

Precision education



AMA announces new Transforming Lifelong Learning Through Precision Education portfolio and grant program

The AMA has announced its next endeavor to improve the health of the nation through medical education. Part of the AMA ChangeMedEd® initiative, the new AMA Transforming Lifelong Learning Through Precision Education portfolio will cultivate and promote democratization of the precision education ecosystem to offer individualized learning that aligns physician education with the needs of patients both now and in the future. By addressing the unique needs of each learner, precision education improves medical education from medical school through practice by boosting personalization, increasing efficiency and transferring agency to the learner.

The launch of this new portfolio culminates a two-year effort by the AMA to support the development of precision education, which leverages data and technology to increase personalization, efficiency and agency for learners.

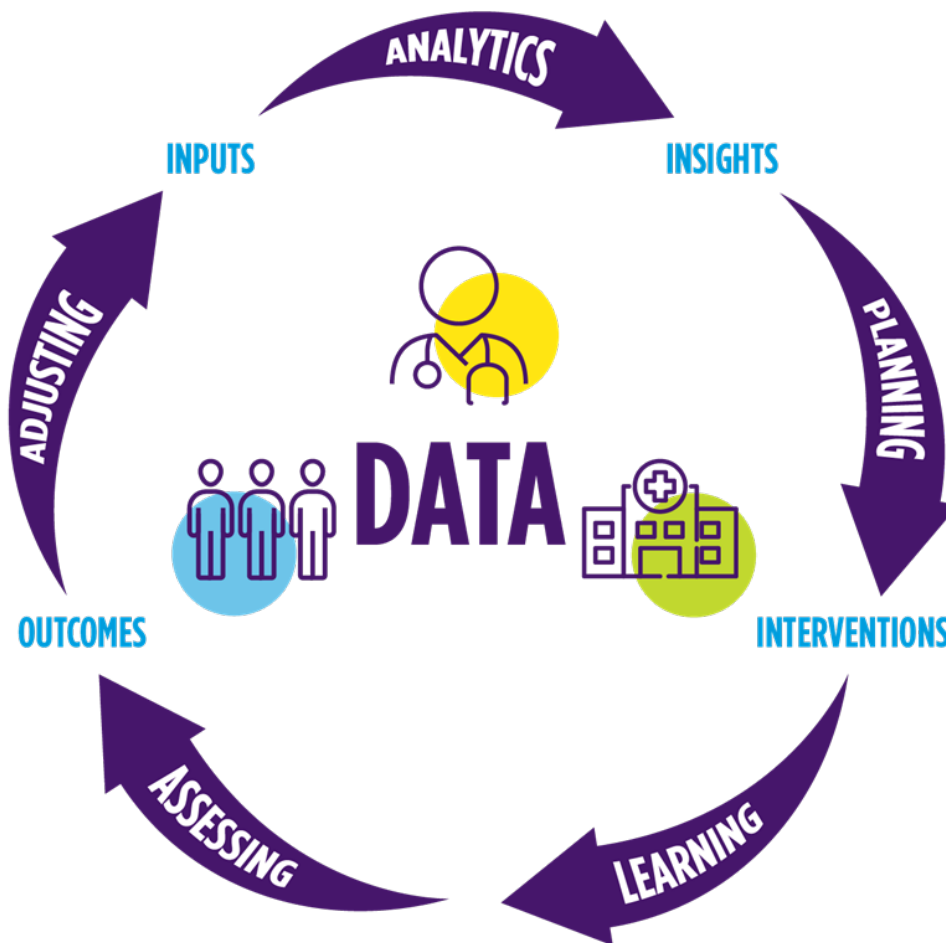
The portfolio consists of two activities:

1. **Precision education grant program:** The AMA will fund the development and implementation of precision education systems. Ten projects will receive funding of at least \$1.1 million distributed over four years—with a total AMA investment of \$12 million. Single U.S.-based institutions or groups of collaborating institutions that collectively have responsibility for the training of physicians at any stage of the continuum and sufficient influence over the context of training to implement proposed interventions are invited to apply for a grant. These institutions will join the ChangeMedEd® Consortium and work together to share findings, challenges and strategies, conduct collective evaluation and co-produce supporting tools for the responsible development and deployment of precision education systems. Access up-to-date information on the precision education grant program.
2. **Principles and standards development process:** In collaboration with Medbiquitous, the standards development program of AAMC, AMA will convene experts to develop and promote adoption of data sharing principles and standards in precision education systems.

Learn more about the AMA's work in precision education.

Check out the new AI resource in medical education.

