DATA SNAPSHOT

# Artificial Intelligence Curricula in U.S. and Canadian Medical Schools

**June 2025**

## Background

Artificial intelligence (AI) holds great promise for transforming health care, and there is an urgent call to action to responsibly integrate AI into health care education and training.[1,2] Doing so will enable the future workforce to leverage AI in practice and adapt to emerging technologies in the service of providing high-quality patient care.[3]

While AI's potential continues to evolve and offer dynamic opportunities in health care, there are signals from the field on how AI should be integrated into medical education.[4] However, the field is outpacing the development of competencies and consensus practice standards, with medical educators seeking clarity on introducing and infusing AI into the curriculum in a way that appropriately prepares the future workforce. Measuring progress and curricular approaches is critical to understanding the current landscape and opportunities. To better understand the state of undergraduate medical education's integration of AI into the curriculum in the United States and Canada, specific questions were included in a survey sent in the fall of 2023, with more in-depth items following in 2024.

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## About the Surveys

The findings in this report come from curriculum survey work conducted in 2023 and 2024. Primarily, this report is based on an expanded set of items focused on AI use from the 2024 Curriculum SCOPE Survey, a questionnaire administered by the AAMC on behalf of the AAMC and the American Association of Colleges of Osteopathic Medicine (AACOM).[5] The AAMC sent the Curriculum SCOPE Survey to AAMC- and AACOM-member schools in the U.S. and Canada. The survey collects medical education program data on curriculum structure, content, organization, process, and evaluation. The 2024 survey contained 64 items and focused primarily on the previous academic year's (2023-24) required curriculum in undergraduate medical education. Participation in the survey was voluntary, and all questions aside from contact information were optional.

As a point of comparison and to measure trends in this rapidly changing space, we also leveraged the 2023 Curriculum SCOPE Survey as a secondary survey source. The 2023 version of the survey was sent to AAMC- and AACOM-member schools in the U.S. and Canada, though Canadian schools did not participate. Participation was voluntary. The 2023 Curriculum SCOPE Survey had a few topic-based items related to AI rather than the deeper dive on AI included in the 2024 version.

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## Key Findings

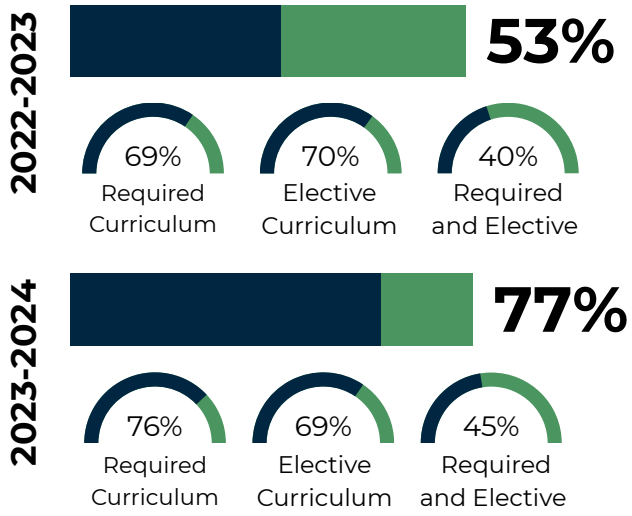
The response rate for the 2024 Curriculum SCOPE Survey was 88% (182 of 208) among MD- and DO-granting schools in the U.S. and Canada. Of 157 eligible U.S. MD-granting schools, 149 (95%) participated in the survey, and of 38 eligible U.S. DO-granting schools, 30 (79%) participated. Additionally, three (23%) of 13 eligible Canadian medical schools participated in the 2024 administration of the Curriculum SCOPE Survey.

The response rate for the 2023 Curriculum SCOPE Survey was 87% (166 of 192) among the U.S. MD- and DO-granting schools. Of the 155 eligible U.S. MD-granting schools, 139 (90%) participated in the survey, and of the 37 eligible U.S. DO-granting schools, 27 (73%) participated.

### Key Finding 1: Most MD- and DO-granting schools have integrated AI into the curriculum — with impressive growth over one year.

In both the 2023 survey and 2024 survey, we asked schools whether AI was covered in their curricula. It is a straightforward question that allows us to measure rapid change. The number of schools responding in the affirmative grew from 88 in 2023 to 140 in 2024. This was a 59% increase over one year. This is particularly noteworthy considering the number of schools surveyed also grew by 8%.

**Figure 1. Number of schools with AI in the curriculum.**




One interesting shift is the dramatic rise in AI integrated into the required curriculum rather than only offered within the elective curriculum. In 2023, 61 schools out of 88 that indicated AI was in the curriculum confirmed it was in the required curriculum; by 2024, 107 schools out of 140 that indicated AI was in the curriculum confirmed that it was in the required curriculum. These findings highlight the rapid growth of AI in curriculum, with the majority of schools surveyed indicating that AI is integrated into their required curricula.

