Health care AI holds promise, but physicians’ perspective needed

JUN 14, 2018

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Computational methods, techniques, and systems for data analysis such as machine image recognition, natural-language processing and machine learning are sometimes called artificial intelligence. But a better term for use in health care is augmented intelligence (AI), according to experts cited in an AMA Board of Trustees report whose recommendations were adopted at the 2018 AMA Annual Meeting.

That is because these methods should enhance patient and physician decision-making to advance improved health outcomes. Health-related AI solutions in the pipeline or already available include wearable AI, new tools for diagnosis and physician training, and data analytics.

“Health care AI can offer a transformative set of tools to help patients, physicians, and the nation” deal with looming quality and cost challenges, but the perspective of physicians must be included to ensure that AI is used wisely and benefits patients, the Board of Trustees report says.

“As technology continues to advance and evolve, we have a unique opportunity to ensure that augmented intelligence is used to benefit patients, physicians, and the broad health care community,” said AMA Trustee Jesse M. Ehrenfeld, MD, MPH.

“Combining AI methods and systems with an irreplaceable human clinician can advance the delivery of care in a way that outperforms what either can do alone,” he said. "But we must forthrightly address challenges in the design, evaluation and implementation as this technology is increasingly integrated into physicians’ delivery of care to patients.”

As a result of the AMA House of Delegates’ first time adopting policy on the topic of AI, the AMA will seek to:

- 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
Identify opportunities to integrate the perspective of practicing physicians into the development, design, validation and implementation of health care AI.

The AMA will 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 and 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.

Also, the AMA will:

- 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.

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