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# Teaching Hospital Characteristics

Association of American Medical Colleges



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**Table 1-1****AAMC-Member Teaching Hospitals by Category, 2022**

AAMC-Member Teaching Hospital Category	Number of Members	Percentage
Integrated	106	39.8%
Independent	112	42.1%
Specialty	7	2.6%
Children's	18	6.8%
Veteran's Affairs	22	8.3%
Other Federal (NIH)	1	0.4%
<b>Total</b>	<b>266</b>	<b>100.0%</b>

Notes: Counts exclude corresponding members. Integrated and independent institutions are all short-term, general, nonfederal AAMC members.

Source: AAMC membership data, December 2022

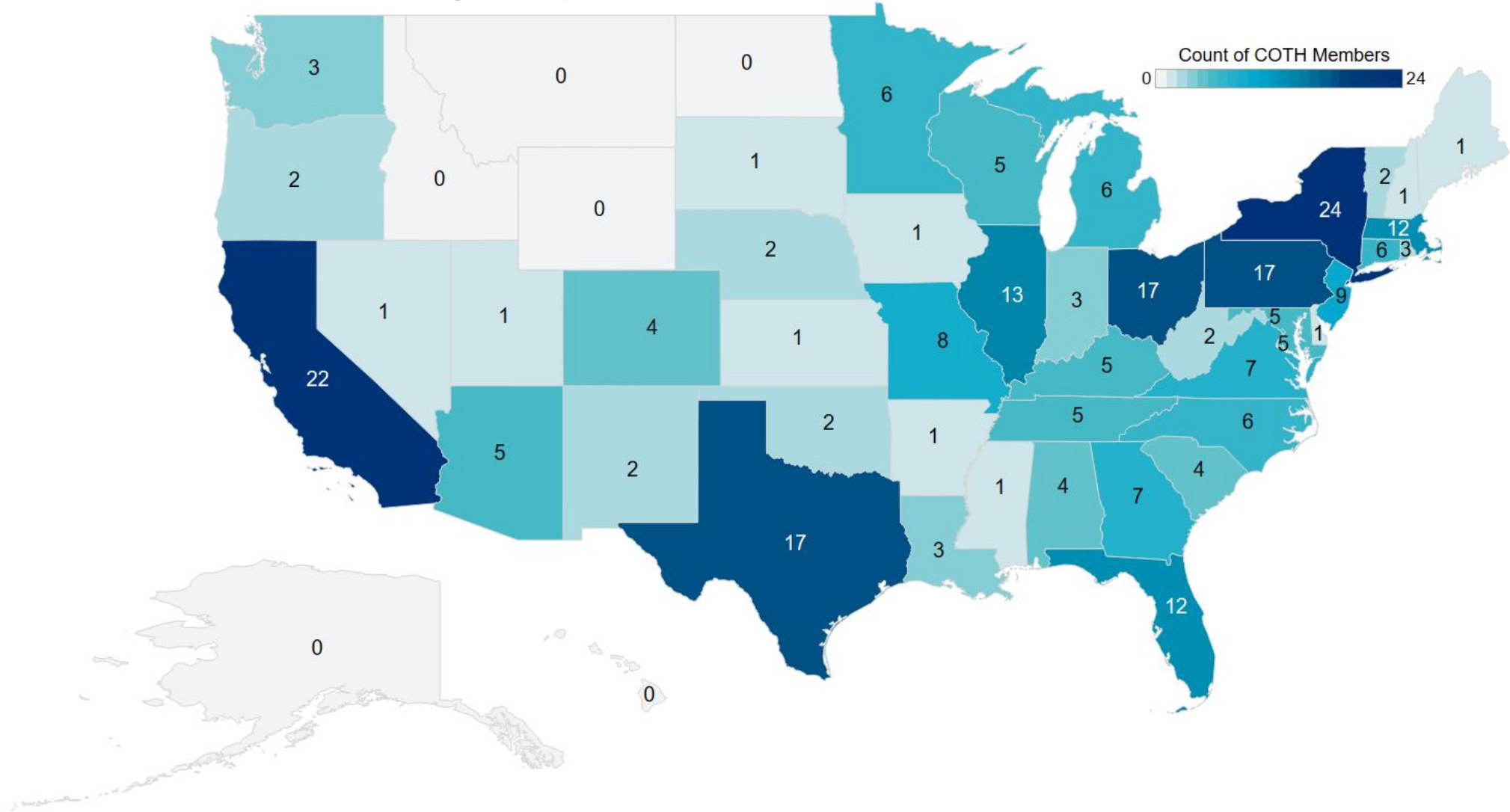
**Table 1-2****Integrated and Independent AAMC-Members by Ownership Category, 2022**

Category	Number of Members	Percentage
Church	14	6.4%
For-profit	4	1.8%
Municipal/county/city	22	10.1%
Other not-for-profit	153	70.2%
State government	25	11.5%
<b>Total</b>	<b>218</b>	<b>100.0%</b>

Notes: Data reflect short-term, general, nonfederal, integrated and independent AAMC-member hospitals. Short-term, general, nonfederal designation obtained from the FY2021 American Hospital Association file. Excludes all corresponding members as well as specialty, children's, VA, and other federal hospitals.

Source: AAMC membership data, December 2022. Ownership categories obtained from the FY2021 American Hospital Association data.

Chart 1-3  
AAMC Membership Geography, December 2022



Notes: Includes independent, integrated, children's, specialty, VA, and other federal hospitals. Counts exclude corresponding members. Integrated and independent institutions are all short-term, general, nonfederal AAMC-member teaching hospitals.

Source: AAMC membership data, December 2022.

