



**MARYLAND**  
**Health Care**  
**Commission**

# Certificate of Ongoing Performance for Cardiac Surgery Services

LUMINIS ANNE ARUNDEL  
MEDICAL CENTER

JANUARY 16, 2025



# Evaluation of Compliance with CON Conditions

- AAMC did not achieve a volume of at least 200 case after over three years in operation.
- COMAR 10.24.17.04B(1)(b) requires that “A new cardiac surgery program that fails to achieve a volume of at least 200 cardiac surgery cases in its second year of operation will be evaluated for closure by the Commission.”
- Staff considered whether AAMC’s cardiac surgery program had met goals for access, quality, and cost that were anticipated and described in the recommended decision on the CON for the hospital’s cardiac surgery program, in determining whether to recommend AAMC’s cardiac surgery program close.



# Evaluation of Closure: Access and Quality

- Access to cardiac surgery for Maryland residents on the Eastern Shore, in Anne Arundel County, and in Prince George's County was expected to improve as a result of AAMC's cardiac surgery program
- Access appears to have improved for residents of Prince George's County, but not residents on the Eastern Shore
- Staff recommends that a condition be included on the Certificate of Ongoing Performance for AAMC, that requires AAMC to continue to strive to improve access to cardiac surgery services for Maryland residents in Prince George's County and the Eastern Shore and for AAMC and report annually on its progress.
- AAMC's performance on quality metrics developed by the Society of Thoracic Surgeons (STS) that are referenced in the Cardiac Services Chapter, has been statistically similar to national benchmarks.



# Evaluation of Closure: Cost

Number of Cardiac Surgery Cases by Hospital, Total Charges, and Average Charges Per Case, FY 2023			
Hospital	Number of Cardiac Surgery Cases	Total Charges	Average Charge Per Case
University of Maryland (UM) Medical Center	710	138,775,754	195,459
The Johns Hopkins Hospital	968	136,931,653	141,458
MedStar Union Memorial	237	24,925,373	105,170
UM Capital Regional Medical Center	97	9,614,679	99,120
UPMC Western Maryland	98	7,213,924	73,611
Luminis Anne Arundel Medical Center	106	7,796,794	73,555
Sinai Hospital	236	16,542,835	70,097
Suburban Hospital	240	16,451,633	68,548
UM Saint Joseph Medical Center	523	34,983,811	66,891
Adventist White Oak Medical Center	311	19,468,206	62,599
TidalHealth Peninsula Regional	269	16,790,667	62,419

Source: HSCRC and MHCC staff analysis of HSCRC discharge abstract data for FY 2023.

Notes: Cardiac surgeries included are those records defined as cardiac surgery in COMAR 10.24.17.



# Evaluation of Closure: Recommendation

- AAMC's cardiac surgery program may remain in operation.
- Include two conditions on the Certificate of Ongoing Performance for AAMC, if the Commission approves it.
  - One condition pertains to reporting additional information regarding the hospital's strategic plans for achieving 200 cardiac surgery cases annually
  - The other condition pertains to reporting on progress on expanding access to cardiac surgery for residents of the Eastern Shore.



# Staff Analysis and Conclusions

Summary of Standard	Applicant Information and Staff Analysis	Recommend Finding Hospital Complies with the Standard
Program shall participate in uniform data collection and reporting by participating in the STS-ACSD.	AAMC has complied with the submission of STS-ACSD data to MHCC in accordance with the established schedule.	Yes
The chief executive officer of the hospital shall certify upon request by the Commission that the hospital fully complies with each requirement for conducting and completing specified quality assurance activities.	AAMC submitted a letter signed by its President stating its commitment to ensuring the highest level of quality for its cardiac surgery program.	Yes
Program shall demonstrate that it has taken appropriate action in response to concerns identified through its quality assurance processes.	AAMC provided detailed documentation of the quality assurance activities for its cardiac surgery program including actions taken in response to any quality concerns identified.	Yes



**Table 1: AAMC’s Cardiac Surgery Volume, Isolated CABG Volume, and Composite STS Star Ratings for CABG, by Reporting Period**

