

AI in Medicine Gets Closer to Making Regular Rounds

By all assessments, artificial intelligence has a bright future in health care.

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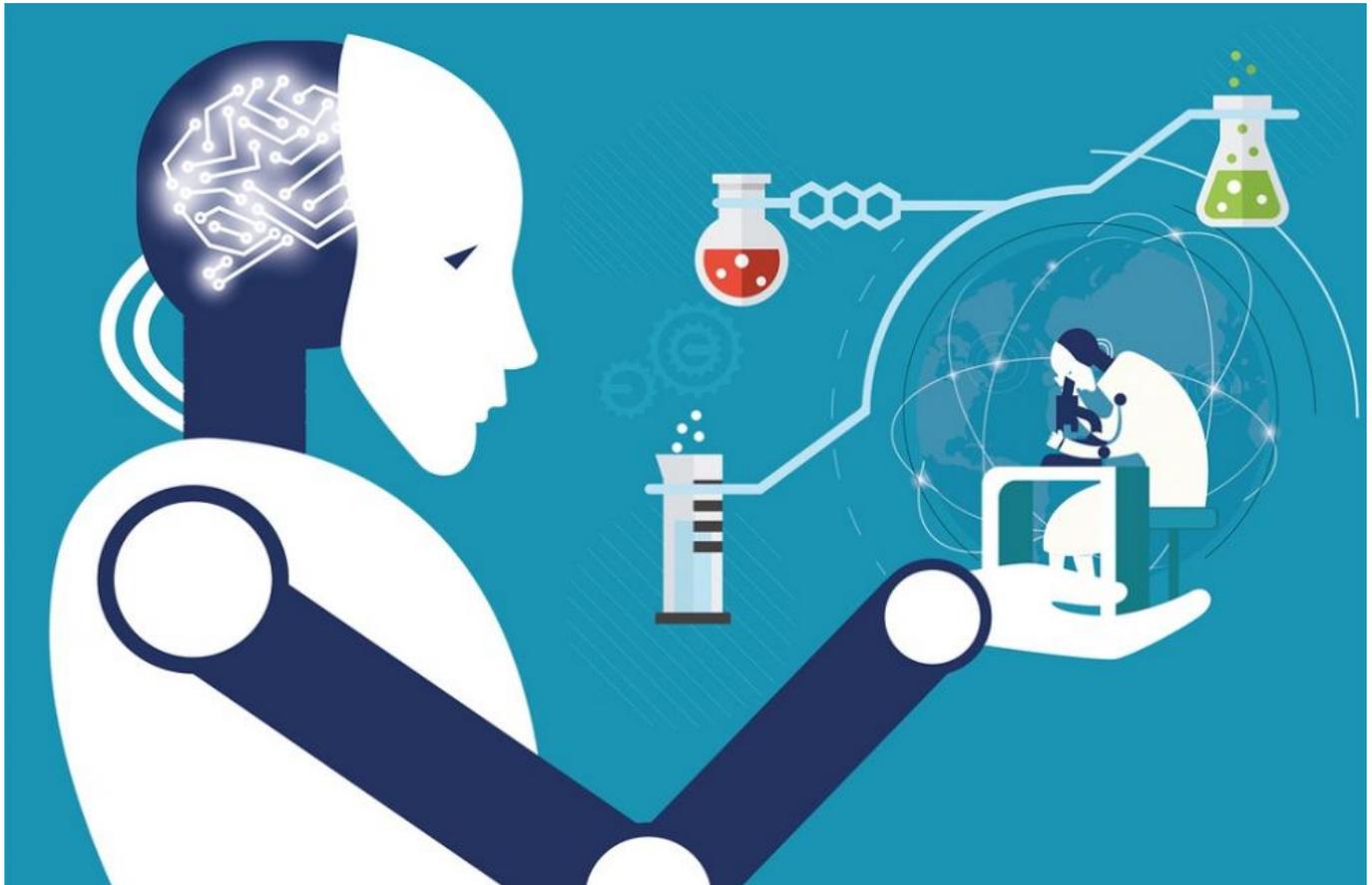


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The Food and Drug Administration recently approved a software algorithm that helps doctors identify hand fractures in X-rays. On its own, it's not ground-breaking news, but it is a sign artificial intelligence in medicine is getting closer to making regular rounds. In addition to finding new health care veins to mine, AI developers also need operate within the business world of health care and meet basic requirements such as cost-effectiveness.

On May 24, FDA [gave the green light](#) to market Imagen OsteoDetect, an AI algorithm that uses machine learning techniques to analyze wrist radiographs (X-

ray images) to assist clinicians in locating areas of distal radius fracturing. It's designed to be used in a variety of settings, including primary care, emergency medicine, urgent care and specialized care such as orthopedics, FDA said.

The approval is FDA's third to date that uses AI within the medical field, following approval in April of a device called [IDx-DR](#) that uses AI to help detect an eye disease known as diabetic retinopathy in adults with diabetes. Its first clearance of an AI device came in February when it [approved Viz.AI Contact](#), which can enable early detection of a potential stroke through automated analysis of computed tomography results. It also saves time in what could be a critical situation by sending an alert to a brain specialist's smartphone.

More on the Way

FDA also is looking to grease the wheels for putting more AI devices in play, working on a plan that would allow officials to keep pace with new developments in AI and encourage innovation.

"Artificial intelligence, particularly efforts to use machine learning . . . holds enormous promise for the future of medicine, and we're actively developing regulatory framework to promote innovation and the use of AI-based technologies," FDA Commissioner Scott Gottlieb [said April 26](#) at the Health Datapalooza in Washington, D.C.

Bringing more AI devices to market would get them closer to commodity items and, at least in one way, address one of the concerns cropping up around their use: financial viability. AI has established an impressive track record in the medical field, in areas such as diagnosing [lung cancer and heart disease](#), creating a [bloodless blood test](#), or [predicting the next pandemic](#). But some of those uses are being tested in developmental settings, with the focus assessing how well the technologies work, instead of studying their cost-effectiveness.

Accounting for the Payoff

And cost-effectiveness is never far from mind in the health care industry, where new technology is seen as the [greatest contributor](#) to rising health care costs, and return on investment still [calls the shots](#). A [survey of health care organizations](#) last

year by Healthcare IT News and HIMSS Analytics found more than half intended to use AI within the next five years, although they had some concerns.

Among barriers cited to AI adoption, the second biggest, behind the fact the technology is still developing, was making a business case for AI. Although many applications of AI in medicine might not fall into the categories FDA is looking at, approvals could get more of the tools into the mainstream.

FDA approval also could help guard against the inevitable labeling of practically anything with a computer chip or an IP connection as “AI,” a marketing tendency familiar to many fields. Market researcher Gartner, while predicting that practically every new piece of software will have AI technology by 2020, also [warns against the hype](#) of vendors touring AI products that might not really be AI. Gartner calls the practice “AI washing,” echoing the “[greenwashing](#)” by vendors claiming to be environmentally friendly when they’re not.

By all assessments, AI has a bright future in medicine, in big-picture endeavors such as the [Cancer Moonshot](#) and the [Precision Medicine Initiative](#), as well as in everyday uses that might prove to be the most common manifestations for AI. In the Healthcare IT News survey, in fact, respondents said they expected the most common use of medical AI would be in “pop health.”

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