandemic-related disruptions that influenced procedure volumes or site-of-service shifts. CPT codes may vary in complexity and resource intensity within the same code, introducing unmeasured heterogeneity.

Maryland APCD does not include claims data from self-insured employer plans that are regulated under the federal Employee Retirement Income Security Act of 1974 (ERISA) due the Supreme Court of the United States (SCOTUS) court case ruling (*Gobeille v. Liberty Mutual*). These plans are exempt from state

[4] Dunn, A., Shapiro, A. H., & Liebman, E. (2013). Geographic variation in commercial medical-care expenditures: a framework for decomposing price and utilization. *Journal of Health Economics*, *32*(6), 1153-1165.

[5] Zuvekas, S. H. (2005). Prescription drugs and the changing patterns of treatment for mental disorders, 1996–2001. *Health Affairs*, *24*(1), 195-205.

insurance regulations and are not required to submit data to the APCD.[6] Specifically, the self-insured ERISA plans represent about 34% of the privately insured population in the Maryland APCD (in CY 2014). Also, Federal Employees Health Benefits Program (FEHBP) are excluded from the Maryland APCD due Office of Personnel Management's (OPM) interpretation that the Federal Employees Health Benefits Act of 1959 (FEHBA), 5 U.S.C. § 8901 et seq., preempts Maryland law authorizing the APCD to collect member claims and encounter data from carriers that contract with OPM, thereby barring private payers from reporting FEHBP data to all state APCDs. The FEHBP data represents about 20% of the privately insured population (in CY 2019) after the ERISA data loss making the ERISA and FEHBP data losses to be about 44% combined of the privately insured population of the Maryland APCD. Other Federal programs such as TRICARE, and the Veterans Health Administration (VHA), which were never collected, are also excluded from the APCD. The APCD does not include health services paid directly by individuals without insurance or care financed through charitable care programs. This omits data for uninsured populations and potentially undercounts volume at safety-net providers.

The HOPD excludes emergency departments and physician fees billed for professional services provided at a hospital. In comparison to the APCD data, the HOPD data includes the self-insured ERISA plans and FEHBP.

Informal interviews were held with insurers to better understand the issues that influence network inclusion decisions. Insurers indicated that in addition to compliance with MIA requirements, including maximum travel distance standards for patient access to covered services, insurers consider physician preferences and performance. It is important to note that insurers are not required to disclose their internal policies and procedures used to determine network inclusion decisions. That information is considered confidential and proprietary. A more formal survey of insurers may have revealed additional information on network size related to provider induced demand effects and referrals to small ASCs that do not benefit from a volume-outcome relationship. In addition, insurers may be able to identify legitimate reasons to exclude ASCs from a network, such as a lack of quality reporting.

Despite the presence of data gaps, the study remains highly relevant because the dataset offers valid insights into procedure-level cost variation and utilization patterns for a broad array of common outpatient surgeries to inform state regulatory bodies such as HSCRC and the Maryland Department of Health. These agencies are actively involved in implementing the Total Cost of Care (TCOC) model and the Maryland AHEAD initiative, which aims to bend the cost curve through delivery system transformation, including expanded use of lower-cost settings such as ASCs. These insights are reflective of prevailing provider behavior and consumer access patterns in Maryland and can guide efforts to address inefficiencies or disparities within the regulated market.

[6] Love, D., Custer, W., & Miller, P. (2010). *All-payer claims databases: state initiatives to improve health care transparency* (Vol. 99, pp. 1-14). New York (NY): Commonwealth Fund.

Findings

Current ASC Landscape in Maryland

The current ASC landscape in Maryland is marked by a concentrated distribution of facilities in urban regions and a clear specialization in a subset of high-volume procedures. We used the Core-Based Statistical Area (CBSA) to assess area variation. CBSAs are geographic regions defined by the U.S. Office of Management and Budget (OMB) that centers around a city or town and includes surrounding areas that are closely connected to it, mostly through people commuting for work. There are nine CBSA regions in Maryland: Baltimore-Columbia-Towson (MD), California-Lexington Park (MD), Cumberland (MD-WV), Frederick-Gaithersburg-Rockville (MD), Hagerstown-Martinsburg (MD-WV), Salisbury (MD-DE), Washington-Arlington-Alexandria (DC-VA-MD-WV), Wilmington (DE-MD-NJ), and Other Maryland (Caroline-Garrett-Kent-Talbot (MD).

