



STUDY

Wearable Technology & Preventative Healthcare

TRENDS IN FITNESS TRACKING AMONG U.S. ADULTS

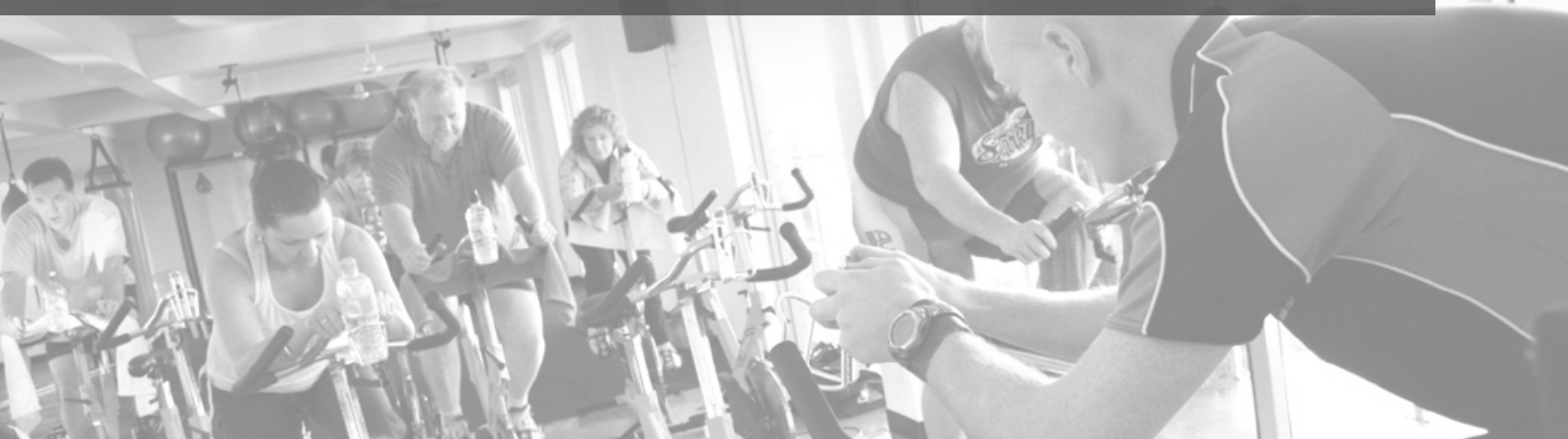


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About This Study

The original data contained in this report comes from a nationwide internet survey of U.S. adults, which was conducted from September 18-19, 2014. The survey was designed by TechnologyAdvice Research, and conducted by Google Consumer Insights. A total of 979 U.S. adults (age 18 and over) were surveyed on their general fitness and health tracking habits. A further 419 adults, who indicated they did not track their fitness using devices or apps, were then surveyed about the reasons for their decision, and their willingness to track their fitness in the future, given various incentives. Where necessary, results are weighted to be as representative as possible of the U.S. internet population.



Preface

Since wearable fitness devices¹, such as the FitBit and Nike+, began to appear on the market, the healthcare community has recognized their potential to provide unbiased, accurate insight into patient activity. Patient-generated data can be used to improve preventative care strategies, monitor patient outcomes, and analyze overall trends in patient populations.

However, there is little information on the number of adults who track their fitness and health using such devices, or the ways in which adults who do not track their fitness can be convinced to do so. Without such information, physicians and other stakeholders cannot effectively encourage the adoption of self-tracking.

In order to provide a better view of the fitness and health tracking market, and current obstacles to adoption, TechnologyAdvice Research designed a nationwide internet survey, which was conducted September 18-19, 2014. Over 900 U.S. adults were surveyed on their general fitness tracking habits, and 419 adults were surveyed on their specific reasons for not using tracking devices or apps.

Specifically, respondents were surveyed about their willingness to use a free tracker (provided by their physician or insurance company), reasons why they have not yet adopted such technology, and which incentives would make them more likely to track such data in the future.