**Table 1-4**
**Comparison of Hospitals by Bed Size, FY2021**

Bed Size	AAMC-Member Integrated and Independent Hospitals		All Hospitals	
	No. of Hospitals	Percent of AAMC Hospitals	No. of Hospitals	Percent of All Hospitals
Fewer than 200 beds	5	2.3%	3,051	71.4%
200-299 beds	9	4.1%	474	11.1%
300-399 beds	25	11.5%	285	6.7%
400-499 beds	28	12.9%	157	3.7%
500+ beds	150	69.1%	305	7.1%
<b>Total</b>	<b>217</b>	<b>100.0%</b>	<b>4,272</b>	<b>100.0%</b>

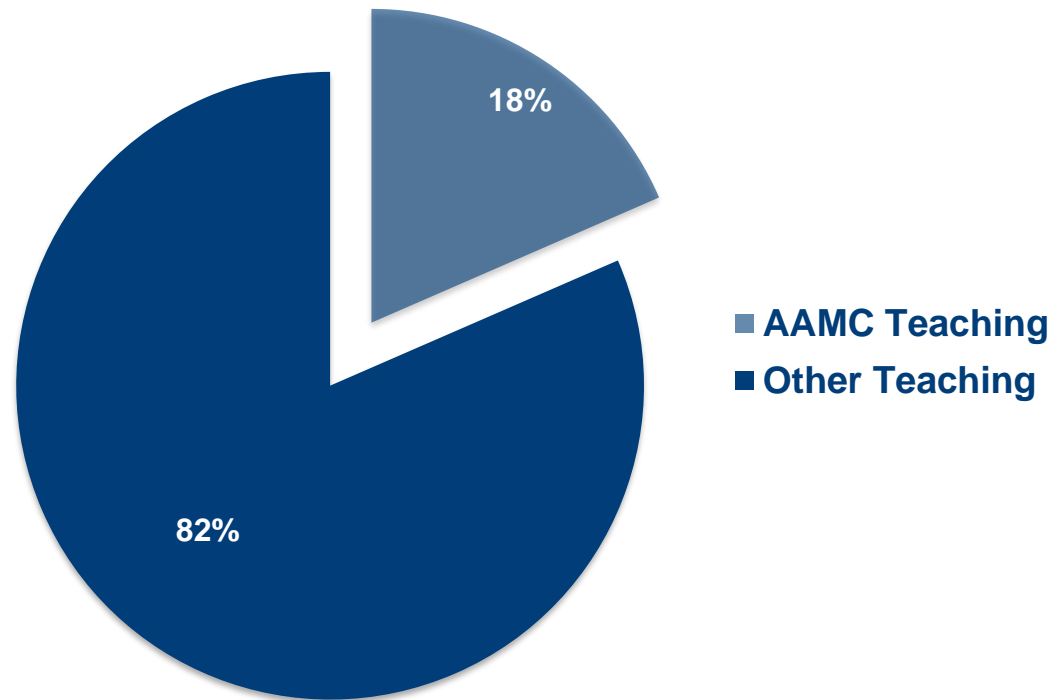
Notes: Data reflect short-term, general, nonfederal hospitals. AAMC-member hospitals reflect integrated and independent AAMC members, excluding corresponding members, as well as specialty, children's, VA, and other federal hospitals.

Source: AAMC analysis of FY2021 American Hospital Association data. AAMC membership data, December 2022.

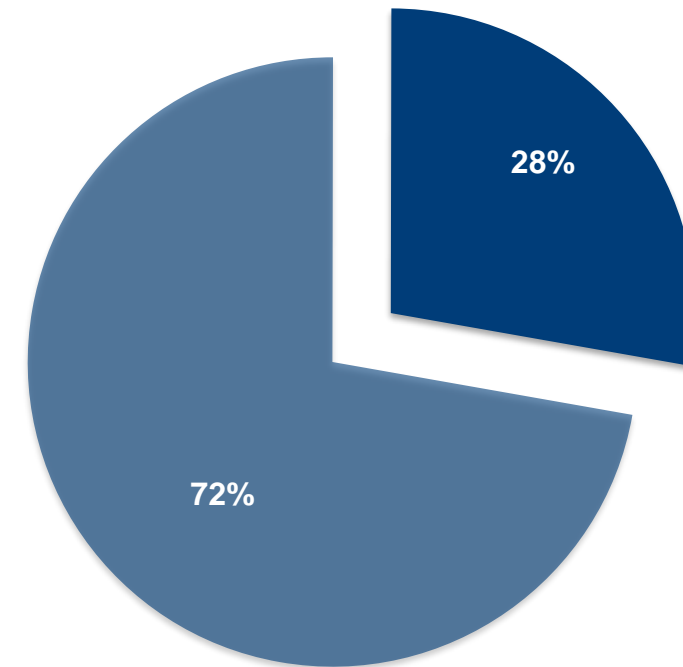
## Chart 2-1

### The Role of AAMC-Member Teaching Hospitals in Graduate Medical Education, FY2021

**AAMC-Member Teaching Hospitals as a Percent of All Teaching Hospitals**



**Residents Educated at AAMC-Member and Other Teaching Hospitals**



Notes: Data reflect short-term, general, non-federal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members.  
Source: AAMC analysis of FY2021 American Hospital Association data. AAMC membership data, December 2022

**Table 2-2**
**Residents Educated at AAMC-Member and Other Teaching Hospitals, FY2022**

Bed Size	AAMC-Member Teaching Hospitals			All Other Teaching Hospitals		
	No. of Hospitals	Percent of All AAMC-Member Teaching Hospitals	Median No. of Residents	No. of Hospitals	Percent of All Other Teaching Hospitals	Median No. of Residents
Fewer than 200 beds	5	2.8%	72	203	32.0%	13
200-299 beds	7	4.0%	58	166	26.2%	17
300-399	19	10.7%	116	118	18.6%	33
400-499	23	13.0%	163	65	10.3%	51
500+	123	69.5%	420	82	12.9%	89
<b>Total</b>	<b>177</b>	<b>100.0%</b>	<b>315</b>	<b>634</b>	<b>100%</b>	<b>23</b>

Notes: Data reflect short-term, general, nonfederal hospitals. Teaching hospitals are defined as having intern and resident to bed ratio greater than zero (FY2023 IPPS Correction Notice to the Final Rule impact file) and reported number of FTE residents in the FY2021 AHA annual survey. The counts of hospitals reflect such a definition.

Source: AAMC analysis of FY2021 American Hospital Association data. AAMC membership data, December 2022.



## Table 2-3

There are approximately 122,699 trainees, including 117,053 residents in ACGME accredited programs. Of trainees in those programs, Medicare reimburses only 90,522 at or below the cap established in 1997.