The Baltimore-Columbia-Towson CBSA hosts the largest number of ASC facilities (n=112), followed by Frederick-Gaithersburg-Rockville (n=60) and the broader Washington metropolitan area (n=41). Rural and smaller metropolitan areas such as Salisbury and Hagerstown have relatively sparse ASC presence. A review of procedural volume reveals that ASCs are highly concentrated in specialties such as gastroenterology and ophthalmology, with CPT codes for colonoscopies (45380, 45378), upper endoscopies (43239), and cataract surgeries (66984) dominating total service counts.

Commercial Insurance Network Participation

The insurance network participation landscape for ASCs in Maryland is shaped by a complex mix of regulatory limitations, access barriers, payer practices, and facility-level experiences. Under the current Maryland Insurance Administration (MIA) regulatory framework, insurers are not explicitly mandated to contract with ASCs but are instead required to have sufficient health care facilities within their networks to meet specified maximum travel distance standards for outpatient surgical services. In general, insurers may satisfy this requirement through the inclusion of ASCs or HOPDs in their networks. This absence of regulatory compulsion can contribute to selective network inclusion and allows commercial insurers to close their networks to new ASCs or impose restrictive participation criteria without substantive oversight or accountability.

MHCC analyzed the 2023 Maryland APCD, which confirmed that network participation is uneven and that access gaps persist across regions. Many ASCs, particularly those located outside high-density urban areas, are excluded from major payer networks, potentially limiting patient options and creating measurable travel burdens for those seeking lower-cost surgical care. This gap is compounded by payer practices that favor HOPDs through higher reimbursement rates and restrictive contracting policies. For example, survey findings show that only 9.5% of ASCs find it easy to join commercial networks, with 38.1% reporting the process as difficult. Common reasons for exclusion include closed networks, requirements for hospital affiliations, and fee schedules that are not financially viable for ASC operations.

Stakeholder feedback from Maryland's ASC community reveals significant frustration with the administrative and financial hurdles they face. While most ASCs participate in at least one commercial network, many claim they have encountered onerous preauthorization requirements, lengthy credentialing delays, and reimbursement practices that effectively steer patients toward hospitals. Insurers were frequently cited for network closures or refusal to credential new ASCs, often citing market saturation or lack of need. Providers expressed that parity in reimbursement, proposing ASC payments at 80% of hospital

rates, would meaningfully expand patient access, and alleviate financial pressures on outpatient facilities. While ASC providers have voiced their opinions about reimbursement rates, it is important to note that the State does not set ASC rates outside of Medicaid reimbursement. These findings point to a critical need for policy reforms that enhance transparency, standardize contracting processes, and integrate ASCs more fully into Maryland's network adequacy and value-based care framework.

Cost Differential Analysis

- Comparison of average costs between ASCs and HOPDs across 101 procedures
- Decomposition of cost differences: reimbursement vs. case mix
- Identification of high-impact procedures for site-of-service reform

The 2023 combined claims dataset contains a total of 4,841 unique CPT codes, reflecting a broad spectrum of outpatient procedures performed across both ASCs and HOPDs in Maryland. Of these procedure codes, a total of 3,523 (73%) are only used in HOPDs, 187 (4%) are only used in in-network ASCs, and 1,119 (23%) are used in both in-network ASCs and HOPDs. A handful of procedure codes (12 codes) are used in out-of-network ASCs but not in-network ASCs. The cost analysis will focus on the procedure codes that are used in both in-network ASCs and HOPDs.

The following table shows the comparison of 101 common procedures performed in ASCs with the same procedures performed in a HOPD (excluding Emergency Department). Results show that the average cost per procedure is about 38 percent lower when performed in an ASC than when performed in the hospital outpatient department.

