AMERICAN MEDICAL ASSOCIATION HOUSE OF DELEGATES

Resolution: 246
(A-24)

Introduced by: Texas

Subject: Augmented Intelligence in Health Care

Referred to: Reference Committee B

1   Whereas, with the rapid pace of change in artificial and augmented intelligence in health care, it
2   is important for the American Medical Association to continually assess and update its policy
3   principles at regular intervals; therefore be it
4
5   RESOLVED, that our American Medical Association amend its augmented intelligence policy to
6   align with the following:
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8   Augmented Intelligence in Health Care
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10   The American Medical Association supports the use of augmented intelligence (AI) when used
11   appropriately to support physician decision-making, enhance patient care, improve
12   administrative functions, and improve public health without reducing the importance of physician
13   decision-making. Augmented intelligence also should be used in ways that reduce physician
14   burden and increase professional satisfaction. Sufficient safeguards should be in place to
15   assign appropriate liability inherent in augmented intelligence to the software developers and
16   not to those with no control over the software content and integrity, such as physicians and
17   other users. Ultimately, it is the physician's responsibility to uphold the standard of care.
18
19   The American Medical Association adopts the following principles for augmented intelligence in
20   health care:
21
22   1. Augmented intelligence should be the preferred health care term over artificial intelligence
23   as it should be used to augment care by providing information for consideration. Augmented
24   intelligence, whether assistive or fully autonomous, is intended to co-exist with human
25   decision-making and should not be used to replace physician reasoning and knowledge.
26   2. Physicians should not be mandated to use augmented intelligence without having input or
27   feedback into how the tool is used either individually or as a medical staff.
28   3. Augmented intelligence must not replace or diminish the patient-physician relationship.
29   4. Algorithms developed to augment user intelligence must be designed for the benefit, safety,
30   and privacy of the patient. The AMA should research opportunities to place practicing
31   physicians on public and private panels, work groups, and committees that will evaluate
32   products as they are developed.
33   5. Sellers and distributors of augmented intelligence should disclose that it has met all state
34   and federal legal and regulatory compliance with regulations such as, but not limited to,
35   those of HIPAA, the U.S. Department of Health and Human Services, and the U.S. Food
36   and Drug Administration.
37   6. Use of augmented intelligence, machine learning, and clinical decision support has inherent
38   known risks. These risks should be recognized, and legal and ethical responsibility for the
39   use and output of these products must be assumed by, including but not limited to,
40   developers, distributors, and users with each entity owning responsibility for its respective

1 role in the development, dissemination, implementation, and use of products used in clinical
2 care.
3 7. Users should have clear guidelines for how and where to report any identified anomalies.
4 Additionally, as with all technology, there should be a national database for reporting errors
5 that holds developers accountable for correcting identified issues.
6 8. Before using augmented intelligence, physicians and all users should receive adequate
7 training and have educational materials available for reference, especially in instances
8 where the technology is not intuitive and there are periods of nonuse.
9 9. Physicians should inquire about whether the AI used is a "continuously learning system"
10 versus a "locked system." A locked system is more appropriate for clinical care, although a
11 hybrid system may be appropriate as long as the clinical output is based on locked training
12 sets. A locked system gives a predictable output, whereas a continuous learning system will
13 change over time.
14 10. Algorithms and other information used to derive the information presented as augmented
15 intelligence to physicians and other clinicians should:
16
17 a. Be developed transparently in a way that is accessible, explainable, and
18 understandable to clinicians and patients and details the benefits and limitations of the
19 clinical decision support, and/or augmented intelligence;
20 b. Have reproducible and explainable outputs;
21 c. Function in a way that promotes health equities while eliminating potential biases that
22 exacerbate health disparities;
23 d. Use best practices for user-centered design that allows for efficient and satisfactory use
24 of the technology;
25 e. Safeguard patient information by employing privacy and security standards that comply
26 with HIPAA and state privacy regulations;
27 f. Have a feedback loop that allows users who identify potential safety hazards to easily
28 report problems and malfunctions as well as opportunities to report methods for
29 improvements; and
30 g. Contain a level of compatibility to allow use of information between hardware and
31 software made by different manufacturers.
32
33 11. Medical students and residents need to learn about the opportunities and limitations of
34 augmented intelligence as they are prepared for future medical practice.
35 12. The AMA will advocate, through legislation or regulation, for payment to physicians for
36 utilization of artificial intelligence tools that have additional cost or require additional time.
37 13. Recognizing the rapid pace of change in augmented intelligence, it is important to
38 continually assess and update the AMA's principles at regular intervals.
39 (Modify Current HOD Policy)