¹Note: throughout this report we refer to activity monitors such as the FitBit, Nike FuelBand, and Jawbone UP as “fitness tracking devices,” “fitness trackers,” and “fitness devices.” These terms are used interchangeably. We also reference smartphone-based health and fitness apps, such as the popular “MapMyRun” or “MyFitnessPal”. We consider these devices and apps to be interchangeable in general purpose, as they collect largely similar data which is of interest to health professionals and could be used to improve preventive care strategies.

Executive Summary

“We were able to find significant opportunities for both healthcare and health insurance providers to incentivize fitness tracking”

25.1 percent of adults are now using either a fitness tracker or smartphone app to track their health, weight, or exercise. This gives healthcare providers the opportunity to collect accurate, previously-unobtainable patient data, for use in preventative care strategies and patient-outcome tracking. Despite this growth, approximately three quarters of Americans are not using a digital device to track their fitness or health. This leaves large room for improvement, given the importance of patient-engagement and patient-centered treatment in modern healthcare.

We were able to find significant opportunities for both healthcare and health insurance providers to incentivize fitness tracking.

There are currently few real barriers to adoption. A plurality of adults surveyed (43.7 percent) did not have specific concerns surrounding the use of fitness tracking devices or apps. The most common specific objection was a general lack of interest (27.2 percent), followed by concerns over cost (17.7). These objections can be overcome by increased marketing (raising awareness among consumers), providing incentives to use such devices (overcoming consumer indifference), and the development of cheaper devices (market expansion).

There are also many opportunities for the healthcare industry to incentivize fitness and health tracking. Approximately half of non-tracking adults would use a fitness tracking device provided to them by their physician or health insurance company, while over half would be more likely to track their health in exchange for discounted insurance premiums.

If healthcare providers help make fitness tracking devices (or apps) available to their patients, or work with health insurance providers to encourage device usage through discounted premiums, they should be able to significantly increase the number of self-tracking adults in the US.



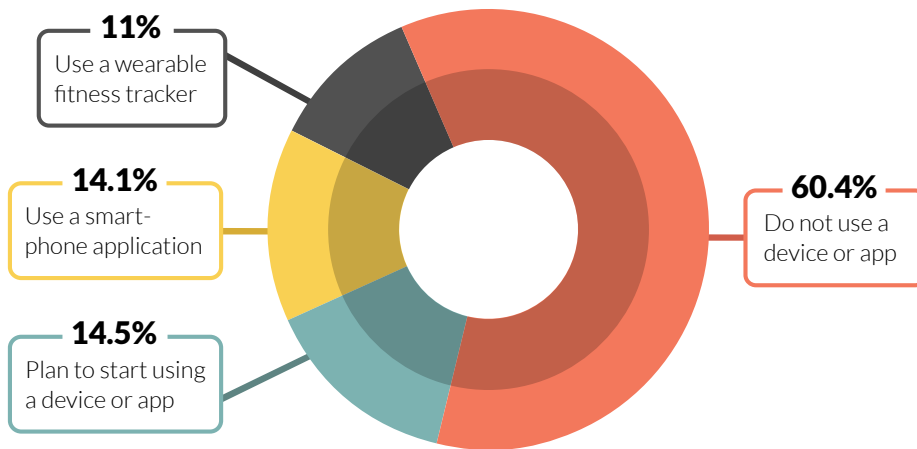
Key Survey Results

- » 74.9 percent of adults do not track their weight, diet, or exercise using a fitness tracking device or app
- » The most commonly cited reason for not tracking fitness or health is a general lack of interest (27.2 percent), followed by concerns over device cost (17.7 percent)
- » 43.7 percent respondents did not have a specific reason for not tracking their fitness
- » 57.1 percent of non-tracking adults said that the possibility of lower health insurance premiums would make them more likely to use a fitness tracking device.
- » Less than half of respondents (44.3 percent) said that better healthcare advice from their physician would be an incentive to use a fitness tracker.

Overall Rates of Fitness and Health Tracking Among U.S. Adults

During our initial screening, we sought to identify general trends in fitness tracking device usage. Weight, diet, and exercise were chosen as general metrics, as they make up the data that is most commonly logged by fitness trackers and smartphone apps. Such data has immense value to healthcare providers for preventative treatment.