### Per Resident Amount, FY2021

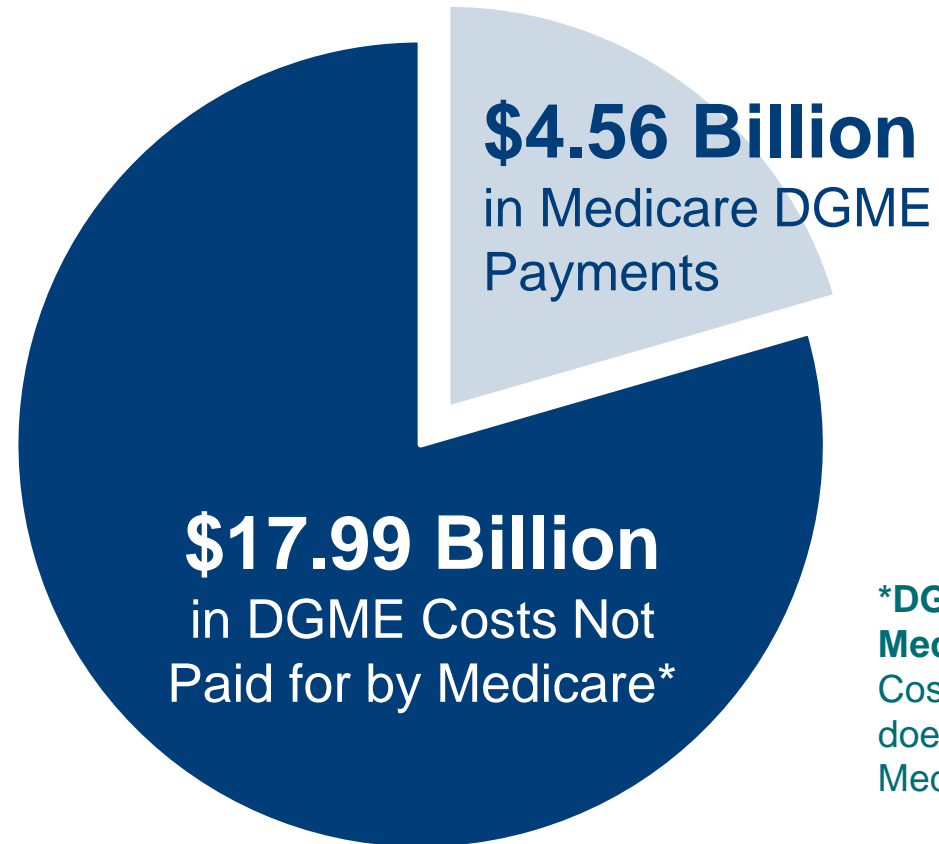
DGME Cost per Trainee	Average Cost
Average Cost per trainee	\$183,889
Average Per Resident Amount (PRA)*	\$119,580
Average Medicare DGME payment per Resident (based on Medicare's share of the PRA)	\$50,406
<b>Total Cost of Training in US Teaching Hospitals</b>	<b>\$22.6 billion</b>
<b>Total Medicare DGME Payment</b>	<b>\$4.56 billion</b>
<b>Medicare underpayment (based on Medicare share of DGME costs)</b>	<b>\$3.96 billion</b>

\*The amount Medicare uses which represents the maximum payment from Medicare per resident assuming 100% of care is borne by Medicare

Source: AAMC Analysis of FY2020 Medicare Cost Report data, July 2022 Hospital Cost Reporting Information System (HCRIS) release. If FY2020 data is not available, FY2019 data is used.

# Medicare Covered Only 20% of All DGME Costs for US Teaching Hospitals in FY2020

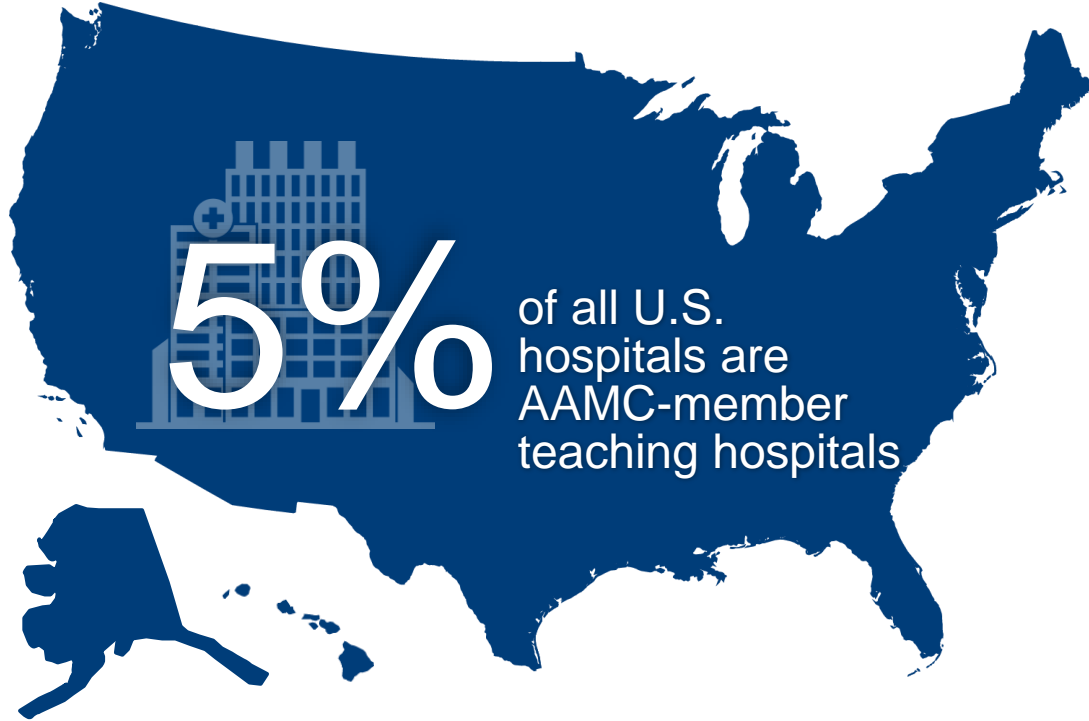
Total Teaching Hospital DGME Costs FY2020  
**\$22.6 Billion**



**\*DGME Costs Not Paid for by Medicare** = \$3.96B in Medicare Costs above the Cap that Medicare does not pay and \$14.03 B in non-Medicare DGME costs.

Note: This analysis was restricted to hospitals that were included in the FY2023 IPPS impact file released by CMS. The total training costs include intern and resident salary, fringe, and other costs.  
Source: AAMC Analysis of FY2020 Medicare Cost Report data, July 2022 Hospital Cost Reporting Information System (HCRIS) release. If FY2020 data is not available, FY2019 data is used.