Fiscal Note: Minimal - less than $1,000

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RELEVANT AMA POLICY

11.2.1 Professionalism in Health Care Systems
Containing costs, promoting high-quality care for all patients, and sustaining physician professionalism
are important goals. Models for financing and organizing the delivery of health care services often aim to
promote patient safety and to improve quality and efficiency. However, they can also pose ethical
challenges for physicians that could undermine the trust essential to patient-physician relationships.

Payment models and financial incentives can create conflicts of interest among patients, health care organizations, and physicians. They can encourage undertreatment and overtreatment, as well as dictate goals that are not individualized for the particular patient.

Structures that influence where and by whom care is delivered—such as accountable care organizations, group practices, health maintenance organizations, and other entities that may emerge in the future—can affect patients' choices, the patient-physician relationship, and physicians' relationships with fellow health care professionals.

Formularies, clinical practice guidelines, decision support tools that rely on augmented intelligence, and other mechanisms intended to influence decision making, may impinge on physicians' exercise of professional judgment and ability to advocate effectively for their patients, depending on how they are designed and implemented.

Physicians in leadership positions within health care organizations and the profession should:
(a) Ensure that decisions to implement practices or tools for organizing the delivery of care are transparent and reflect input from key stakeholders, including physicians and patients.
(b) Recognize that over reliance on financial incentives or other tools to influence clinical decision making may undermine physician professionalism.
(c) Ensure that all such tools:
  (i) are designed in keeping with sound principles and solid scientific evidence.
       a. Financial incentives should be based on appropriate comparison groups and cost data and adjusted to reflect complexity, case mix, and other factors that affect physician practice profiles.
       b. Practice guidelines, formularies, and similar tools should be based on best available evidence and developed in keeping with ethics guidance.
       c. Clinical prediction models, decision support tools, and similar tools such as those that rely on AI technology must rest on the highest-quality data and be independently validated in relevantly similar populations of patients and care settings.
  (ii) are implemented fairly and do not disadvantage identifiable populations of patients or physicians or exacerbate health care disparities;
  (iii) are implemented in conjunction with the infrastructure and resources needed to support high-value care and physician professionalism;
  (iv) mitigate possible conflicts between physicians' financial interests and patient interests by minimizing the financial impact of patient care decisions and the overall financial risk for individual physicians.
(d) Encourage, rather than discourage, physicians (and others) to:
  (i) provide care for patients with difficult to manage medical conditions;
  (ii) practice at their full capacity, but not beyond.
(e) Recognize physicians' primary obligation to their patients by enabling physicians to respond to the unique needs of individual patients and providing avenues for meaningful appeal and advocacy on behalf of patients.
(f) Ensure that the use of financial incentives and other tools is routinely monitored to:
  (i) identify and address adverse consequences;
  (ii) identify and encourage dissemination of positive outcomes.
All physicians should:
(g) Hold physician-leaders accountable to meeting conditions for professionalism in health care systems.
(h) Advocate for changes in how the delivery of care is organized to promote access to high-quality care for all patients. [Issued: 2016; Amended: 2021; Amended: 2022]

H-295.857 Augmented Intelligence in Medical Education
Our AMA encourages: (1) accrediting and licensing bodies to study how AI should be most appropriately addressed in accrediting and licensing standards; (2) medical specialty societies and boards to consider production of specialty-specific educational modules related to AI; (3) research regarding the effectiveness of AI instruction in medical education on learning and clinical outcomes; (4) 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; (5)

stakeholders to provide educational materials to help learners guard against inadvertent dissemination of bias that may be inherent in AI systems; (6) 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; (7) enhanced training across the continuum of medical education regarding assessment, understanding, and application of data in the care of patients; (8) 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; (9) institutional leaders and academic deans to proactively accelerate the inclusion of nonclinicians, such as data scientists and engineers, onto their faculty rosters in order to assist learners in their understanding and use of AI; and (10) close collaboration with and oversight by practicing physicians in the development of AI applications. [CME Rep. 04, A-19]

