

IDEAS

The AI doctor will charge you now

Artificial intelligence is likely to alter the medical profession — by making care even more expensive.

By **Benjamin Mazer** Updated March 16, 2023, 3:00 a.m.



A.DRAGAN8@GMAIL.COM/ADRAGAN - STOCK.ADOBE.COM

The release of ChatGPT — the artificial intelligence program that produces complex, human-like responses — has provoked a public reckoning over the future of learned professions. Writers, teachers, and office workers are all said to be on the chopping block. But even the most rigorously trained and highly paid jobs might face disruption through automation. Could your next doctor be a chatbot? A large part of a physician’s work involves analyzing symptoms and laboratory results, rendering a diagnosis, and selecting appropriate treatments. If AI effectively replicates these tasks, the health care system could soon be radically reshaped.

This prediction is thought to be either utopian or apocalyptic, depending on which side of the medical relationship one is on. The investor and public thinker Balaji Srinivasan recently summarized the promise of ChatGPT medicine in a [series of tweets](#) that have been viewed over 2 million times. “AI means a brilliant doctor on your phone,” Srinivasan wrote. One that “can diagnose you instantly, for free, privately, using only your locally stored medical records.” Sounds awesome. But apparently not for physicians. “Do you think the doctors will be happy about that?” he continued. “They’ll fight it. Hard.” Srinivasan predicted a bitter financial conflict between technological progress and the medical guild.

As a doctor, I think the truth is simpler and more depressing. The medical profession isn’t afraid of losing business to AI. Instead, physicians are embracing their ability to profit from it. Your AI doctor isn’t going to be free and efficient; it’s likely to be a costly generator of unnecessary care.

Let me paint a different — and more realistic — picture of how artificial

intelligence will soon find its place in the clinic. At a routine checkup in the near future, you will be asked to complete an electronic form detailing your medical history and symptoms. Seems familiar enough. But your answers will be fed into a piece of AI software, which will generate a list of lab tests that your doctor might want to order. If your symptoms raise enough alarm, the software will prompt your primary care physician to consider referring you to a specialist. As the technology gets more advanced, it will even be able to perform elements of a physical exam itself. Report a history of diabetes and a machine's camera will automatically look for signs of the disease in your eyes. Complain of palpitations and a built-in echocardiogram will analyze images of your heart.

You'll leave the doctor's office utterly impressed. Your physician finally had time to talk to you, and your medical workup was more thorough than ever. Then the bill arrives a few weeks later. You see a separate charge for the interrogation of your medical history, another charge for the eye exam, and yet another for the heart images. You begin to wonder whether you can still afford those lab tests or that specialist referral on your high-deductible health insurance plan.

American medicine plays by different rules than other industries. Innovation doesn't drive down prices; new health care technologies typically lead to greater expense. This is because our insurance system is still largely based on "fee for service," which means that doctors and hospitals make more money when they perform more tests and procedures. The latest techniques tend to pay a lot better than the tried-and-true tools they replace, and one service naturally leads to another. Say you complain of belly pain so your doctor orders a CT scan. The scan doesn't find an explanation for your symptoms, but it does pick up a concerning cyst in your kidney. This leads to a specialist evaluation and even

more expensive tests to rule out cancer. Doctors and patients are all too familiar with these unnecessary, alarming, and sometimes harmful “[cascades of care](#).” But patients want answers to their questions, and physicians want to avoid any chance of malpractice liability.

In his online commentary, Srinivasan sarcastically asked, “Will the AMA accelerate AI diagnosis?” In fact, the American Medical Association and other physician groups are striving to make artificial intelligence a reality by ensuring that doctors can charge handsomely for it. The most important innovation in medical AI isn’t ChatGPT but CPT. Current Procedural Terminology, or CPT, codes are what doctors and hospitals use to submit claims to health insurers. If a CPT code doesn’t exist for a particular intervention, then your doctor can’t get paid for it. Rather than fighting against artificial intelligence, the AMA has convened a [digital medicine payment advisory group](#) that’s developing new CPT codes for AI devices. Preliminary guidance from the group [went into effect](#) in January.

Consider [IDx-DR](#), one of the first AI technologies that’s been [approved by the Food and Drug Administration](#) to provide a real medical diagnosis. IDx-DR can detect diabetic retinopathy — a common cause of vision loss — without the input of a clinician. Doctors aren’t trying to ban this remarkable advance. On the contrary. Because this software has a billable code associated with it, doctors stand to profit from its use. The AMA [lauded](#) the device’s approval, while the American Academy of Ophthalmology is trying to [jack up the price](#). Ophthalmologists are embracing IDx-DR because diagnosing more retinopathy ultimately means more referrals to specialists like themselves.

Srinivasan’s viral Twitter thread predicted that AI companies might sidestep medicine’s regulatory and financial bureaucracy entirely — a sort of Uber-fication of health care. Startups could sell their software directly to consumers. It’s possible. A notable example of this was the laboratory startup Theranos, which successfully lobbied state governments to allow patients to order their own tests, then offered them at rock-bottom prices. You probably know how the Theranos story [turned out](#). Yet there’s little reason for even legitimate medical startups to take this route. AI startups, like innumerable health care enterprises before them, realize how much money can be made by producing FDA-approved, insurance-reimbursable devices. Artificial intelligence companies are eagerly anticipating AI-specific CPT codes, hailing them as an “[exciting step forward](#)” for the industry. Most consumers don’t have deep pockets, but Aetna and Cigna and Medicare sure do.

I don’t mean to be too cynical about the future. Digital augmentation is likely to make doctors better at their jobs. My specialty of pathology recently saw the [approval](#) of artificial intelligence-based software that enhances our ability to detect prostate cancer. Because we don’t often get paid extra for this gadget, however, few pathologists are actually using it. I’m keen to see how new technologies might improve the lives of my patients. But until we reform the way American medicine is financed and practiced — until we prioritize affordability and discourage excessive care — a true AI revolution seems out of reach.

Dr. Benjamin Mazer is an assistant professor of pathology at Johns Hopkins University and writes a newsletter at mazer.substack.com.



Show comments

©2023 Boston Globe Media Partners, LLC