Percentage of US Adults That Track Their Fitness or Health Using a Wearable Device or Smartphone App



A combined 74.9 percent of respondents reported that they do not currently track their fitness or health using a device or smartphone application. Of this group, 14.5 percent indicated that they plan to begin doing so, suggesting a general interest in the overall fitness tracking industry. This could be due to several recent, high-profile announcements in the wearable market, including the Apple Watch² and Ralph Lauren's line of sensor-embedded clothing³.

14.1 percent of respondents indicated that they track either their weight, diet, or exercise using a smartphone app. Another 11 percent said they do so using a wearable device. Together, just over one quarter of Americans reported using some type of digital device in order to track their health and fitness.

²<http://www.apple.com/watch/>

³<http://www.cio.com/article/2489094/wearable-technology/fashionable-wearables-ralph-lauren-unveils-smart-shirt-at-u-s-open.html>

Using data collected in 2012 by the Pew Research Center’s Internet & American Life Project as a benchmark, our results show that the market for fitness tracking devices is expanding. The Pew Center’s latest Tracking for Health study found that just 7 percent of adults tracked health indicators using an “app or other tool on their mobile phone or device.”⁴ The data for their study was collected during August and September 2012, roughly two years ago.

Combined with our findings, this indicates that the percentage of adults tracking such data through a smartphone has grown approximately 100 percent during the last two years - from 7 percent in late 2012, to 14.1 percent in late 2014. This is not necessarily surprising, given the rising trends in smartphone ownership⁵ and mobile device usage⁶ throughout the US. It also represents a relatively small portion of U.S. adults, given the wide variety (and price points) of devices currently on the market. The FitBit alone has been on the market for over seven years.

“the percentage of adults tracking such data through a smartphone has grown approximately 100 percent during the last two years”



⁴ <http://www.pewinternet.org/2013/01/28/tracking-for-health/>

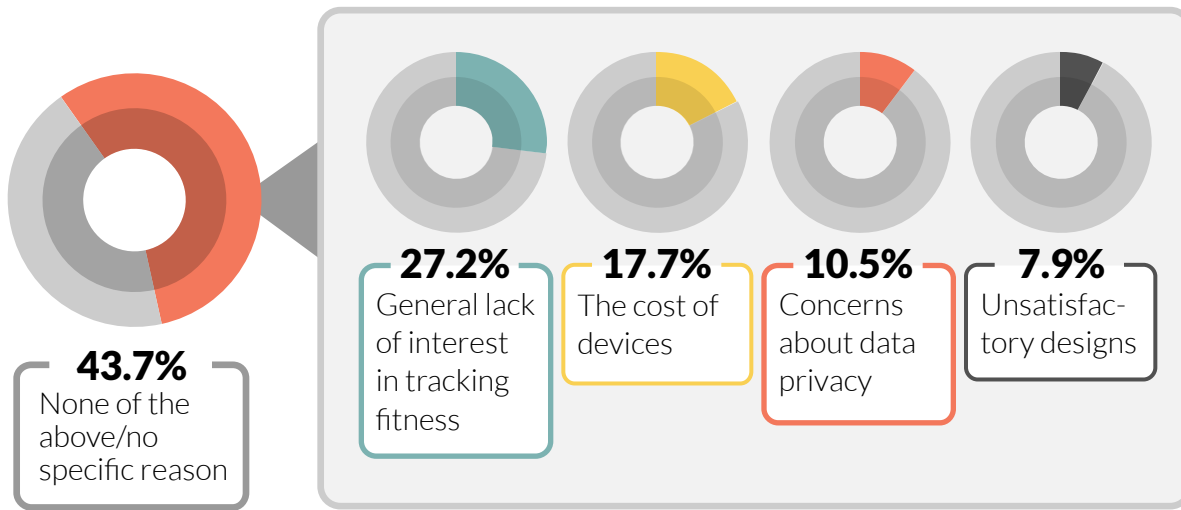
⁵ <http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/>

⁶ <http://www.emarketer.com/Article/Mobile-Continues-Steal-Share-of-US-Adults-Daily-Time-Spent-with-Media/1010782>

Barriers to Adoption

When evaluating the potential of fitness trackers, and assessing the reason for their lack of market penetration, it's helpful to know why potential users have not adopted the devices. This is especially true for healthcare providers, who may need to convince patients of the benefits of tracking. To help identify such barriers, we asked adults who do not use a fitness tracking device or app about the factors that contributed to their decision.

