

NIH funds study to see if Apple Watch can prevent strokes, limit blood thinners

Article

The news: The National Heart, Lung, and Blood Institute, a National Institutes of Health division, [awarded](#) nearly \$37 million to Northwestern University and John Hopkins University

to study if an **Apple Watch** app can help prevent strokes.

- The study is a collaboration between **Northwestern University Feinberg School of Medicine** and the **American Heart Association**. **Stanford** and the **University of California at San Francisco** will also participate.
- The seven-year trial will include 5,400 patients, who will receive standard atrial fibrillation (AFib) care of blood thinners or Apple Watch-directed treatment.

How it works: In the Rhythm Evaluation for AntiCoagulaTion (REACT-AF) trial, patients with AFib will use an Apple Watch and a corresponding app on the iPhone to try to cut down on unnecessary use of blood thinners, which reduce the risk of blood clots or strokes but are costly. Apple will guide the study and aid researchers in developing an algorithm.

Patients with no symptoms of AFib will use the Apple Watch to monitor heart activity. The watch notifies patients when they experience an episode. In the event of a high-risk portion of the episode, patients will take blood-thinning medication.

Why it matters: The study could ensure patients only take blood thinner medication when they're at a high risk of stroke.

- AFib impacts between **2.5 million and 5 million Americans**, and the number will grow to **12.1 million** by 2030, **according to** the CDC.
- By limiting use of blood thinners to high-risk episodes, patients can save money on use of the drugs and reduce bleeding.
- For example, blood-thinning medications such as **Eliquis** and **Xarelto** can run around \$500 for a month's supply without insurance, **per** Healthcare Finance.
- Overall, AFib costs the US healthcare system \$26 billion annually, **per** the American Heart Association.

Trendspotting: Since 2020 the Apple Watch has offered an FDA-cleared feature that regularly checks a user's heart rhythm in the background for signs of AFib. However, the Apple Watch isn't the only device that can detect AFib.

- Startup **iRhythm** recently **received** FDA (510)k clearance for its **Zio Watch**. However, unlike the Apple Watch, the Zio Watch is a clinical device.

- In April, Google-owned Fitbit received FDA clearance for its photoplethysmography (PPG) algorithm to identify AFib.

Watching for accuracy: A consumer device like the Apple Watch can reach more consumers than implantable devices that detect the need for blood thinners. That's because implantable devices are more expensive and require a lot of infrastructure. But Apple must prove that the watch's algorithm can accurately detect irregular heart rhythms.

Physicians are hesitant to review data from patients' wearable devices.

- **Nearly half (48.6%) of US healthcare professionals** said they **wouldn't review their patients' wearable data**, and even more (58.2%) said they wouldn't store that data in patients' EHRs, according to a Feb. 1, 2022, survey by SSCG MAP MD.

US adults have also been slow to adopt smartwatches—higher adoption of smartwatches and more acceptance of the data will be needed for studies like this one to have an impact.

- Just 29% of US adults currently own a smartwatch, but 35% of those who don't would like to get one, per a January 2022 My Code study of adults ages 18-64.

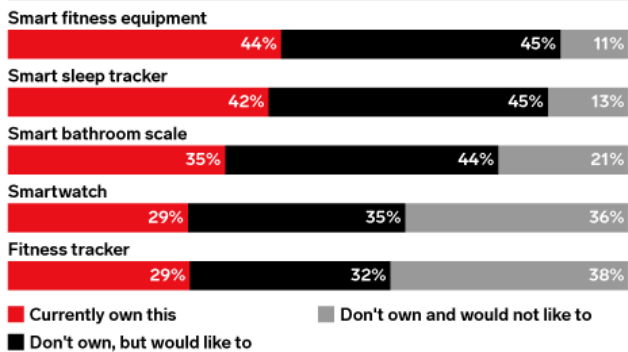
Go deeper: Check out our report [Digital Doctors 2022](#) for more on physicians' attitudes toward technology.

What's next? On September 7, Apple is expected to release the eighth version of its Apple Watch, per CNBC. Bloomberg reports that the new watch will include a body temperature sensor.

We're awaiting confirmation on digital health features in the latest Apple Watch iteration. With more health features officially added to the Apple Watch, adoption for health and fitness purposes and physician acceptance could increase.

Health and Wellness Smart Device Ownership Among US Adults, by Type, Nov 2021

% of respondents



Note: ages 18-64; numbers may not add up to 100% due to rounding
Source: My Code, "Health & Wellness Tech: An Opportunity for Growth Lies in Multicultural Consumers," Jan 11, 2022

273432

InsiderIntelligence.com

*This article originally appeared in **Insider Intelligence's Digital Health Briefing**—a daily recap of top stories reshaping the healthcare industry. Subscribe to have more hard-hitting takeaways delivered to your inbox daily.*

- *Are you a client? [Click here to subscribe.](#)*
- *Want to learn more about how you can benefit from our expert analysis? [Click here.](#)*