# Overview of AAMC-Member Hospital Services



However, they provide:

26%  
of Medicaid  
hospitalizations



32%  
of hospital  
charity care



AAMC-member  
teaching hospitals  
operate:

100% of comprehensive  
cancer centers

74% of burn unit beds

64% of level-one  
trauma centers

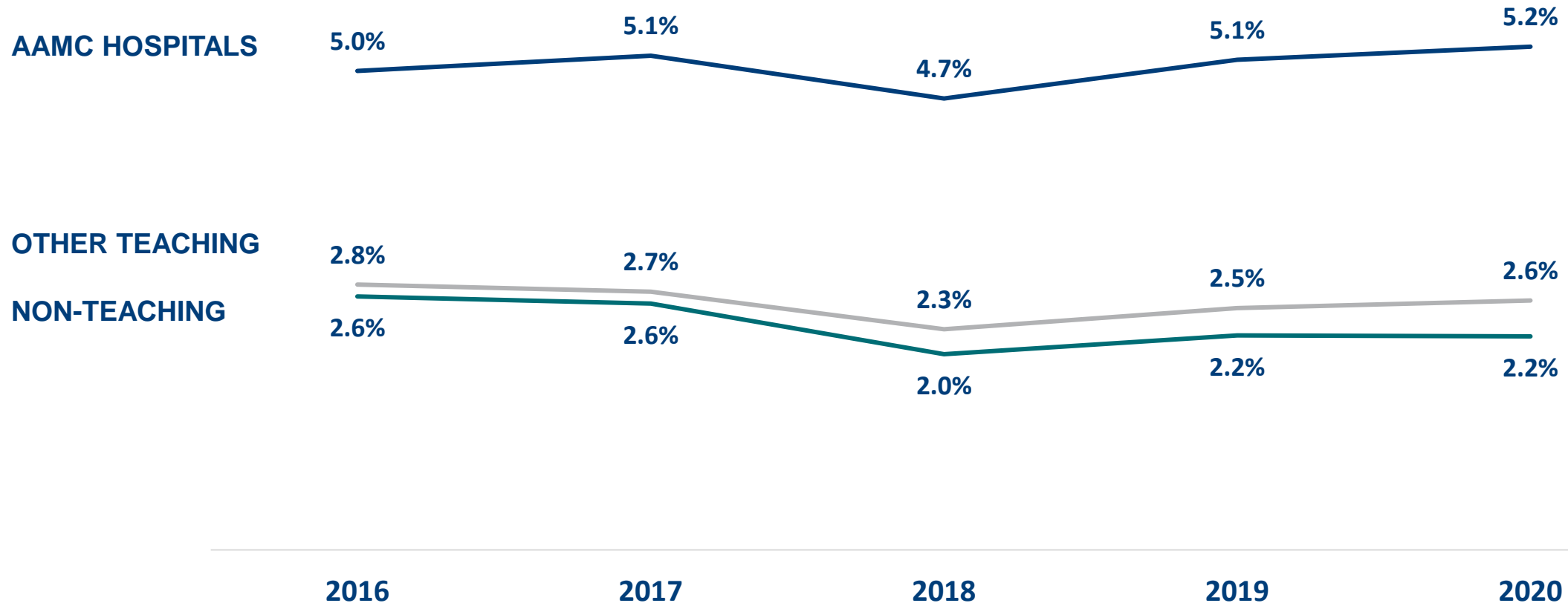
63% of pediatric ICU  
beds

Note: Data reflect short-term, general, nonfederal hospitals.

Source: AAMC analysis of FY2021 American Hospital Association data, American College of Surgeons Level 1 Trauma Center designations, 2023, and the National Cancer Institute's Office of Cancer Centers, 2022. AAMC membership data, December 2022.

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## Chart 3-2 AAMC-Member Teaching Hospitals Treat Higher Rates of Outlier Cases and the Trend Continues, FY2016-2020



Notes: This analysis controlled for payment factors (DRG weight, wage index, IRB ratio, and disproportionate patient percentage) and random hospital-specific effects.  
Source: AAMC analysis of Medicare claims data from FY2016- FY2020.

**Table 3-3**
**Outpatient Visits by Bed Size and Teaching Status, FY2021**

Bed Size	Median Outpatient Visits		
	AAMC-Member Teaching Hospitals	Other Teaching Hospitals	Nonteaching Hospitals
Fewer than 200 beds	148,171	125,978	47,145
200-299 beds	234,955	193,733	144,510
300-399 beds	221,576	218,383	190,223
400-499 beds	454,131	271,598	230,619
500+ beds	716,474	427,830	339,520
<b>Total</b>	<b>578,112</b>	<b>195,614</b>	<b>55,425</b>

Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members.

Source: AAMC analysis of FY2021 American Hospital Association data. AAMC membership data, December 2022.

**Table 3-4****Comparison of Length of Stay, Case Complexity and Occupancy Rates Among Hospitals by Teaching Status, FY2021**

	Median Length of Stay (in days)*	Aggregate Case Mix**	Median Occupancy Rate
AAMC-Member Teaching Hospitals	6.2	2.21	78%
Other Teaching Hospitals	5.1	1.88	65%
Nonteaching Hospitals	4.9	1.74	46%

