

How the AMA and Technology Innovation are Shaping the Physician Practice

“Alexa, are you listening and learning?”

By Scott Ferguson, MD

AMA Trustee

Physicians, as a group, have been very receptive to adopting new technologies. Telehealth and telemedicine, for example, are no longer novelties, as we have seen a rapid-scale adoption and implementation of remote patient care during this pandemic. Many physicians, who thought they would never use telemedicine, have purchased equipment and created spaces to see patients virtually. Telehealth not only offers opportunities for patient care but patient information. Web MD and Mayo Clinic now offer web content through Alexa.

The key to digital health, whether it's remote patient care or AI, is that it enhances – and is not a replacement for – physician experience and expertise, and that it effectively improves patient outcomes.

While AI is most frequently referred to as artificial intelligence, the AMA uses the term *augmented* intelligence because while the capabilities of machine-learning, imagining and processing have grown tremendously in the last few years, it is a poor substitute for the human clinician. We remain essential and irreplaceable.

That being said, AI could prove essential in its own right if it successfully streamlines and improves clinical workflow to allow us to dedicate more of our time to patient care. AMA's first-ever policies on AI adopted at the 2018 Annual Meeting called on us to promote the development of thoughtfully designed, clinically validated AI on the expectation that it:

- 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.

Examples of AI that could make our jobs a little easier include point-of-care learning, in which AI offers personalized content by analyzing data, online searches and assessments to help with physician decision-making. Doctors shouldn't have to waste time scanning through mountains of text that is not relevant to their patients or practices.

Another successful AI implementation would be around rapid clinical documentation to address one of the major drivers of physician frustration and burnout. AI could also replace manual-data collection to assist with quality-measure reporting, another major source of burnout.

These are, indeed, promising advancements. But they won't happen by accident.

AMA pledged to leverage its existing engagements and relationships in digital health to help set AI priorities in health care. And we committed to looking for opportunities to integrate the perspective of practicing physicians into the development, design, validation, and implementation of health care AI.

When it comes to digital health and its promises for the future, we have learned a lot from the flawed roll out and implementation of Electronic Health Records more than a decade ago. Chief among those hard-learned lessons is that for digital health to actually work as intended, physicians must have a role in the design and development of technologies in the early stages.

This was the driving force behind the creation of the AMA's [Physician Innovation Network](#) (PIN) in 2017, a platform that connects the worlds of medicine and health care innovation by integrating the clinical voice into emerging technologies solutions.

Four years after its launch, PIN has more 15,000 users and 30 organizational collaborators from across the industry --physicians and companies working together to create improved, scalable solutions and to better understand how to navigate the health care ecosystem. The result is market-ready products that have the potential to work as planned in the clinical setting.

PIN is just one of many successful initiatives launched by the AMA to elevate the experience and expertise of physicians in the creation of digital health. A Silicon Valley-based business formation company the AMA founded in 2016, [Health2047](#), brings together physicians, engineers, coders, behavioral economists, psychologists, technology entrepreneurs and others to design, test and grow potentially transformative new digital tools in health care. So far, Health2047 has spun out five distinct digital health companies focused on addressing challenges in the modern health care landscape.

There will always be a need for hands-on medicine. Physicians need to embrace and not fear telehealth as a disruptive change in the delivery of health care. We want to lead in the adoption of technologies like AI and telehealth and assure that they are truly advancements in patient care. Preserving the doctor-patient relationship and payment parity should remain the focus of our advocacy efforts.

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