A new survey builds on a 2016 AMA survey of 1,300 physicians and aims to deepen the understanding of why doctors do or don’t adopt new digital health solutions. The research finds that physicians have concerns about technology’s efficacy and evidence base. They also are apprehensive about IT’s impact on payment, liability and quality of care. Physicians are eager for solutions that give them back more face-to-face time with patients.

“Digital health is the sort of Wild West of medicine and health care right now,” Kate Kirley, MD, a family physician and director of chronic disease prevention at the AMA, said during a presentation at the Connected Health Conference in Boston. “It’s one of the new frontiers that we are all attempting to tame.”

The study found that physicians have four key questions about digital health:

- Does it work?
- Will I get paid?
- Will I get sued?
- Does it work in my practice?

To explore that last question, researchers from Partners HealthCare Center for Connected Health and the AMA decided to conduct a study focused on how the technology will work in a physician’s practice. The “Physician Adoption of Digital Health Technology” study was conducted by researchers at the AMA in collaboration with Partners HealthCare. The collaborative research team was led by principal investigator Kamal Jethwani, MD, MPH, senior director of Connected Health Innovation at Partners HealthCare, and co-investigator Dr. Kirley.

“We wanted to take that deeper dive and start to explore some of the facilitators and barriers of physician adoption of digital health solutions,” she said.
Thousands of papers; little talk about adoption

The study was initially narrowed down to papers and other work published on hypertension management using connected health technologies. When researching this information, the team addressed the barriers and facilitators to implementation and adoption of successful digital health. A series of secondary questions were also included.

To conduct the study, the team performed internal program reviews, scope reviews—this looked at the total body of literature published and unpublished—and social media listening. With talk about digital health, the research team understood that not everything gets published, which is why listening for provider adoption on social media was an important addition.

“What we started seeing is even though we had over 3,000 papers, not many of them actually talked about provider adoption. They weren’t studying it, they weren’t talking about it and they weren’t mentioning it,” Dr. Jethwani said. “We actually ended up with only 57 studies with any mention of provider adoption.”

Among the included studies, more than half (56 percent) of the digital health solutions had been implemented in primary care settings, while 19 percent were in specialty settings and 25 percent in both. Researchers determined that outcomes results were needed for patients and physicians.

“That interplay is very important. If you have a lot of unengaged patients, the provider is going to lose interest,” Dr. Jethwani said. “If you have an unengaged provider, the patients lose interest after a point.”

Physicians face 100 frustrations a day

While the information provided at the Connected Health Conference was not final, the interim results showed key facilitators of adoption for physicians included:

- The availability of additional resources and training.
- Access to accurate data.
- Positive impact on quality of care.
- Evidence base for the digital health solution.

“All of these things really speak to the idea that for physicians to adopt a digital health solution, they need to feel very comfortable with the idea that this solution is going to help them take better care of their patients,” Dr. Kirley said. “This is why we got into this in the first place as physicians—we want to
take care of our patients."

“If a solution can provide evidence and can demonstrate that it’s going to help us take care of our patients, then we are going to be all the more likely to adopt that solution,” she added.

Every day, the average physician encounters about 100 frustrations that bug, challenge or interfere with doctors fulfilling their mission, Dr. Kirley said. But since physicians are too often overloaded, of those 100 frustrations doctors often only attempt to deal with or correct about two or three.

“If you think about that and these findings, if a given digital health solution is one of those frustrations, the chances that a physician is actually going to continue to use it or find a way to make it work—it’s not going to happen,” she said. “If there is any sort of piece of this solution that is frustrating or logistically challenging for a physician, they’re not going to use it.”

When looking at physician feedback, Dr. Kirley shared one physician’s response, “We need to know that the data is accurate and reliable to take action based on it.” She emphasized the importance of this, especially in the context of hypertension.

“We know that when physicians are presented with blood pressure measurements, they frequently don’t trust the validity or accuracy,” she said. “And that’s true of both measurements that happen in the clinic as well as measurements that happen outside of the clinic.”

So, Dr. Kirley asked, “What happens when a physician gets an elevated measurement, but they don’t trust the accuracy of that data?” She said many physicians will ignore it and won’t adjust their patient’s therapy.

“This is one of the key reasons we know from our research why we still have such a high rate of patients with uncontrolled hypertension in America,” she said. “Accuracy of data is really important for physicians in using a solution.”

**Away from screen, back with patients**

And with digital health solutions often comes a loss of face time with patients. Dr. Kirley shared an experience in which her patients have asked, “Are you even typing anything?” To which she explained that she was documenting what they were saying. However, the process is exhausting.

“I want to have a good interaction with my patient, but at the same time I need to get my documentation done,” Dr. Kirley said. “I don’t want to stay up until midnight closing my charts.”

“One of the challenges I really want to put forth to those of you who are innovators is if you can
develop a digital health solution that takes me away from my screen and gives me back to my patients, that is something I am very interested in and it is something we saw a lot of in our social listening piece,” she added.

“A lot of themes are common between patients and providers,” said Dr. Jethwani. “As innovators and startup company executives, this makes your life easier because if you address the same exact issue, it is going to help on both sides of the aisle.”

“If we are able to solve the system issue using digital health, then the patient-provider relationship can improve drastically because now you’re actually creating a meaningful relationship,” he added.

To ensure new digital health solutions facilitate effective care and relationships between patients and physicians, the AMA brings the physician voice to innovators and entrepreneurs. By recognizing the key challenges physicians face when implementing health IT and the increase of direct-to-consumer digital health apps, the AMA aims to help physicians navigate and maximize technology for improved patient care and professional satisfaction.

The AMA is focused on influencing health IT with the goal of enhancing patient-centered care, improving health outcomes and accelerating progress in health care.

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