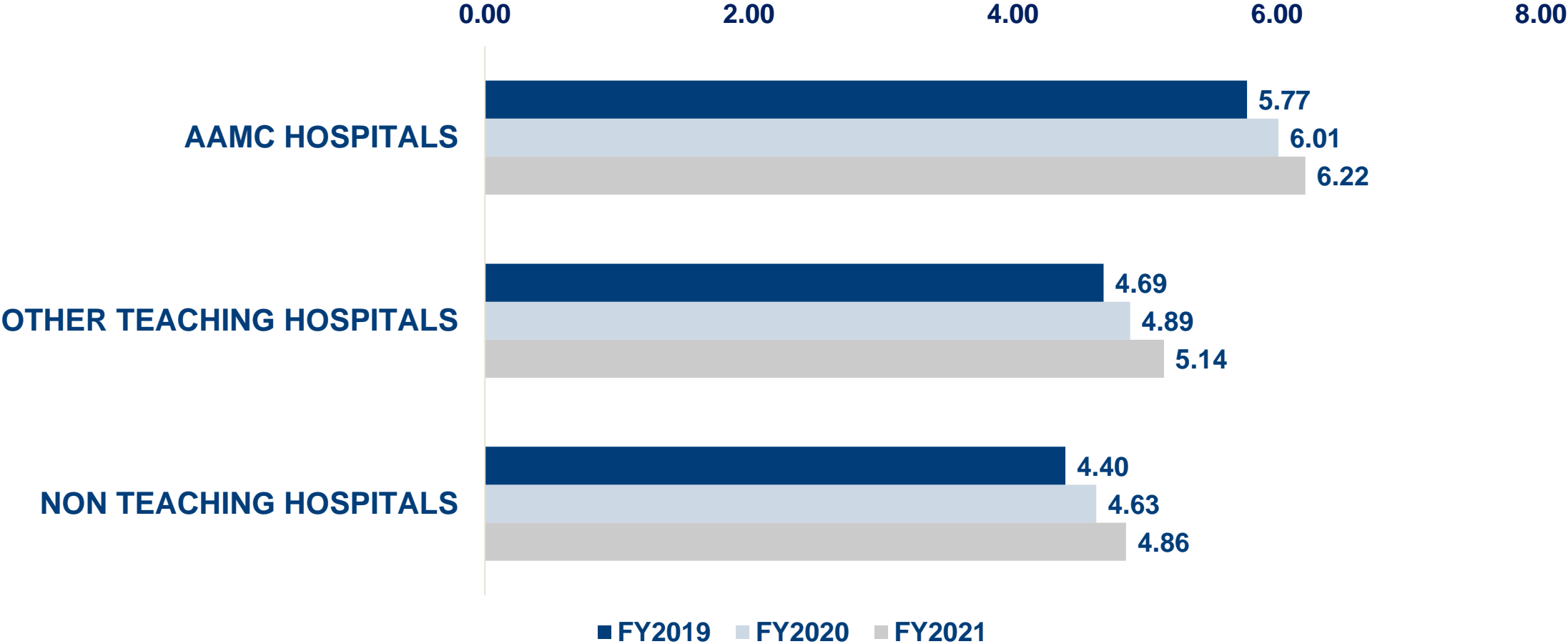
\*Length of stay is not adjusted to reflect complexity of patient population (i.e., case mix)

\*\*Based on 2020 Medicare claims data

Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members.

Source: AAMC analysis of FY2021 American Hospital Association data. AAMC membership data, December 2022.

**Chart 3-5**  
**Change in Median Length of Stay Rates Among Hospitals by Teaching Status, FY2019-2021**



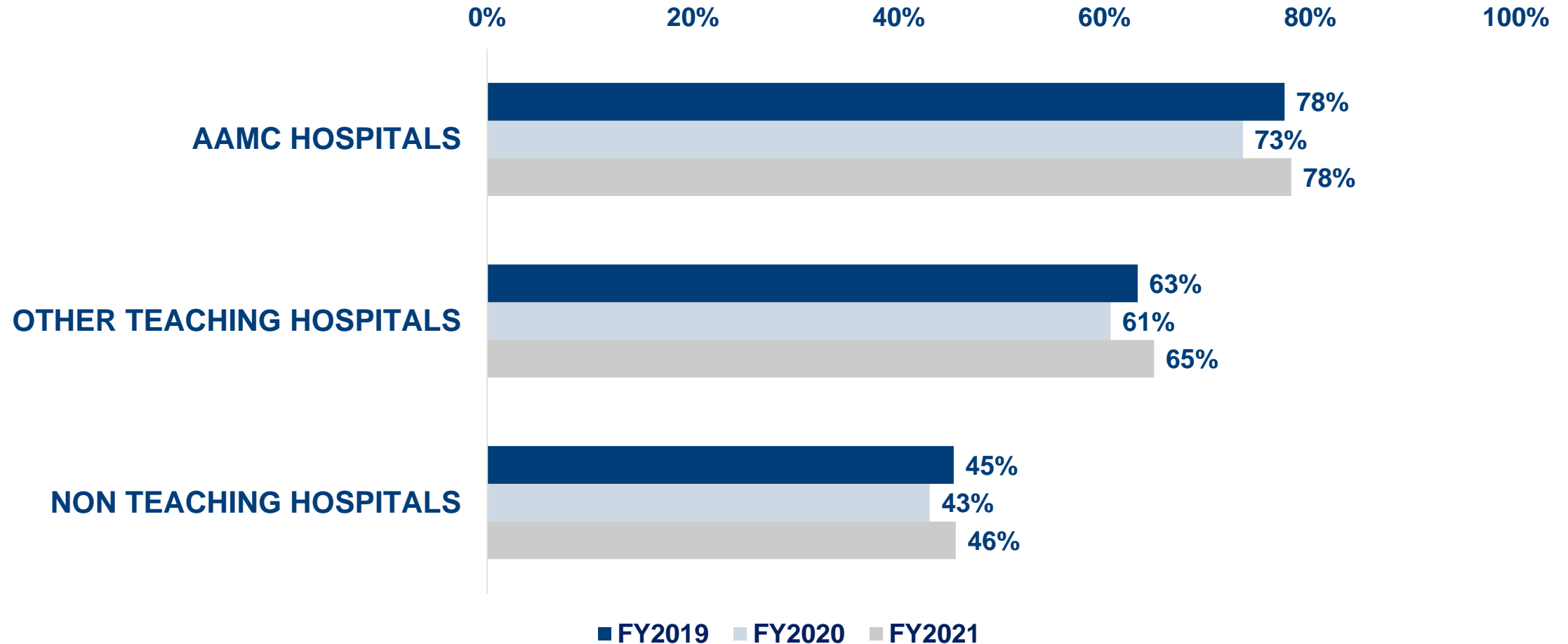
\*Length of stay is not adjusted to reflect complexity of patient population (i.e., case mix)

Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members.  
Source: AAMC analysis of FY2019-2021 American Hospital Association data. AAMC membership data, December 2022.



## Chart 3-6

### Change in Median Occupancy Rates Among Hospitals by Teaching Status, FY2019-2021



Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members.

Source: AAMC analysis of FY2019-2021 American Hospital Association data. AAMC membership data, December 2022.