H-480.935 Assessing the Potentially Dangerous Intersection Between AI and Misinformation

Our American Medical Association will: (1) study and develop recommendations on the benefits and unforeseen consequences to the medical profession of large language models (LLM) such as, generative pretrained transformers (GPTs), and other augmented intelligence-generated medical advice or content, and that our AMA propose appropriate state and federal regulations with a report back at A-24; (2) work with the federal government and other appropriate organizations to protect patients from false or misleading AI-generated medical advice; (3) encourage physicians to educate our patients about the benefits and risks of consumers facing LLMs including GPTs; and (4) support publishing groups and scientific journals to establish guidelines to regulate the use of augmented intelligence in scientific publications that include detailing the use of augmented intelligence in the methods, exclusion of augmented intelligence systems as authors, and the responsibility of authors to validate the veracity of any text generated by augmented intelligence. [Res. 247, A-23]

H-480.939 Augmented Intelligence in Health Care

Our American Medical Association supports the use and payment of augmented intelligence (AI) systems that advance the quadruple aim. AI systems should enhance the patient experience of care and outcomes, improve population health, reduce overall costs for the health care system while increasing value, and support the professional satisfaction of physicians and the health care team. To that end our AMA will advocate that:

1. 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.
2. 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.
3. Payment and coverage for health care AI systems intended for clinical care must be conditioned on
   a. clinical validation
   b. alignment with clinical decision-making that is familiar to physicians; and
   c. high-quality clinical evidence.
4. Payment and coverage for health care AI systems must
   a. be informed by real world workflow and human-centered design principles;
   b. enable physicians to prepare for and transition to new care delivery models;
   c. support effective communication and engagement between patients, physicians, and the health care team;
   d. seamlessly integrate clinical, administrative, and population health management functions into workflow; and
   e. seek end-user feedback to support iterative product improvement.
5. 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.

6. 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. Furthermore, our AMA opposes:
   a. 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.
   b. The imposition of costs associated with acquisition, implementation, and maintenance of healthcare AI systems on physicians without sufficient payment.
7. 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. Our AMA will further advocate:
   a. 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.
   b. 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.
   c. 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.
8. Our AMA, national medical specialty societies, and state medical associations
   a. Identify areas of medical practice where AI systems would advance the quadruple aim;
   b. Leverage existing expertise to ensure clinical validation and clinical assessment of clinical applications of AI systems by medical experts;
   c. Outline new professional roles and capacities required to aid and guide health care AI systems; and
   d. Develop practice guidelines for clinical applications of AI systems.
9. There should be federal and state interagency collaboration with participation of the physician community and other stakeholders in order 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. (New HOD Policy)
10. AI is designed to enhance human intelligence and the patient-physician relationship rather than replace it. [BOT Rep. 21, A-19; Reaffirmation: A-22]

H-480-940 Augmented Intelligence in Health Care
As a leader in American medicine, our American Medical Association has a unique opportunity to ensure that the evolution of augmented intelligence (AI) in medicine benefits patients, physicians, and the health care community.

To that end our AMA will seek to:
1. Leverage its ongoing engagement in digital health and other priority areas for improving patient outcomes and physicians' professional satisfaction to help set priorities for health care AI.
2. Identify opportunities to integrate the perspective of practicing physicians into the development, design, validation, and implementation of health care AI.
3. Promote development of thoughtfully designed, high-quality, clinically validated health care AI that:
   a. is designed and evaluated in keeping with best practices in user-centered design, particularly for physicians and other members of the health care team;
   b. is transparent;
   c. conforms to leading standards for reproducibility;
   d. 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; and
   e. safeguards patients' and other individuals' privacy interests and preserves the security and integrity of personal information.
4. 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.
5. 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. [BOT Rep. 41, A-18]

H-480-956 Augmented Intelligence for Prior Authorization
Our American Medical Association advocates for greater regulatory oversight of the use of augmented intelligence for review of patient claims and prior authorization requests, including whether insurers are using a thorough and fair process that: (1) is based on accurate and up-to-date clinical criteria derived from national medical specialty society guidelines and peer reviewed clinical literature; (2) includes reviews by doctors and other health care professionals who are not incentivized to deny care and with expertise for the service under review; and (3) requires such reviews include human examination of patient records prior to a care denial. [Res. 721, A-23]