Table 3. Cost Differentials by Procedure
ASCs vs. Hospital Outpatient (Excludes Emergency Department) - 2023

		ASC Inst MCDB (In-Network)		Hospital OutPatient Casemix		ASC vs. Hospital Outpatient	
Procedure Code	Description	Number of Services Per 10,000 Patients per Year	Cost Per Procedure	Number of Services Per 10,000 Patients per Year	Cost Per Procedure	Cost Differential	Cost Differential %
19303	Mastectomy, simple, complete	47	$2,144	1,526	$25,803	-$23,659	-92%
19301	Mastectomy, partial (eg, lumpectomy, tylectomy, quadrantectomy, segmentectomy);	142	$1,016	26,500	$10,493	-$9,477	-90%
28124	Partial excision (craterization, saucerization, sequestrectomy, or diaphysectomy) bone (eg, osteomyelitis or bossing); phalanx of toe	130	$533	128	$5,179	-$4,646	-90%
19125	Excision of breast lesion identified by pre-operative placement of radiological marker, open, single lesion	59	$1,037	5,818	$6,535	-$5,498	-84%
49593	Repair of anterior abdominal hernia(s) (ie, epigastric, incisional, ventral, umbilical, spigelian), any approach (ie, open, laparoscopic, robotic), initial, including mesh or other prosthesis when performed, total length of defect(s); 3 cm to 10 cm, reducible	47	$1,682	3,447	$10,027	-$8,345	-83%
58262	Vaginal hysterectomy, for uterus 250 g or less; with removal of tube(s), and/or ovary(s)	50	$1,895	596	$9,827	-$7,932	-81%
58662	Laparoscopy, surgical; with fulguration or excision of lesions of the ovary, pelvic viscera, or peritoneal surface by any method	186	$2,238	21,715	$11,240	-$9,002	-80%
Total	**101 procedures**	**8,493**	**$6,709**	**248,669**	**$10,853**	**-$4,144**	**-38%**

The comparison of the procedures with the highest differential has a limitation in comparing low volume procedures, both at ASCs and HOPDs. The following table presents a comparative analysis of high-volume procedures performed in ASCs versus HOPDs in Maryland, highlighting significant opportunities for cost savings through site-of-service shifts. It lists 14 CPT codes accounting for over 51% of all ASC services, ordered by volume and cumulative percent of ASC activity. These CPTs span orthopedic, gastrointestinal, ophthalmologic, and neurologic specialties.

Table 4. Top 14 Procedure Codes that Make Up 50 Percent of ASC Total Cost

		ASC Inst MCDB (In-Network)				HOPD
Procedure Codes	Description	Number of Facilities	Cost Per Procedure	Percent of Total Cost	Cumulative Percent of Total Cost	Cost Per Procedure
27447	Arthroplasty, knee, condyle and plateau; medial AND lateral compartments with or without patella resurfacing (total knee arthroplasty)	39	$15,320.89	7.4%	7.4%	$16,524.16
45380	Colonoscopy, flexible; with biopsy, single or multiple	57	$494.26	7.0%	14.5%	$3,052.99
45378	Colonoscopy, flexible; diagnostic, including collection of specimen(s) by brushing or washing, when performed (separate procedure)	58	$521.98	6.1%	20.6%	$2,234.88
45385	Colonoscopy, flexible; with removal of tumor(s), polyp(s), or other lesion(s) by snare technique	55	$524.19	5.6%	26.2%	$2,872.89
43239	Esophagogastroduodenoscopy, flexible, transoral; with biopsy, single or multiple	58	$426.03	5.5%	31.7%	$3,007.94
27130	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty), with or without autograft or allograft	28	$14,346.64	3.9%	35.6%	$17,159.44
66984	Extracapsular cataract removal with insertion of intraocular lens prosthesis (one stage procedure), manual or mechanical technique (e.g., irrigation and aspiration or phacoemulsification)	35	$1,048.86	3.9%	39.6%	$5,759.93
52356	Cystourethroscopy with ureteroscopy and/or pyeloscopy; with lithotripsy (ureteral or renal pelvic stone[s]), includes placement of ureteral stent, when performed	19	$4,072.98	2.1%	41.7%	$8,623.55
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair	42	$3,950.53	2.1%	43.7%	$14,264.48
29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving)	43	$2,054.64	1.9%	45.6%	$6,333.30
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction	38	$5,033.16	1.6%	47.2%	$21,469.56
63685	Insertion or replacement of spinal neurostimulator pulse generator or receiver, direct or inductive coupling	19	$23,593.74	1.4%	48.7%	$47,004.20
52000	Cystourethroscopy (separate procedure)	34	$439.90	1.2%	49.9%	$1,912.38
64483	Injection(s), anesthetic agent and/or steroid, transforaminal epidural; lumbar or sacral, single level	71	$421.26	1.2%	51.0%	$724.24