**Table 3-5**
**AAMC-Member Teaching Hospitals Treat Higher Rates of Transfers Cases, FY2021**

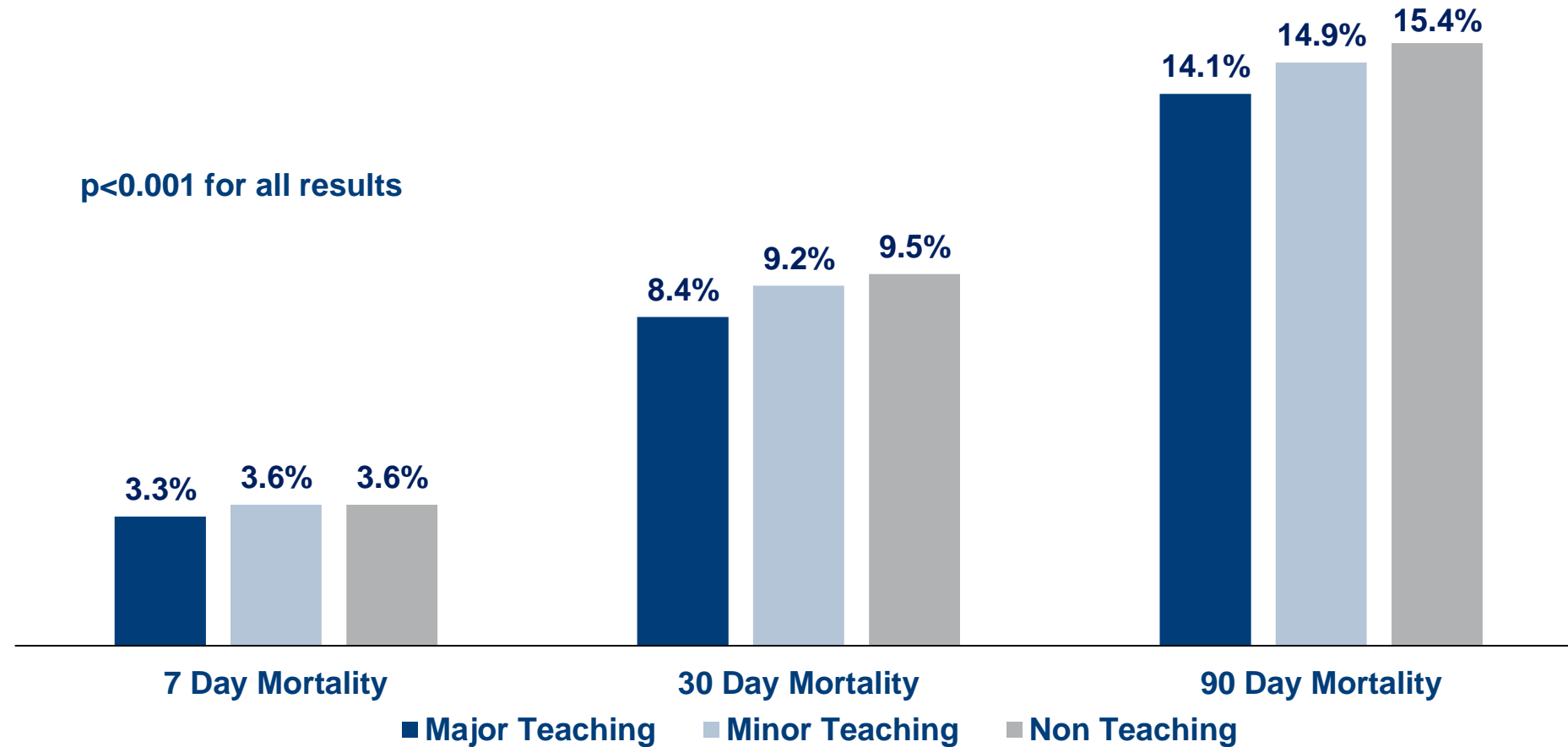
	Transfer Cases Share of All Medicare Inpatient Stays	Aggregate Case Mix for Transfer Cases
AAMC-Member Teaching Hospitals	12.8%	2.67
Other Teaching Hospitals	7.0%	2.25
Nonteaching Hospitals	3.5%	2.09

Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members.

Source: AAMC analysis of Medicare claims data, 2020. AAMC membership data, March 2023

## Chart 3-7

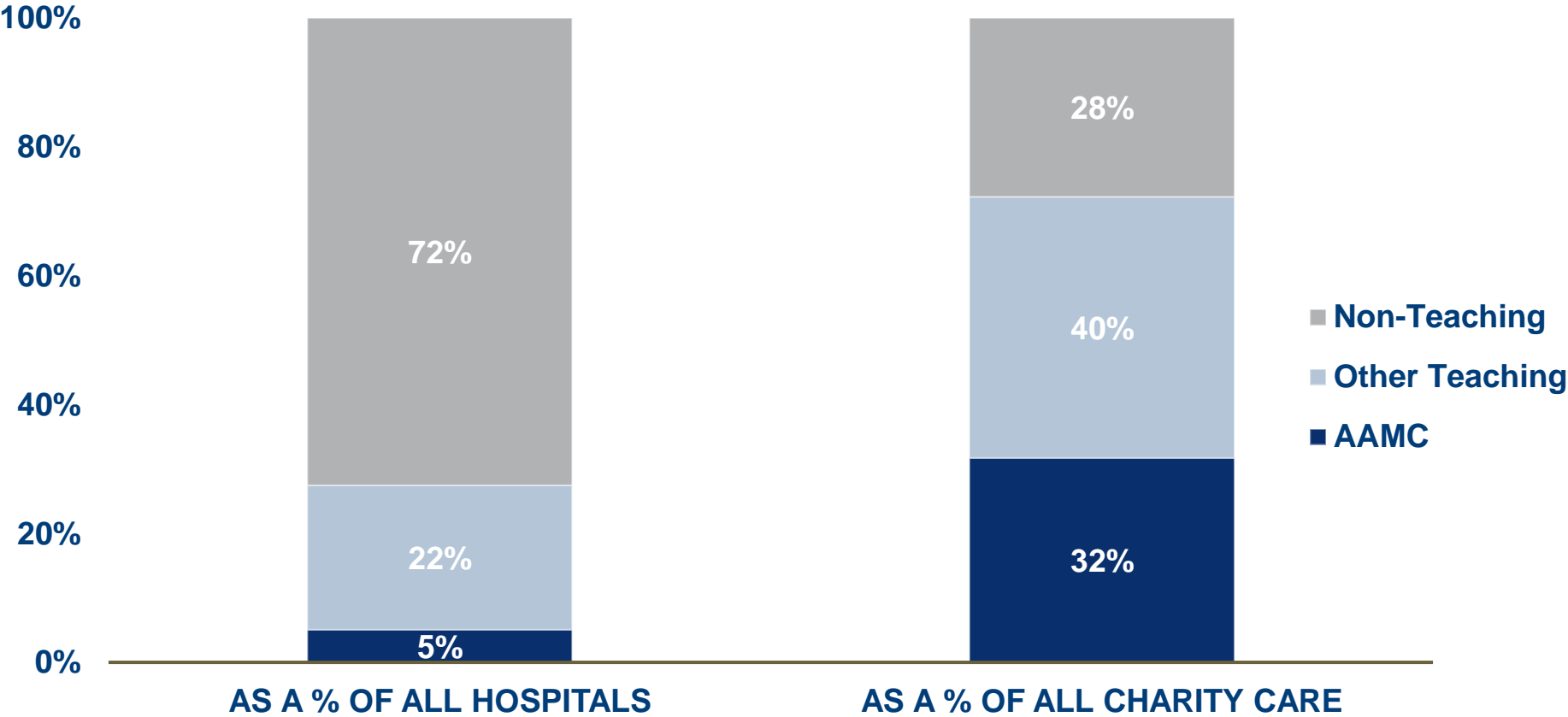
### Patient Mortality is Lower at Teaching Hospitals



