Economic Impact of AAMC Medical Schools and Teaching Hospitals

June 2022
The AAMC (Association of American Medical Colleges) is a nonprofit association dedicated to improving the health of people everywhere through medical education, health care, medical research, and community collaborations. Its members comprise all 155 accredited U.S. and 16 accredited Canadian medical schools; approximately 400 teaching hospitals and health systems, including Department of Veterans Affairs medical centers; and more than 70 academic societies. Through these institutions and organizations, the AAMC leads and serves America’s medical schools and teaching hospitals and the millions of individuals employed across academic medicine, including more than 191,000 full-time faculty members, 95,000 medical students, 149,000 resident physicians, and 60,000 graduate students and postdoctoral researchers in the biomedical sciences. In 2022, the Association of Academic Health Centers and the Association of Academic Health Centers International merged into the AAMC, broadening the AAMC’s U.S. membership and expanding its reach to international academic health centers. Learn more at aamc.org.

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Executive Summary

Medical schools and teaching hospitals are important contributors to their communities, playing crucial roles in educating tomorrow’s doctors and researchers, providing cutting-edge patient care, conducting groundbreaking research, and collaborating with communities to improve the health of all.

In 2022, the AAMC retained RTI International to measure the economic impact of medical schools and teaching hospitals represented by the AAMC in 47 individual states, the District of Columbia, and Puerto Rico. This report presents the results of that study, which are based on data from 154 medical schools and 258 teaching hospitals. This analysis demonstrates that medical colleges and teaching hospitals are economic engines, generating and sustaining substantial employment and economic development for surrounding communities. The data used for this analysis was collected prior to the onset of the COVID-19 pandemic and does not include the possibly significant impacts the pandemic had on medical schools, teaching hospitals, and the U.S. economy as a whole.

According to RTI International’s research using data from 2019, the medical schools and teaching hospitals represented by the AAMC contributed more than $728 billion in gross domestic product (GDP). This amount translates to about 3.2% of the U.S. GDP, making the economic impact of these medical schools and teaching hospitals comparable in size to other important sectors such as transportation and warehousing, and accommodation and food services. On a per capita basis, these medical schools and teaching hospitals generate approximately $2,218 in economic impact per person.

In addition, AAMC member institutions’ education, research, patient care, and community partnership work supports more than 7.1 million jobs in the United States across multiple industries (Table 1). These jobs are approximately 4.4% of the 2019 labor force nationwide, paying more than $488 billion in aggregate annual wages, salaries, and benefits — an average of more than $68,000 in wages, salaries, and benefits per job.

Medical schools and teaching hospitals that are members of the AAMC also have substantial secondary economic and social impacts on their multicounty regions and within the counties and cities where they have operations. Communities in all regions of the country typically rely on these organizations for job creation, high-quality medical care, medical research and scientific advancements, new business development, and the education of the nation’s health care workforce.

A full state-by-state accounting of this data analysis is available at aamc.org/EconomicImpact.

### Table 1. Economic Contributions of AAMC Member Activities in 2019

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>GROSS DOMESTIC PRODUCT (GDP)</th>
<th>LABOR INCOME</th>
<th>JOBS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Hospitals</td>
<td>$493 billion</td>
<td>$338 billion</td>
<td>4.6 million</td>
</tr>
<tr>
<td>Medical Schools</td>
<td>$235 billion</td>
<td>$150 billion</td>
<td>2.5 million</td>
</tr>
<tr>
<td>Total</td>
<td>$728 billion</td>
<td>$488 billion</td>
<td>7.1 million</td>
</tr>
</tbody>
</table>

**Source:** RTI International analysis based on results of a single-region IMPLAN PRO input-output model.

**Note:** 2019 activities are reported in 2021 dollars and have been adjusted using the annual gross domestic product (GDP) deflator produced by the U.S. Bureau of Economic Analysis. GDP is a measure of the overall size of economic value. Labor income is the value of wages, salaries, and benefits earned.

1 258 of the approximate 400 AAMC-member teaching hospitals and health systems met the criteria for this analysis.

ECONOMIC IMPACT OF MEDICAL SCHOOLS AND TEACHING HOSPITALS

AAMC-member medical schools and teaching hospitals supported more than 7.1 million U.S. jobs in 2019. This is approximately 4.4% of jobs nationwide.

Total Wages, Salaries, and Benefits

| Total Direct | $232 Billion |
| Total Secondary | $257 Billion |
| **Total** | $488 Billion |

Average Wages, Salaries, and Benefits

| Average Direct | $77,455 |
| Average Secondary | $62,141 |
| **Average Total** | $68,578 |

This equates to about 3.2% of U.S. GDP, or roughly $2,218 per person.

**EDUCATION**

U.S. medical schools graduated

20,921 new MDs in 2021.¹

**RESEARCH**

Research at medical schools and teaching hospitals added

$32.6 BILLION to local economies in 2019.

**PATIENT CARE**

AAMC-member teaching hospitals operated

98% of all comprehensive cancer care centers.³

**COMMUNITY BENEFIT**

The average AAMC-member teaching hospital spends

$148 MILLION annually on community benefit.⁴

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¹ Secondary effects include two additional economic effects. The first is the new business spending as AAMC-member institutions buy more goods and services from other local businesses to meet growth. The second is the additional spending brought about by the salaries and benefits associated with job creation.


³ AAMC analysis of membership data as of December 2021 and 2022 data from the National Cancer Center Institute's Office of Cancer Centers.

⁴ AAMC analysis of the FY 2020 Council of Teaching Hospitals and Health Systems Annual Survey of Hospital Operations and Financial Performance. Data are based on voluntary survey responses from AAMC-member teaching hospitals that were required to submit IRS Form 990.
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