

Policy

The American Medical Association House of Delegates has adopted policies to keep the focus on advancing the role of augmented intelligence (AI) in enhancing patient care, improving population health, reducing overall costs, increasing value and the support of professional satisfaction for physicians.

Foundational policy *Annual 2018*

As a leader in American medicine, our AMA has a unique opportunity to ensure that the evolution of AI in medicine benefits patients, physicians and the health care community. To that end our AMA seeks to:

- Leverage ongoing engagement in digital health and other priority areas for improving patient outcomes and physician professional satisfaction to help set priorities for health care AI
 - Identify opportunities to integrate practicing physicians' perspectives into the development, design, validation and implementation of health care AI
 - Promote development of thoughtfully designed, high-quality, clinically validated health care AI that:
 - Is designed and evaluated in keeping with best practices in user-centered design, particularly for physicians and other members of the health care team
 - Is transparent
 - Conforms to leading standards for reproducibility
 - Identifies and takes steps to address bias and avoids introducing or exacerbating health care disparities, including when testing or deploying new AI tools on vulnerable populations
- Safeguards patients' and other individuals' privacy interests and preserves the security and integrity of personal information
 - Encourage education for patients, physicians, medical students, other health care professionals and health administrators to promote greater understanding of the promise and limitations of health care AI
 - Explore the legal implications of health care AI, such as issues of liability or intellectual property, and advocate for appropriate professional and governmental oversight for safe, effective, and equitable use of and access to health care AI

“Medical experts are working to determine the clinical applications of AI—work that will guide health care in the future. These experts, along with physicians, state and federal officials must find the path that ends with better outcomes for patients. We have to make sure the technology does not get ahead of our humanity and creativity as physicians.”

—Gerald E. Harmon, MD, AMA Board of Trustees

Regulation, payment, liability and other key policies Annual 2019

Our AMA supports the use and payment of AI systems that advance the quadruple aim. Specifically, AI systems should (1) enhance the patient experience of care and outcomes, (2) improve population health, (3) reduce overall costs for the health care system while increasing value, and (4) support the professional satisfaction of physicians and the health care team.

Regulation, payment and deployment

Our AMA advocates that:

- AI is designed to enhance human intelligence and the patient-physician relationship rather than replace it



- Oversight and regulation of health care AI systems must be based on risk of harm and benefit accounting for a host of factors, including but not limited to: intended and reasonably expected use(s); evidence of safety, efficacy and equity, including addressing bias; AI system methods; level of automation; transparency; and conditions of deployment
- Payment and coverage for all health care AI systems must be conditioned on complying with all appropriate federal and state laws and regulations, including but not limited to those governing patient safety, efficacy, equity, truthful claims, privacy and security, as well as state medical practice and licensure laws
- Payment and coverage for health care AI systems intended for clinical care must be conditioned on
 - Clinical validation
 - Alignment with clinical decision-making that is familiar to physicians
 - High-quality clinical evidence
- Payment and coverage for health care AI systems must
 - Be informed by real-world workflow and human-centered design principles
 - Enable physicians to prepare for and transition to new care delivery models
 - Support effective communication and engagement between patients, physicians and the health care team
 - Seamlessly integrate clinical, administrative and population health management functions into workflow
 - Seek end-user feedback to support iterative product improvement
- Payment and coverage policies must advance affordability and access to AI systems that are designed for small physician practices and patients and not limited to large practices and institutions
- Government-conferred exclusivities and intellectual property laws are meant to foster innovation, but constitute interventions into the free market, and therefore should be appropriately balanced with the need for competition, access and affordability

Penalties and mandates

Our AMA advocates that:

- Physicians should not be penalized if they do not use AI systems while regulatory oversight, standards, clinical validation, clinical usefulness and standards of care are in flux

Our AMA opposes:

- Policies by payers, hospitals, health systems or governmental entities that mandate use of health care AI systems as a condition of licensure, participation, payment or coverage
- The imposition of costs associated with acquisition, implementation and maintenance of health care AI systems on physicians without sufficient payment

Liability

Our AMA advocates that:

- Liability and incentives should be aligned so that the individual(s) or entity(ies) best positioned to know the AI system risks and best positioned to avert or mitigate harm do so through design, development, validation and implementation
- Where a mandated use of AI systems prevents mitigation of risk and harm, the individual or entity issuing the mandate must be assigned all applicable liability
- Developers of autonomous AI systems with clinical applications (screening, diagnosis, treatment) are in the best position to manage issues of liability arising directly from system failure or misdiagnosis and must accept this liability with measures such as maintaining appropriate medical liability insurance and in their agreements with users
- Health care AI systems that are subject to non-disclosure agreements concerning flaws, malfunctions or patient harm (referred to as gag clauses) must not be covered or paid and the party initiating or enforcing the gag clause assumes liability for any harm

Role of physician organizations

Our AMA advocates that our organization, national medical specialty societies and state medical associations:

- Identify areas of medical practice where AI systems would advance the quadruple aim
- Leverage existing expertise to ensure clinical validation and clinical assessment of clinical applications of AI systems by medical experts

“To realize the benefits for patient care, physicians must have the skills to work comfortably with augmented intelligence in health care. Just as working effectively with electronic health records is now part of training for medical students and residents, educating physicians to work effectively with AI systems or, more narrowly, the AI algorithms that can inform clinical care decisions will be critical to the future of ai in health care.”

—Bobby Mukkamala, MD, AMA Board of Trustees

- Outline new professional roles and capacities required to aid and guide health care AI systems
- Develop practice guidelines for clinical applications of AI systems

National and state collaboration and strategic planning

Our AMA advocates that:

- There should be federal and state interagency collaboration with participation of the physician community and other stakeholders to advance the broader infrastructural capabilities and requirements necessary for AI solutions in health care to be sufficiently inclusive to benefit all patients, physicians and other health care stakeholders.

Education, professional development and other key policies Annual 2019

Citing the potential to improve both the quantity and quality of patient care, the AMA House of Delegates has adopted policy that further examines AI and its potential to benefit physicians, including those who are in training.

The AMA House of Delegates has directed that our AMA encourage:

- Accrediting and licensing bodies to study how AI should be most appropriately addressed in accrediting and licensing standards
- Medical specialty societies and boards to consider production of specialty-specific educational modules related to AI
- Research regarding the effectiveness of AI instruction in medical education on learning and clinical outcomes
- Institutions and programs to be deliberative in the determination of when AI-assisted technologies should be taught, including consideration of established evidence-based treatments, and including consideration regarding what other curricula may need to be eliminated in order to accommodate new training modules
- Stakeholders to provide educational materials to help learners guard against inadvertent dissemination of bias that may be inherent in AI systems
- The study of how differences in institutional access to AI may impact disparities in education for students at schools with fewer resources and less access to AI technologies
- Enhanced training across the continuum of medical education regarding assessment, understanding and application of data in the care of patients
- The study of how disparities in AI educational resources may impact health care disparities for patients in communities with fewer resources and less access to AI technologies
- Institutional leaders and academic deans to proactively accelerate the inclusion of non-clinicians, such as data scientists and engineers, onto their faculty rosters to assist learners in their understanding and use of AI
- Close collaboration with and oversight by practicing physicians in the development of AI applications

And, the AMA House of Delegates reaffirmed AMA Policy D-295.328, "Promoting Physician Lifelong Learning."

For more information: ama-assn.org/ai