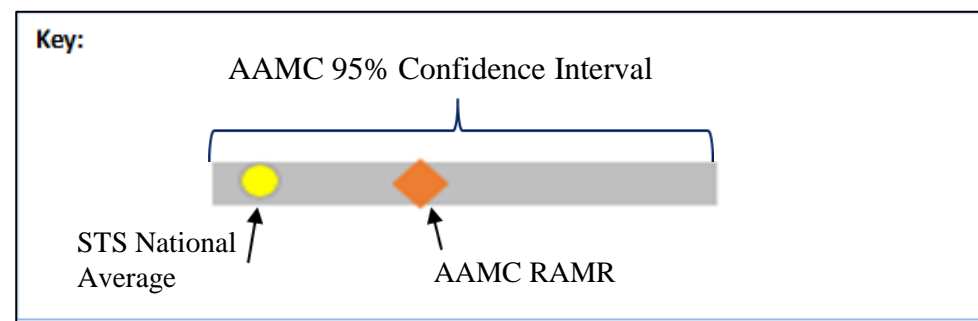
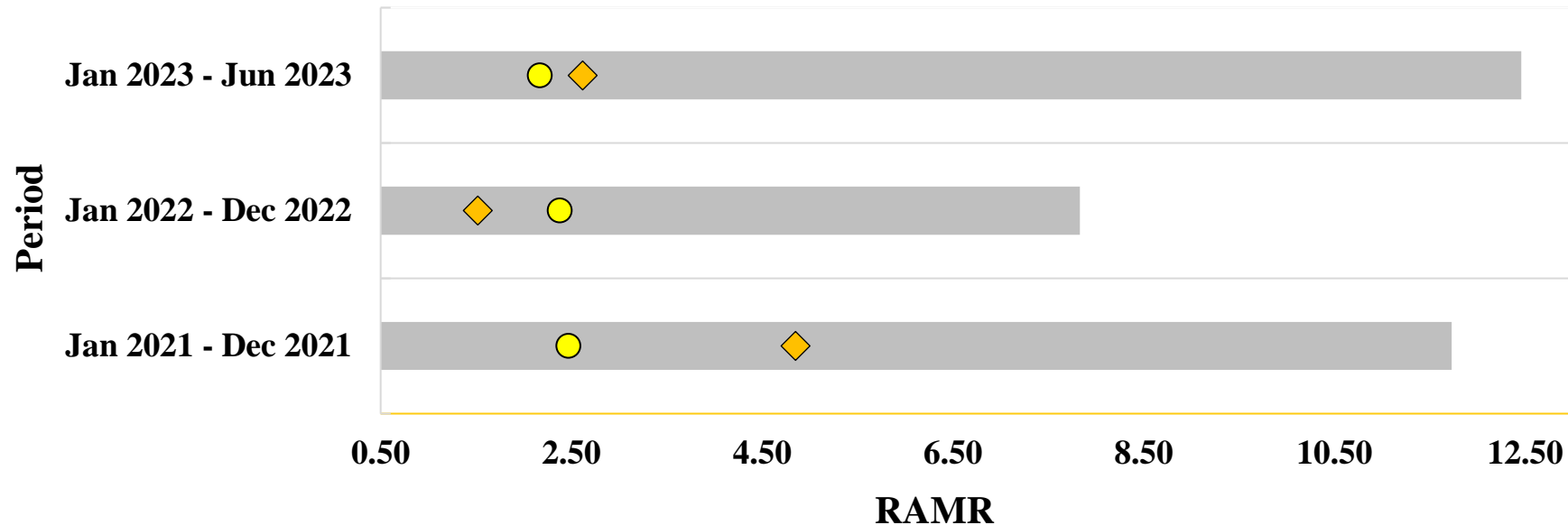
Reporting Period	Composite Star Rating	Total Isolated CABG Cases Included	Total Cardiac Surgery Volume	Estimated Percentage of Cardiac Surgery Cases Included in CABG Star Rating
Jan 2019 – Dec 2021	★ ★	85	128	66.4%
Jul 2019 – Jun 2022	★ ★	108	174	62.1%
Jan 2020 – Dec 2022	★ ★	167	223	74.9%
Jul 2020 – Jun 2023	★ ★	206	280	73.6%
Jan 2021 – Dec 2023	★ ★	225	316	71.2%

Source: MHCC compilation of information submitted by AAMC and analysis of HSCRC discharge data.

Note: Although the STS report period covers three years, due to the timing of the opening of AAMC’s cardiac surgery program, the only reporting period with three full years of data is for January 2021 through December 2023.



**Figure 1: All-Cause 30-Day Risk-Adjusted Mortality Rates (RAMR) for Isolated CABG: AAMC Compared to the National Average for All Cardiac Surgery Programs by Reporting Period**



Source: MHCC staff compilation of STS reports provided directly to MHCC.



# Staff Analysis and Conclusions

Summary of Standard	Applicant Information and Staff Analysis	Recommend Finding Hospital Complies with the Standard
The hospital shall maintain an STS-ACSD composite score for isolated CABG cases of two stars or higher.	AAMC maintained an STS composite score for coronary artery bypass graft (CABG) surgeries of two stars during the review period.	Yes
Maintain a hospital all-cause 30-day risk-adjusted mortality rate for CABG cases that is consistent with high quality patient care.	AAMC's all-cause 30-day risk-adjusted mortality rate for isolated CABG cases did not differ, to a statistically significant degree, from the national average for STS registry participants.	Yes
Program shall maintain an annual volume of 200 or more cases.	CY 2021 117 cases; CY 2022 106 cases; CY 2023 cases 93; ~ CY 2024* 180 cases	Yes

\* For December 2023 to November 2024, AAMC reported that is performed 180 cardiac surgery cases, as defined in COMAR 10.24.17



# Recommendation and Condition #1

Based on the above analysis and the record in this review, AAMC meets the requirements for a Certificate of Ongoing Performance defined in COMAR 10.24.17.07B., Staff recommends that the Commission issue a Certificate of Ongoing Performance that permits AAMC to continue providing cardiac surgery services for the next four years with the following two conditions:

AAMC shall continue to strive to improve access to cardiac surgery services for Maryland residents in Prince George's County and the Eastern Shore. AAMC shall report annually by December 31 each year on its progress improving access to cardiac surgery services as well as its progress in growing the volume of cardiac surgery cases annually for at least one year, until the MHCC releases the hospital from this condition.



## Condition #2

If AAMC fails to achieve an annual volume of 200 cardiac surgery cases by the end of CY 2025, then AAMC shall report by June 30, 2026, on its strategic plan for achieving a volume of 200 cardiac surgery cases annually, by June 30th each year, until AAMC achieves an annual volume of 200 cardiac surgery cases or the MHCC releases the hospital from this condition. The strategic plan should address why strategies previously expected to increase cardiac surgery volume have not been successful and describe new strategies for achieving a volume of 200 cardiac surgery cases annually.