### Key Finding 2: AI is being infused across required curriculum in various areas.

The results of the 2024 Curriculum SCOPE Survey showed that AI is actively being integrated across curricula. Ethical use and basic concepts around AI are the most common topics found in the required curriculum. At this point in the development of AI curriculum, it makes sense to see these essential fundamentals given priority. Some schools also indicated that they had required curriculum about AI in the clinical space and in research, and about using AI tools for data analysis and evaluation. In future administrations of this survey, we will continue to monitor how AI is reflected in the required curriculum and how it changes over time. As AI develops, it will be interesting to track how fundamental AI is more broadly infused into the curriculum, while individual schools with distinct missions might focus on specific aspects of AI.

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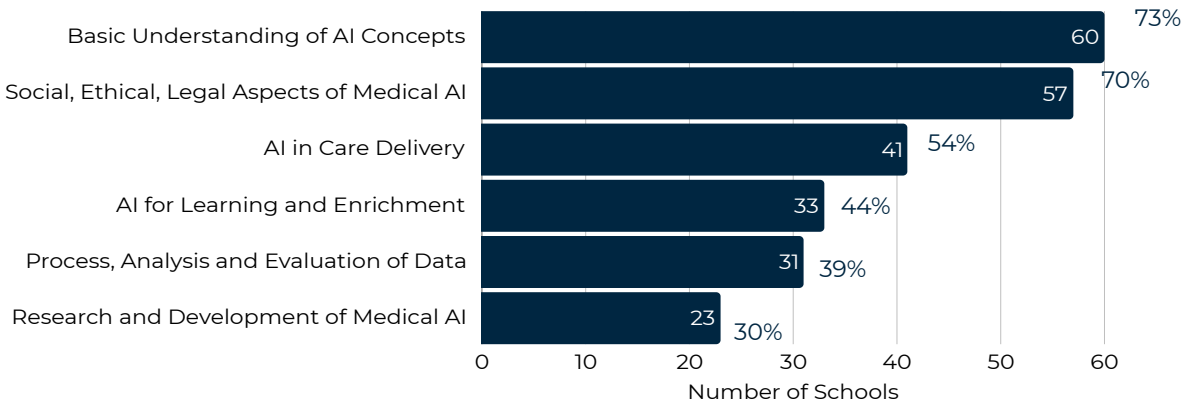
**Figure 2. AI topics in required curriculum.**

Percentages were calculated based on total medical school respondents to each AI topic on the survey, whether medical schools responded "Yes" or "No" regarding an AI topic in the required curriculum.




## Key Finding 3: The overall technical and governance infrastructure to support AI's integration into curriculum needs a sharper focus.

While the number of schools integrating AI in the required curriculum jumped significantly in just two years, the critical governance and infrastructure necessary to support AI is falling behind. Ninety-four (52%) of the schools surveyed lack an appropriate use policy, whether developed by the medical school or a parent institution. Infrastructure with regards to access to tools was also found to be lacking, with only 30% providing learners with secure access to an AI agent for teaching and learning purposes.

**Figure 3. Number of schools with infrastructure to support AI integration.**


## Implications for the Future

It is clear by the tremendous growth in schools reporting AI in their required curricula that AAMC- and AACOM-member schools believe AI is here to stay and that it is necessary to prepare learners for future health care practice that will involve AI. As schools work to integrate AI into the curriculum, the infrastructure and governance needed to support this important work needs attention. Schools must develop appropriate use policies related to AI and provide responsible access to AI tools.

Consistent access also appears to be an issue. With only 30% of schools in the survey providing learners with access to AI

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tools, the field is not achieving a key principle of equal access as noted in the AAMC's recent guidelines.[6] While institutions should ensure similar access for learners, it is important to acknowledge that institutions also have uneven access to AI tools and resources. It is essential that we work together as a community to overcome this technology gap to ensure all learners have adequate training and access so that we can use AI to improve patient care and health outcomes.

AI in medical education, as is the case with AI across many facets of our lives, remains a dynamic disruption. We will continue to monitor the trends and opportunities related to AI in the curricula of AAMC- and AACOM-member medical schools through future survey work.

## Limitations

Participation in the Curriculum SCOPE Survey was voluntary, and all questions and topics (aside from contact information) were optional. The AAMC does not solicit information about why respondents do not respond to a given question. It cannot be inferred that medical schools that did not respond to a question did not cover a topic or offer a service. The 2024 survey focused on educational technology, which led to more detailed data about AI; the 2023 and 2024 surveys had different items, and all items could not be measured across both years' surveys.

## Acknowledgments

This report relies on data from the AAMC and AACOM Curriculum SCOPE Survey 2022-23 and the AAMC and AACOM Curriculum SCOPE Survey 2023-24 (**http://www.aamc.org/SCOPE**).

We wish to acknowledge the following AAMC staff: Angela D. Blood, Alison Whelan, Dorothy Andriole, Lisa Howley, Katherine McOwen, Whitney Staiger, Katherine Brandenburg, Andrew Nees, Kwame Osei, Diane Cassidy, Lee Crowther, Valerie Dandar, and Hershel Alexander. We thank AACOM staff Mark Speicher, Aisha Ali, and Erik Guercio, and the AAMC Curriculum Committee for their continued advisement on the Curriculum SCOPE Survey.

## Use of Report

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To cite this publication, please use the following attribution: Farmakidis AL, Singh A, Leaf K, Rossi A. Artificial Intelligence Curricula in U.S. and Canadian Medical Schools. Data Snapshot. AAMC; 2025.

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