Notes: Model includes state fixed effects and adjusted for correlation of patients at the hospital level. Patient characteristic adjustments include principal discharge Diagnosis Related Group Weight, age, sex, Medicaid eligibility, and Hierarchical Condition Category. Hospital characteristic adjustments include profit status, rural/urban location, and volume of hospitalizations.

Source: Burke, Laura G., Austin B. Frakt, Dhruv Khullar, E. John Orav, and Ashish K. Jha. "Association Between Teaching Status and Mortality in US Hospitals." *JAMA* 317, no. 20 (2017): 2105-2113.

**Chart 4-1**  
**Proportion of Charity Care Costs Provided at Hospitals by Teaching Status, FY2021**



**Notes:** Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members. Charity care is defined as the revenue forgone as a result of care provided without the expectation of payment. As these labels are rounded percentages, the totals for each bar may not add up to 100%.

**Source:** AAMC analysis of FY2021 American Hospital Association data. AAMC membership data, December 2022.



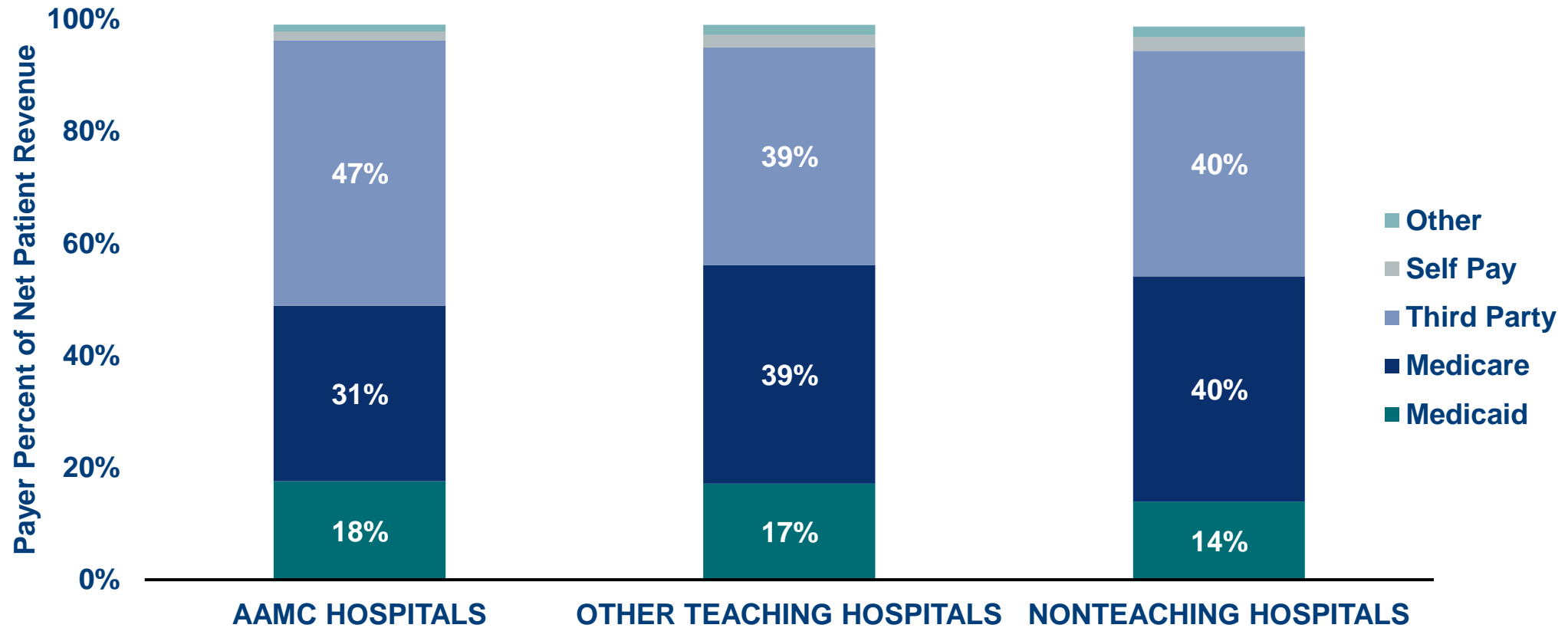
**Table 4-2**
**Median Amount of Charity and Uncompensated Care Costs Provided at Hospitals by Teaching Status, FY2021**

	Number of Hospitals	Median Amount (Millions of dollars)	
		Charity Care Costs	Uncompensated Care Costs
AMMC-Member Teaching Hospitals	217	\$18.3	\$30.7
Other Teaching Hospitals	958	\$4.7	\$9.3
Nonteaching hospitals	3,097	\$0.8	\$2.0

Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members. Charity care is defined as care provided without the expectation of payment. Excludes hospital's bad debt and is measured in terms of costs, not charges.