For nearly all listed CPTs, the cost per service is substantially lower in ASCs than in HOPDs. The percentage cost differential ranges from –7% for CPT 27447 (total knee arthroplasty) to –86% for CPT 43239 (esophagogastroduodenoscopy), with the majority exceeding 70% in savings. This stark difference indicates that ASCs are not only handling high procedural volume but doing so at significantly reduced costs. A small number of procedures account for a large share of ASC volume and associated savings potential. For example, five endoscopic (45380, 45378, 45385, 43239) and ophthalmologic (66984) codes account for over 25% of total ASC procedures and demonstrate cost differentials between $1,700 and $4,700 per case. The table includes procedures from orthopedics (27447, 27130, 29827, 29888), urology (52000, 52356), and pain management (64483), illustrating the breadth of services that can be efficiently performed in ASCs. Notably, CPT 63685 (neurostimulator spinal implant) shows a $23,000+ cost reduction per service, signaling a high-value target for potential bundled payment or site-neutral reimbursement reforms.

To assess the CBSA Region Impact, we conducted a geographic decomposition of the total cost differences between ASCs and HOPDs, broken down into two components: (1) reimbursement differences (unit price effect) and (2) case mix differences (volume effect). Cost differences by CBSA regions are largely driven

by case mix (intensity of services) rather than reimbursement. Urban and high-volume regions such as Baltimore-Columbia-Towson and the Washington-Arlington-Alexandria corridor exhibit substantial volume effects in HOPDs, suggesting that higher overall spending is driven by the number of services delivered rather than disproportionately high prices per service. For example, Baltimore-Columbia-Towson, MD, had the highest total spending, yet a substantial negative price effect of approximately -$3.35 billion, suggesting that much of its observed spending is due to service volume rather than high prices. This suggests that volume differences (i.e., HOPDs performing more services than ASCs) are the primary contributor to geographic variation in charges. In these CBSAs, even if the same rates were used (ASC rates), the higher volume of services at HOPDs results in significantly higher aggregate costs. Unit price variation between ASCs and HOPDs, being more moderate or less influential could reflect narrower reimbursement gaps due to payer practices, more regulated rate structures, or fewer high-cost outlier procedures in those areas. The decomposition analysis also indicates that in rural CBSAs, the price effect is the dominant driver of spending differences in HOPDs, while volume plays a smaller role. For instance, the combined CBSA for rural counties (Caroline, Garrett, Kent, and Talbot) have positive volume effect of $306 thousand and a much larger price effect of $9.3 million.

Overall, the data underscores the strategic value of incentivizing appropriate site-of-service transitions. If these high-volume, high-differential procedures were more frequently performed in ASCs, Maryland could possibly significantly reduce outpatient surgical costs while maintaining or improving access and patient experience.

The combined dataset of ASC and HOPD data for 2023 contains 1,119 CPT codes that are performed in both facility types. The decomposition of cost differences between ASCs and HOPDs, using a counterfactual-based arithmetic decomposition method, suggests that approximately $9.27 million in cost differential is attributable to differences in unit reimbursement amounts—reflecting that HOPDs, on average, charge more per service than ASCs for the same CPT codes when volume is held constant. Furthermore, approximately -$101.4 million in differential is attributable to case mix, suggesting that HOPDs are performing a greater volume of higher-cost procedures (even at ASC rates), or simply a larger overall volume of services. The result implies that even if HOPDs were reimbursed at ASC rates, their total charges would still exceed those of ASCs due to higher or more intensive service utilization.

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offer a valuable lens for tailoring policy interventions and network design strategies to regional cost structures and utilization patterns.

The survey, to better understand ASCs' perspective of commercial health insurance network participation, revealed significant insights into the readiness of ASCs in Maryland for inclusion in regulated models, particularly those under the Maryland Total Cost of Care or the AHEAD model. Several themes appear:

1. **Insurance Network Participation and Coverage**. Most ASCs (81%) are actively participating in commercial insurance networks, with a significant portion (52%) involved in multiple networks. Key players like Aetna, BCBS, CareFirst, and Cigna dominate the participation landscape. However, despite this widespread involvement, challenges persist due to closed networks, delayed credentialing processes, limited reimbursement rates, and location- based restrictions. Some facilities have been denied access due to factors such as market saturation or geographic proximity to existing providers, especially in urban areas. The survey reveals that 38% of respondents cited challenges in network inclusion. The findings suggest that while ASCs are actively engaged with insurers, the contractual and reimbursement challenges they face may pose barriers to fully integrating into more value-based or regulated payment models.
2. **Access and Equity Challenges**. Patients' abilities to access services in ASCs are impacted by ASC's challenges in participating in the commercial insurance network. Additionally, patients may have to travel long distances to access ASC services, which could negatively impact health equity. These access limitations, coupled with the need for significant improvements in provider relations, regulatory alignment, and reimbursement fairness, suggest that while ASCs have the infrastructure to participate in regulated models, substantial efforts are needed to ensure that network access and geographical equity are optimized.
3. **Financial Viability and Reimbursement Concerns.** A recurring theme from the survey responses is the disparity in reimbursement between HOPDs and ASCs. Many ASCs report that reimbursement rates for services provided in ASCs are much lower than those offered to hospitals for identical procedures. This reimbursement gap, coupled with additional financial burdens related to accreditation and certification, creates significant obstacles to ASC participation in regulated models that prioritize cost containment and efficiency.
4. **Operational and Regulatory Readiness**. ASCs are generally well-equipped operationally to participate in regulated models, as evidenced by their broad network participation and the high number of services provided across a variety of specialties. However, the survey results indicate that many ASCs face cumbersome administrative requirements, such as preauthorization protocols, peer-to-peer reviews, and delayed insurance claim processing, which reduce their capacity to deliver care efficiently. A more streamlined regulatory and claims processing environment would improve ASC readiness for participation in state-regulated models. Respondents emphasized the need for standardized applications, reduced administrative burdens, and clearer payment terms to facilitate smoother participation.

The findings indicate that Maryland ASCs possess strong integration potential under the AHEAD Model, supported by widespread commercial network participation, demonstrated procedural specialization, and substantial cost advantages over HOPDs. Analysis of 2023 claims data revealed that a concentrated set of high-volume, high-cost differential procedures—particularly in gastroenterology, orthopedics, and ophthalmology—could generate system-wide savings if shifted to ASCs. Aligning ASCs with the AHEAD

Model through quality monitoring, network adequacy reforms, and payment parity strategies would enhance statewide efforts to contain costs, improve access, and promote high-value care delivery.

Quality and Transparency

- Overview of existing quality monitoring programs (e.g., CMS ASCQR, HSCRC QBR)
- Gaps in ASC-specific quality data
- Proposed quality metrics and initial benchmarking using 2023 data

Maryland's quality monitoring infrastructure includes a combination of federal and state-level programs aimed at assessing performance across both ASCs and HOPDs.

For ASCs, the CMS administers the *Ambulatory Surgical Center Quality Reporting (ASCQR) Program*, which mandates data submission on clinical quality measures such as patient burns, falls, surgical site infections, and patient experience for Medicare-certified ASCs. This program is designed to promote transparency and accountability by linking performance to payment updates.

For hospitals, Maryland's HSCRC operates the *Quality-Based Reimbursement (QBR) Program*, which adjusts hospital payments based on a composite of clinical process, outcome, and patient experience metrics, including measures aligned with the federal Hospital Value-Based Purchasing Program. ASCs in Maryland are not currently subject to HSCRC's QBR program or other all-payer performance-based initiatives, resulting in a fragmented oversight landscape.

There are significant gaps in the availability, granularity, and comprehensiveness of ASC-specific quality data, despite the presence of federal reporting mechanisms such as the CMS ASCQR Program. Many of the required ASCQR measures focus on rare adverse events or process compliance, offering limited insight into patient outcomes, functional status, or disparities in care. Moreover, there is no mandatory all-payer quality reporting for ASCs at the state level in Maryland, resulting in fragmented data that does not capture variations across commercial, Medicaid, or self-pay populations. The lack of standardized reporting on complications, unplanned hospital transfers, or patient-reported outcomes hampers efforts to compare ASC performance to HOPDs or to incorporate ASCs into value-based purchasing and population health strategies. This data deficit constrains policymakers' ability to assess quality across sites of service and weakens accountability frameworks essential for the success of models like Maryland AHEAD. Bridging these gaps through unified, all-payer quality reporting requirements would enhance transparency, support equitable care delivery, and enable more effective oversight of ASCs.

