

# The Empowerment of Consumers for Health: AI Accelerates a Long-Standing Trend

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## ARTIFICIAL INTELLIGENCE: FRIEND OR FOE?

The conversation around artificial intelligence (AI) and its impact on health care has sparked wide-ranging debate. Although advances in the 2010s regarding AI for image recognition (eg, in radiography) prompted bold predictions around the potential replacement of physicians,<sup>1</sup> the coverage in medical journals, including this one, has largely centered around AI as a tool supporting the continued central role of physicians in health care.<sup>2,3</sup>

So which is it: AI as a tool to empower physicians, or AI as a tool to replace doctors?

In a 2023 CNBC editorial, physician and former US Food and Drug Administration commissioner Scott Gottlieb, MD, likely prompted by the release of ChatGPT, made it clear where he stood: “The inevitable question isn’t so much if but when these artificial intelligence devices can step into the shoes of doctors. For some tasks, this medical future is sooner than we think.”<sup>4</sup>

Does Gottlieb think that AI will replace *all* physicians? I doubt it. AI will no more replace all physicians than online travel websites replaced all travel agents. But as with travel agents, AI will likely replace a significant number of physicians in specific tasks—providing tools to consumers to monitor and manage diabetes or depression; screening for diabetic retinopathy; and providing early warning for diseases such as Alzheimer and Parkinson disease.<sup>5-9</sup>

## ALL THIS HAS HAPPENED BEFORE

The trend of patients bypassing physicians to diagnose and treat themselves is not new. Over the past decades, an increasing number of over-the-counter (OTC) drugs have been used to self-manage many conditions—from headaches to seasonal allergies to birth control—that formerly required physician expertise.<sup>10</sup>

The rise in self-treatment using OTC drugs has so far been powered by pre-AI technologies such as online search engines. Digitally empowered consumers do their own research and make their own decisions. Are we surprised this also impacts health?

The same consumer empowerment could explain a 2020 Harvard study that showed primary care use among insured Americans decreased by 24.2% of visits per capita from 2008-2016.<sup>11</sup> In explaining this finding, the researchers hypothesized that patients, particularly younger people, may “be increasingly comfortable with online self-care,” noting that “visit rates decreased sharply for low-acuity conditions, such as conjunctivitis, that might be addressed more easily by calling a nurse or searching the Internet.”<sup>11</sup>

## AI, CONSUMERIZATION, AND THE CHANGING ROLE OF PHYSICIANS

As with OTC drugs, the rise of AI represents another step toward empowering consumers to take control of their health decisions. So, what will it mean when these empowered consumers gain access to 24/7 tools, likely free to use or included with health insurance, that explain how to adjust insulin dosage, know the difference between a cold and pneumonia, and monitor health metrics not just annually but continuously?

In the near term, it might mean the decline in purely informational and low-acuity visits to physicians. Health care will need to refocus on activities that are higher acuity and less easily automated.

Medical practice will change, hopefully with better diagnostics, online scheduling, instant imaging interpretations, and productivity-enhancing electronic health records. And physicians need to change with it.

Every physician who remains in practice must find the value that AI can provide to patients. The tech community needs medical expertise to envision innovative applications; physicians can play an active role in producing AI tools that enhance health care for patients and clinicians, improve clinical outcomes, reduce administrative overload, protect privacy, and supercharge research.

Humility is essential: leadership for doctors in this extraordinary age of medicine is not a given and will not be won by looking away or to the past, but by embracing and using these new tools to their fullest potential and continually demonstrating the unique and irreplaceable value doctors bring to health care.

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