Source: AAMC analysis of a special tabulation using FY2021 American Hospital Association (AHA) data. AAMC membership data, December 2022.

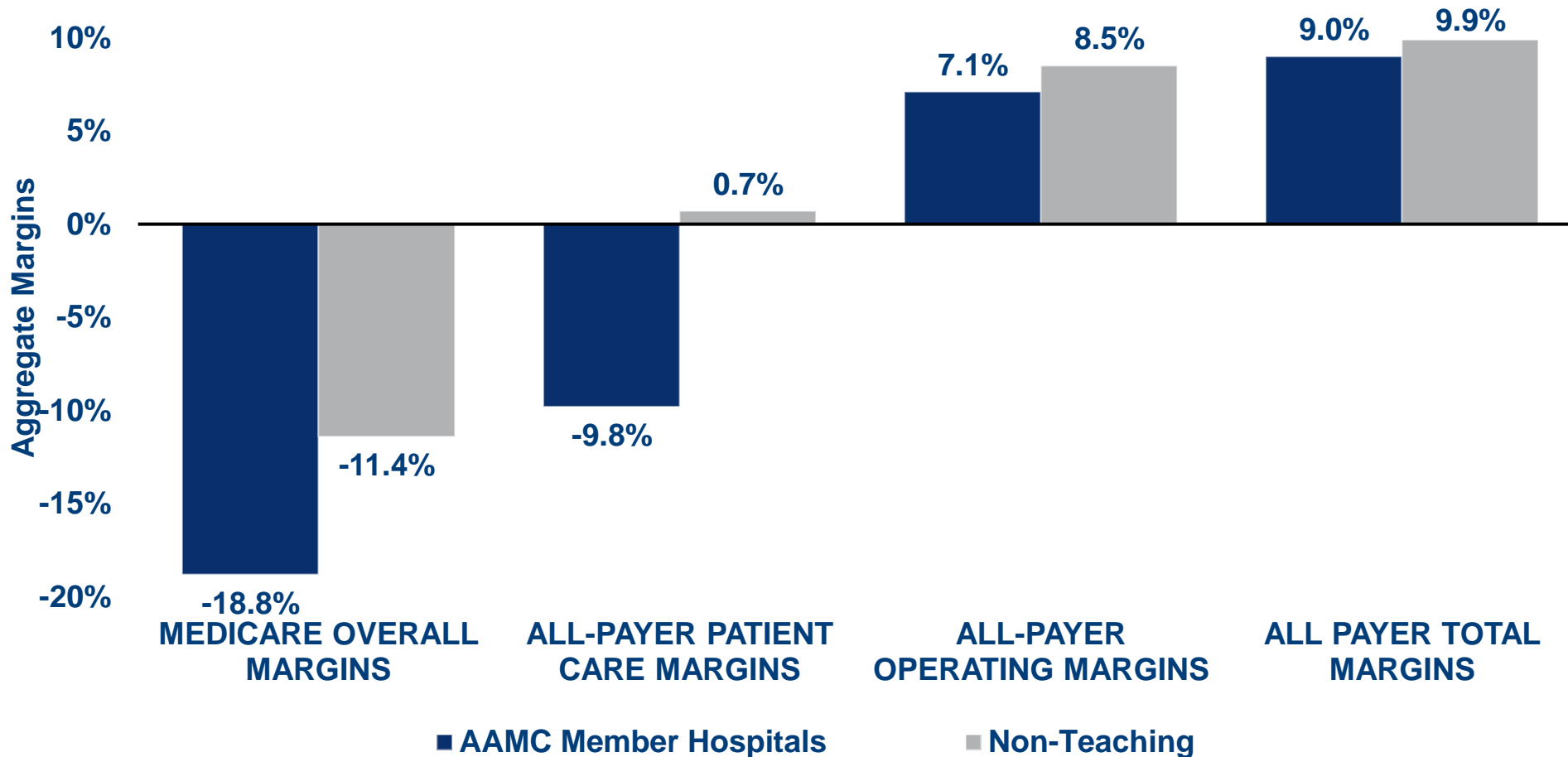
**Chart 4-3**  
**Net Patient Revenue Payer Mix at Hospitals by Teaching Status, FY2021**



Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members. Gross patient payer mix is defined as net patient revenue from each source divided by total net patient revenue.

Source: AAMC analysis of FY2021 American Hospital Association data. AAMC membership data, December 2022.

**Chart 4-4**  
**Aggregate Margins at AAMC-Member and Non-Member Teaching Hospitals, FY2020**



Notes: Margins are as reported, after sequestration, and excludes outlier institutions, both high and low. General formula:  $(\text{Revenues} - \text{Expenses}) / \text{Revenues}$ . Operating Margin: revenues include all sources other than "Contributions, Donations, Bequests" and "Investment Income" and expenses include all hospital expenses.

Source: AAMC analysis of FY2020 the Hospital Cost Reporting Information System (HCRIS) released on July 30, 2022. AAMC membership data, September 2022.

## Chart 5-1

### Distribution of Residents at VA AAMC-Member and Other Teaching Hospitals, FY2021

	VA AAMC-Member Teaching Hospitals	All Other Teaching VA Hospitals
Number of Hospitals	20	90
Percent of All VA Teaching Hospitals	18.2%	81.8%
Total Number of Resident FTEs	1,637	4,297
Percent of Resident FTEs*	27.6%	72.4%

Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members. Charity care is defined as care provided without the expectation of payment. Excludes hospital's bad debt and is measured in terms of costs, not charges.

Source: AAMC analysis of a special tabulation using FY2021 American Hospital Association (AHA) data. AAMC membership data, December 2022.

## Chart 5-2

### Distribution of Residents at Children's AAMC-Member and Other Teaching Hospitals, FY2021

	AAMC-Member Children's Teaching Hospitals	Other Children's Teaching Hospitals
Number of Hospitals	18	19
Percent of Residents Educated at Children's Teaching Hospitals	86.2%	13.8%
Median number of Residents and Fellows	141	14

Notes: Data reflect short-term, general, nonfederal hospitals. Data for AAMC-member teaching hospitals reflect integrated and independent AAMC members. Charity care is defined as care provided without the expectation of payment. Excludes hospital's bad debt and is measured in terms of costs, not charges.

Source: AAMC analysis of a special tabulation using FY2021 American Hospital Association (AHA) data. AAMC membership data, December 2022.