Initial benchmarking and quality metric development using state-administered data, such as the Maryland APCD and HSCRC's Case Mix system, may offer a pragmatic and scalable approach to establishing a foundational quality monitoring framework for ASCs. These datasets already capture broad, cross-payer information on utilization, procedural volume, cost, and outcomes such as emergency department visits and readmissions, which can serve as reliable proxies for care quality and safety. Leveraging existing state infrastructure circumvents the delays and limitations of federal reporting systems while enabling Maryland to tailor metrics to local priorities, such as geographic access, equity, and high-value care transitions. Additionally, using state-administered data allows for benchmarking across all sites of service, HOPDs, ASCs, and potentially office-based settings, supporting apples-to-apples comparisons and informing site-

neutral payment reforms. This approach aligns with Maryland's all-payer regulatory authority and enhances the accountability and transparency needed for effective inclusion of ASCs under the AHEAD Model.

Recommendations

Recommendation #1: Enhance MIA oversight and support for ASC network inclusion

Under MIA rules, particularly COMAR 31.10.44.03, commercial health insurance carriers must develop and maintain provider networks that are sufficient in numbers, geographic distribution, and specialty coverage to ensure enrollee access to covered services. A critical element of this standard is travel distance, which is stratified by urban, suburban, and rural classifications. While MIA sets the regulatory framework for network adequacy, the current standards related to outpatient surgery may be satisfied by any type of licensed facility authorized to perform surgical services. The standards do not specifically require the inclusion of ASCs in commercial insurance networks. The findings from this study highlight commercial insurance network inclusion as a potential area for policy development to promote broader access to cost-effective outpatient surgical services.

1. Oversight of Network Adequacy Standards. MIA is responsible for ensuring that commercial health insurance plans meet network adequacy standards to serve Maryland residents effectively. According to COMAR 31.10.44.03, this includes requirements for enough providers across geographic areas and 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. MIA enforces a travel distance standard to guarantee enrollee access to providers based on urban, suburban, or rural classification. Since 2018, the MIA has taken administrative action against commercial carriers, including the imposition of monetary penalties for various violations of these travel distance standards, including the standard for outpatient surgical services. Since 2021, however, most commercial carriers have complied with these travel distance standards for outpatient surgical services.
2. Network Participation Denial Criteria. Under Section §15-112 of the Insurance Article, current Maryland law outlines acceptable reasons insurers may deny network participation to providers, including ASCs. These include: (1) a declaration of a full network, (2) any reason not prohibited by law provided with 90-days written notice, and (3) issues related to fraud, abuse, or licensure. However, insurers are not required to make public their rationale for determining a "full network," limiting transparency for excluded providers like ASCs.

Recommendation #2: Work with MDH and HSCRC to further align ASCs under the AHEAD Model, where appropriate

Further aligning ASCs within the Maryland AHEAD Model represents an opportunity to advance statewide goals of cost containment, equitable access, and care delivery transformation. ASCs may provide a lower-cost alternative to HOPDs for many common surgical procedures. Incorporating ASCs into the AHEAD Model would enable Maryland to leverage these efficiencies more systematically while promoting site-of-service optimization—a key lever in bending the cost curve. Data from the 2023 Maryland APCD show that significant cost differentials exist between HOPDs and ASCs for high-volume procedures, with a handful of CPT codes alone accounting for significant savings if shifted to

ASCs. This underscores the fiscal relevance of continuing a model that incentivizes appropriate use of ASCs as in the current Total Cost of Care model.

Furthermore, integration of ASCs into the AHEAD Model would support the model's broader emphasis on health equity, quality, and accountability. By working with HSCRC, the state can develop mechanisms to extend regulatory oversight and value-based payment principles to ASCs, ensuring that cost savings do not come at the expense of equitable access or care quality. Such integration could include provisions for standardized quality reporting, geographic access monitoring, and alignment with population health strategies, particularly in underserved areas where hospital-based outpatient capacity may be constrained. Further, it would enable Maryland to stay ahead of national trends in site-neutral payment policy and capitalize on its unique regulatory infrastructure to drive sustainable value-based reform.

Recommendation #3: Establish an ASC/HOPD Quality Monitoring Program

Establishing a joint ASC/HOPD Quality Monitoring Program would provide the necessary infrastructure to ensure that efforts to shift care from HOPDs to ASCs are guided by standardized, transparent, and equitable performance metrics. While cost savings are a primary motivator for such site-of-service shifts, patient safety, care outcomes, and access equity must remain paramount. A unified quality monitoring initiative would facilitate apples-to-apples comparisons between ASCs and HOPDs, enabling Maryland to detect differences in complication rates, infection control, readmissions, and patient experience across settings. Without such a program, variation in quality remains obscured, and opportunities to hold providers accountable for value—not just volume—are limited.

