

# Doctors say most metrics provided by your Apple Watch, Fitbit aren't helpful to them

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We use wearables to count calories, measure heart rates and even rate our quality of sleep.

With healthier living in mind, we purchase kid-friendly versions for our children and step-counting options for grandparents. Apple Watches, Fitbits and other [fitness-trackers](#) are everywhere, with data-obsessed users tapping away at tiny screens from the gym to the doctor's office.

It's clear that consumers love wearables and the information they provide—but do physicians?

Doctors have mixed views on how patients gather and present information from gadgets with quasi-medical aspirations. Most say it's a plus that patients can collect and curate more health-related data than ever before. However, bringing printed out pages of calories burned or counted steps to your next check-up isn't exactly advised.

## Information overload

In fact, it becomes "just a data dump" at the clinician's office, according to Neel Chokshi,

medical director of the sports cardiology and fitness program at Penn Medicine, which has conducted several studies on the relationship between consumers and their [wearable devices](#).

Chokshi said some of the information provided by wearables is actually useful for physicians, but most of it is not.

"My hypothesis is (fitness trackers) can be useful for doctors. We just haven't figured out how to use them quite yet," said Chokshi. While the devices have been marketed as self-help health tools for consumers, "we haven't" really told doctors how to use this information. Doctors weren't trained on this in [medical school](#)."

A story published in the MIT Technology Review echoed Chokshi's sentiments, finding that doctors from a number of specialties are unsure what to do with the data like counted steps.

Apple users have access to the Health app and developers can utilize the HealthKit platform, which offers the ability to track health data including medical records, lab results and medications downloaded directly from medical institutions. Android users have Google Fit to help them and their doctors analyze personal health trends.

Products from FitBit, Garmin, and others can monitor a user's heart rate and notify if it goes too high or too low, and there are several astounding stories out there of fitness trackers alerting people of sudden medical emergencies.

Still, these benefits to patients are often only seen in extreme cases when the device is charged and worn long enough to identify a person's irregular heartbeat.

Unfortunately, often the information isn't easy for doctors to make sense of.

"As clinicians, it can be challenging because these tracings are not very clear. Some can be challenging to interpret. Other times, patients may really inundate (staff) with a lot of tracings to look at," said Shon Chakrabarti, an interventional cardiologist and medical director at Abiomed, which manufactures medical devices for people with heart problems.

## Accuracy

Then there's the looming question of accuracy.

Heart rate measurements, which are a crown jewel of almost all fitness trackers, tend to be the most accurate metric across wearables according to a Stanford study that examined the precision of the Apple Watch, Basis Peak, Fitbit Surge, Microsoft Band, Mio Alpha 2, PulseOn and the Samsung Gear S2.

There's still lots of room for technological error because the trackers measure your [heart rate](#) on your wrist rather than closer to your chest and readings can be skewed due to movement and sweat.

None of the seven devices measured energy expenditure (or calories burned) accurately, the study found. Most wearable fitness trackers, with the exception of Apple Watch Series 4's EKG and irregular rhythm notification features, are not cleared by the FDA or approved to diagnose or treat any conditions, so doctors are wary about using the data to treat patients.

"I'd like to see significantly more, large-scale peer-reviewed studies validating the accuracy of the data before we start basing care decisions on the data," said Ripley Hollister, a family medicine specialist who is a board member of the Physicians Foundation.

Hollister also said that race, weight, and even pregnancy can skew the data provided by fitness trackers.

What doctors do care about is streamlined data integration and information that is clinically actionable, Chokshi said. Patients who come into

the office with accurate and reliable data about their underlying condition or symptoms could speed things up during medical emergencies.

"A lot of my patients are very regimented folks, and they would keep spreadsheets even if they didn't have an Apple Watch. The only way we can improve is if we measure," said Chokshi, who treats a wide range of cardiovascular diseases.

Companies have begun providing AI-backed services that help doctors comb through mountains of medical data provided by wearables like the Apple Watch, cutting down the noise in their day-to-day practice. FDA-approved Cardiologs, for example, uses cloud technology and AI to help doctors make actionable decisions based on detailed heart readings.

The founder of Cardiologs, Yann Fleureau, told U.S. TODAY that fitness trackers are seen as "pre-clinical devices, that enable patients to get to the doctor and start relevant care." Doctors seem to be OK with their patients' affinities with wearables, as long as they recognize that the gadgets are non-certified and that the data is nonclinical.

Both Chakrabarti and Hollister wear Apple Watches.

"All patients should feel empowered to manage their lifestyle with what works best for them," Hollister said. "But whether or not (wearables) lead to improved health outcomes outside of cardiovascular activity remains to be seen."

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