



Wearables Weekly

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While last week's Apple event did not reveal significant updates to the Apple Watch, the company did announce a new health management tool for consumers. Apple also announced that it will be partnering with 23andMe to bring genetic data into ResearchKit. In other headlines, a JAMA study finds varied accuracy of energy expenditure measurements provided by fitness trackers and smartwatch startup Pebble finds itself in troubled waters. Read the latest below!

Apple's CareKit helps patients better manage their illnesses

Last year, Apple debuted ResearchKit, an open-source platform for medical research. This year the company debuted CareKit, an open-source development platform to empower people to use data to understand their health. CareKit will launch next month with four basic modules. Care Cards are an interactive to-do list, reminding people to do things like take medication or perform physical therapy exercises. The Symptoms and Measurement Tracker allows users to record symptoms and recovery progress. There is also an Insight Dashboard module and a Connect module, which allows people to share data with their doctor.

Importance: In 2014, Apple launched the Health app. In 2015, it launched ResearchKit and debuted the Apple Watch. With this most recent announcement, Apple is demonstrating its commitment to building out an entire ecosystem for health and medical data.

What's new with the Apple Watch

Although the Apple Watch was not a focal point of last week's Apple event, CEO Tim Cook did briefly discuss the company's smartwatch. The biggest news was a \$50 price drop for the 38mm Apple Watch Sport, which will now start at \$299. In the UK, it's listed starting at £259, and in the Apple Australia store it's listed starting at AU\$429. Apple also rolled out a very minor software update for the Apple Watch in addition to new accessories, including a variety of colorful nylon bands. A second-generation model is expected to arrive later this year.

Importance: The Apple Watch is a high end smartwatch with a price tag to match. The price drop could make the watch more accessible to potential buyers.

Wearables' accuracy varies widely for caloric burn

A new JAMA study by researchers from the National Institute of Health and Nutrition in Tokyo found that many leading fitness trackers have a margin of error of about 200 calories per day in either direction when it comes to measuring energy expenditure. The study involved nineteen participants, aged 21 to 50, who each wore 12 fitness trackers. The devices included popular consumer products (Fitbit Flex, Jawbone UP24, Misfit Shine, Epson Pulsense PS-100, Garmin Vivofit, Tanita AM-160, Omron CalorieScan HJA-403C, and Withings Pulse O2) and devices more traditionally used in healthcare (Panasonic Actimarker EW 4800, Suzuken Lifecorder EX, Omron Active style Pro HJA-350IT, and ActiGraph GT3X). These readings were then compared to two more robust ways of tracking calories—metabolic chambers and urine samples.

Importance: While consumer health technologies pose little risk to healthy consumers if the information is not used for medical decision-making, it is important that they still undergo testing for accuracy. As wearables migrate into the clinical realm, there is a need for more stringent documentation and even FDA regulation if these technologies are going to be used as medical devices.



Other Health Technology Headlines

Amazon's Alexa can now shout your Fitbit stats at you

Apple taps 23andMe to bring genetic data into ResearchKit

'Fitbit for your period': the rise of fertility tracking

Ford's wearables lab explores health tech applications for cars

How a Fitbit May Make You a Bit Fit

Johnson & Johnson is expanding project to predict who will develop certain diseases

Nike Says No to Wearable Devices, Under Armour Says Just Do It

Pebble is laying off 25 percent of its staff

The problem with a technology revolution designed primarily for men

This wearable patch uses sweat to monitor blood glucose levels

We're More Honest With Our Phones Than With Our Doctors

WebMD's app-enabled weight loss pilot helped 800 Verizon employees lose weight

What Pebble's layoffs can tell us about the future of smartwatches

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