Precision Education Framework



The Precision Education Framework is the conceptual framework for an education system focused on individualized learning that aligns with learner needs as well as the needs of current and future patients. Data at the learner, program, or organization level anchors this cyclical system. Analytics applied to inputs generate insights. These insights drive planning processes and precision interventions. Assessed outcomes identify needs and determine adjustments. The cycle repeats as necessary.

The framework was initially proposed in: Desai et.al. Precision Education: The Future of Lifelong Learning in Medicine. Acad Med. 2024 Apr 1;99(4S Suppl 1):S14-S20

AMA Academic Medicine supplement on precision education



As part of the AMA ChangeMedEd initiative’s new strategic focus on precision education, the AMA supported a supplement in the April 2024 issue of Academic Medicine entitled, “The Next Era of Assessment: Advancing Precision Education for Learners to Ensure High-Quality, Equitable Care for Patients.”

In the supplement, authors compel readers to consider a next era of assessment that places less focus on how assessment is done (e.g., tests, work-based assessment) and more focus on why it is done: to ensure high-quality, equitable care for patients.

Watch on demand: Precision Education in Medical Education: On-the-Ground Initiatives and Learnings

This webinar features authors, Brian T. Garibaldi, MD, MEHP, and Eric Warm, MD, from the ChangeMedEd supplement in Academic Medicine who are taking novel approaches to apply precision education and use data and technology for effective assessment of learners at their own institutions. **Watch now.**

Watch on demand: The Next Era of Assessment: Equitable Patient Care and Precision Education for Learners

This webinar features guest editors from the AMA ChangeMedEd supplement in Academic Medicine and explore how the future of assessment—and the meaningful use of learning and data analytics in medical education—can focus on ensuring high quality equitable care. **Watch now.**

Dive deeper:

- How assessment can evolve to ensure high-quality, equitable care
- **Bonus content:** Listen to the Association of American Medical College recent Academic Medicine podcast on the next era of assessment and precision education, available on Apple , Spotify and wherever you listen to podcasts.

Precision education: What it is and how it's advancing medical education

Earlier this year, AMA published an article on an AMA issue brief on precision education and the future of lifelong learning in medicine.

Precision education plenary session at ChangeMedEd 2023

Presented during the September 2023 conference, this plenary reviews barriers to lifelong learning in medical education and how precision education can be an effective tool to improve the system.

Medical School Admissions: Focusing on Producing a Physician Workforce that Addresses the Needs of the United States

In this invited commentary, the authors acknowledge that the current system for selecting and developing the physician workforce is severely limited by the data available at all levels. Screening processes have relied on measures of convenience that are not well aligned with the desired attributes of physicians or of educational institutions. Innovations in data science and generative artificial intelligence platforms offer an opportunity for all stakeholders to act upon more meaningful information.

Reconnect medical education to patient care

Continuing professional development can be a source of frustration for practicing physicians with limited time. Often, structured training is not directly relevant to the physician's practice and physicians rely heavily on just-in-time resources that may not support deeper learning.

A multi-disciplinary team at the AMA has developed Reconnect, an AI tool aiming to personalize physician lifelong learning and improve efficiency. Reconnect integrates with EHR systems (in a manner that does not transmit protected health information) to curate and deliver personalized education content relevant to a physician's patient panel.

The algorithm identifies multivariate nuances within patient records and trends within a physician's practice pattern to elevate appropriate learning resources in anticipation of upcoming clinic sessions. High-yield ongoing learning is the focus; this tool does not involve recommendations regarding the care of individual patients. The concept and prototype were developed over three years and is being piloted with health systems to test feasibility. Future study and refinement will pursue long term goals of enhancing physician well-being and improving care of patients.

The TRainee Attributable & Automated Care Evaluations in Real-Time (TRACERs) Project

This project builds on the concept of resident-sensitive quality measures (RSQMs). These are clinical care measures that are both important for patient care and highly attributable to an individual resident (rather than the team, system or patient). This project introduces the concept of TRainee Attributable & Automated Care Evaluations in Real-Time (TRACERs), which are characterized as: meaningful for patient care and trainees; sufficiently attributable to the trainee of interest; automatable, meaning there is minimal human input needed once fully implemented; scalable across electronic health records (EHRs) and training environments; and amendable in real-time to formative educational feedback loops.

TRACERs builds upon RSQM research by automating the previously labor-intensive process of EHR data extraction and exploring how to make such measures scalable across institutions. This undertaking is a collaboration between researchers from the University of Cincinnati College of Medicine, NYU Grossman School of Medicine and Stanford University School of Medicine.