Moreover, a joint monitoring program would promote alignment across payment and regulatory frameworks, including the Maryland AHEAD Model and HSCRC's broader quality and equity initiatives. Currently, quality oversight for ASCs is often less robust or fragmented compared to hospital-based settings, largely due to regulatory differences and data reporting gaps. By harmonizing reporting requirements and creating a shared platform for data submission and benchmarking, Maryland can integrate ASCs more fully into its value-based ecosystem. Such a program could also serve as a foundation for future innovations, such as performance-based incentives, public quality dashboards, or targeted quality improvement collaboratives across care settings.

Importantly, establishing this monitoring program would support equity objectives by identifying disparities in procedural access, outcomes, and follow-up care across racial, geographic, and payer lines. Including sociodemographic indicators and stratified outcome measures in the monitoring framework would allow policymakers to ensure that site-of-service shifts are not disproportionately benefiting certain populations while leaving others behind. As Maryland seeks to lead nationally in aligning cost containment with health equity, a joint ASC/HOPD Quality Monitoring Program offers a practical and policy-relevant step toward accountable, patient-centered care across outpatient surgical settings.

Recommendation #4: Sustain analytic work and ongoing data evaluation

Sustaining analytic work and ongoing data evaluation is essential to ensuring that Maryland's health system transformation efforts, particularly under the AHEAD Model, are responsive, evidence-based, and continuously improving. As outpatient care patterns evolve and policy reforms shift incentives, the

underlying cost, quality, and access dynamics are likewise in flux. Robust and iterative analysis of claims data, such as that housed in the Maryland APCD, enables the state to monitor these changes, assess the impacts of interventions like site-of-service shifts, and refine policies based on actual performance.

Moreover, ongoing data evaluation is critical for identifying unintended consequences, disparities, or emerging opportunities that static, one-time analyses may miss. For example, longitudinal monitoring can reveal whether cost reductions from increased ASC use are sustained over time or offset by downstream utilization, and whether access to high-quality surgical care remains equitable across regions and populations. It also supports the early identification of high-cost outliers, rapidly growing procedure volumes, or changes in clinical practice patterns that may warrant further investigation or policy response. Embedding analytics within a continuous learning framework ensures that Maryland remains proactive rather than reactive in its approach to health care regulation and reform.

Finally, sustained analytic infrastructure supports transparency and stakeholder engagement by equipping policymakers, providers, payers, and the public with actionable insights. Regularly published dashboards, technical briefs, and evaluation reports can foster alignment and shared accountability across the system. Investing in this analytic work is not merely a technical necessity, it is a strategic imperative to safeguard the effectiveness, fairness, and fiscal sustainability of Maryland's all-payer model as it enters its next phase under the AHEAD initiative.

Implementation Considerations

Establishing a formal governance structure, such as a joint workgroup comprising the MHCC, HSCRC, and MIA, could provide the necessary oversight, coordination, and policy alignment to effectively integrate ASCs into regulated care models. This multi-agency framework would ensure consistent standards for quality reporting, network participation, reimbursement policies, and consumer protections, leveraging each agency's statutory authority and technical expertise. A centralized governance structure would also facilitate stakeholder engagement, guide data infrastructure development, and oversee implementation timelines, ensuring that ASC integration supports Maryland's broader goals under the AHEAD Model while maintaining patient safety, equity, and fiscal sustainability.

To ensure accountability and guide iterative improvement, a core set of metrics should be established to track progress on enhancing the integration of ASCs into Maryland's regulated care models. These metrics should include quantitative indicators such as the percentage of high-volume outpatient procedures performed in ASCs versus HOPDs, changes in per-procedure costs by site of service, and rates of payer network participation among licensed ASCs. Quality-focused metrics should include postoperative complication rates, unplanned hospital admissions or emergency department visits within 7 days, and adherence to evidence-based clinical protocols. Additionally, measures of equity and access, such as average travel distance to in-network ASCs and ASC utilization rates stratified by race/ethnicity, Medicaid status, and rurality, should be monitored to ensure that reforms do not exacerbate disparities. Collectively, these indicators will enable state agencies and stakeholders to assess both the effectiveness and fairness of ASC integration under the AHEAD Model, while providing a foundation for public reporting and policy refinement.