Fitbit and Fitabase Innovate Health Research Practices to Enable Real-Time, Continuous Measurement, Better Participant Engagement and Innovative Study Design

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Over 200 studies to date have relied on Fitbit technology and the Fitabase data analytics platform to incorporate activity, sleep, and heart rate data

SAN FRANCISCO--(BUSINESS WIRE)-- Fitbit (NYSE:FIT), the leader in the connected health and fitness market, and Fitabase, a research platform that collects data from internet-connected devices, today announced that their technologies have been used by researchers from leading research institutions such as Johns Hopkins University, Northwestern Medicine, the University of Texas MD Anderson Cancer Center, and the University of California San Diego. Over the last four years, Fitbit and Fitabase have changed the way research is done by helping researchers continuously and objectively measure physical activity, engage patients in a new way, and enable just-in-time adaptive interventions. To date, Fitabase has collected over 2 billion minutes of Fitbit data on behalf of their research customers.

“Historically, measuring participants’ activity, sleep, and heart rate data over significant periods of time has been logistically difficult to collect and costly to measure,” said Aaron Coleman, CEO of Fitabase. “Fitbit's consumer-friendly technology provides our customers with an accurate, meaningful way to capture 24/7, real-time data so they can design innovative study protocols in ways not possible before.”

Fitbit and Fitabase Are Used to Continuously, Objectively Measure Physical Activity
Researchers often rely on self-reported data, which are subject to recall bias and other measurement error – especially as related to physical activity and sleep. While data from the National Health and Examination Survey (NHANES) showed that 62 percent of Americans reported meeting the Physical Activity Guidelines for Americans, objective accelerometer data showed that less than 10 percent of Americans actually met the guidelines.1 Fitbit can help close that gap. A recent validation study that used the Fitabase platform was published in the International Journal of Cardiology and concluded that Fitbit trackers may be “an accurate, reliable, and efficient tool for physicians to track the adoption/maintenance of physical activity programs and support their patient’s attempt at an active lifestyle.”2

This is why investigators from Northwestern Medicine and the University of California San Francisco collaborated with Fitbit and Fitabase to conduct a joint study on minimally invasive spine surgeries for degenerative disease and deformity, such as correcting scoliosis. In an effort to better predict recovery over time for patients who undergo spine surgery, the researchers are monitoring physical activity using Fitbit trackers. During the four weeks before surgery and for six months afterward, Fitbit devices will capture personal data on a patient’s steps and activity levels. If successful, physicians may be able to use a physical activity monitoring approach to predict which patients are at risk of hospital readmission.

With Fitbit and Fitabase, UCSF Recruits and Engages Patients in a New Way

Many researchers struggle with study recruitment and retention, and Fitbit may be able to improve compliance rates among research participants. A study published in the American Journal of Preventive Medicine showed that, in a 16-week study of 51 women, all of the 25 participants who wore a Fitbit device reported liking it, and subjects wore the device on 95 percent of intervention days.3

Recognizing this opportunity, UCSF is collaborating with both Fitbit and Fitabase to overcome this challenge as it launches a study to test the impact of improved physical fitness on patients awaiting liver transplantation. Clinical observations have indicated that, for liver transplant candidates, regular physical activity has the potential to reduce the likelihood of patient hospitalization and may increase patients’ ability to withstand acute events while awaiting liver transplantation. All 200 participants awaiting transplant in the study, sponsored by the American Society of Transplantation, will be equipped with Fitbit Alta to help them stay physically active in an exercise program.

“My patients told me very clearly that, if they were going to wear a device, it had to be easy to wear, easy to use, and offer information they cared about in an accessible fashion. I have found that providing patients with health trackers can be a motivating factor – and sometimes the deciding factor – for deciding to participate or not,” said Jennifer Lai, MD, a general and transplant hepatologist at UCSF. “We are hoping that a name brand device will encourage people to join and engage in the study.”
Fitbit and Fitabase Enable “Just-In-Time” Adaptive Interventions (JITAI)

Traditionally, clinical research involves static protocols that draw conclusions for specific groups of people. Dr. Eric Hekler, assistant professor at Arizona State University and director of the Designing Health Lab, is looking to change this model through his research on “precision behavior change.” Hekler’s work, in collaboration with Dr. Daniel Rivera, also at Arizona State University, uses control system engineering strategies that incorporate Fitbit data through the Fitabase platform to generate personalized recommendations that adapt to participants over time to drive behavior change. Learnings from his studies may help move the precision medicine movement forward by creating health interventions that are adaptive and individualized, versus static and generalized.

“Supporting the research community is critical to our efforts as we continue to grow as a digital health company,” said Amy McDonough, vice president and general manager of Fitbit Group Health, which brings together the offerings Fitbit provides to corporate wellness partners, health management practitioners, and health researchers. “Fitbit has always been focused on empowering people to lead healthier, more active lives through data and insights. Fitabase has helped make our mission a reality with researchers by allowing them to better engage study participants, collect more objective data, and ultimately, develop new interventions that may positively influence patient care.”

About Fitbit, Inc. (NYSE:FIT)

Fitbit helps people lead healthier, more active lives by empowering them with data, inspiration and guidance to reach their goals. As the leader in the connected health and fitness category, Fitbit designs products and experiences that track everyday health and fitness. Fitbit’s diverse line of award-winning products includes Fitbit Surge™, Fitbit Blaze™, Fitbit Charge HR™, Alta™, Fitbit Charge™, Fitbit Flex®, Fitbit One® and Fitbit Zip® activity trackers, as well as the Aria® Wi-Fi Smart Scale. Fitbit products are carried in 50,000 retail stores and in 63 countries around the globe. Fitbit Group Health uses the power of the Fitbit activity trackers, software, and services to deliver innovative solutions for corporate wellness, weight management, insurance and clinical research.

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About Fitabase
Fitabase is a comprehensive data management platform designed to support innovative research projects using wearable and internet-connected devices. Fitabase has supported over 200 research projects around the world. To learn more about using Fitabase for your research needs visit www.fitabase.com.


2 http://www.internationaljournalofcardiology.com/article/S0167-5273(15)00276-4/abstract

3 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4705008/


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