Contributing Reasons for Not Using a Fitness Tracking Device or App



27.2 percent of non-tracking adults cited a general lack of interest in using a fitness device. This was the most common, specific reason for lack of adoption. The second most cited reason was the cost of fitness devices (or apps), which was a concern for 17.7 percent of respondents.

Data privacy was cited by just 10.5 percent of people as a reason for not using such technology. There also seems to be minimal aesthetic or functional concern about current devices. Only 7.9 percent of respondents cited poor design as a reason for non-adoption.

43.7 percent of respondents (a plurality) said none of the listed reasons were contributing factors in their decision not to use fitness tracking

devices or apps. Among these respondents it's unclear if there are specific barriers that weren't listed, or if they simply have not yet considered using such technology.

A large portion of "none of the above" respondents may simply require a catalyst for adoption, and do not necessarily have specific barriers holding them back from purchasing and using fitness tracking technology. This is encouraging for the healthcare community, as these individuals (lacking a defined barrier to adoption) will likely be more willing to use such devices, given the proper incentives.



Opportunities to Spur Adoption and Possible Incentives

After establishing why most adults are not using fitness trackers or apps, we gauged their potential interest in a variety of incentives.

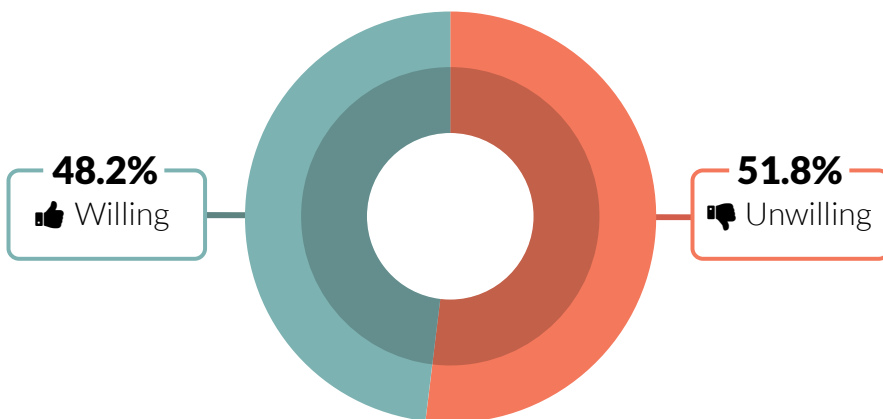
There are two primary stakeholders that have incentives to promote fitness tracking, aside from device manufacturers. One group consists of healthcare providers, who will gain access to accurate, patient-generated data. If this data is automatically synced through a patient portal, such as with Apple and Epic System's HealthKit partnership⁷, physicians will be able to better monitor at-risk patients from afar, and improve outcomes.

The other stakeholder is healthcare insurance companies. Faced with new regulations governing policies, insurance companies are turning towards fitness trackers as a way to create better, more accurate risk profiles on individuals⁸. Lowering premiums for patients who agree to wear fitness trackers could

provide extremely beneficial data about risk factors and potential expenditures. Many car insurance companies have started employing a similar tactic, offering driver's the possibility of reduced premiums if they agree to install a monitoring device in their car, which reports back information such as average speed, braking distance, and more⁹. While health insurance companies would likely not be able to raise premiums for inactive people, they would be able to give discounts only to those who met certain activity thresholds. This alone might be an adequate incentive for many people.

To determine the best strategy for encouraging fitness and health tracking, we asked respondents whether they would use a fitness tracking device if it was provided to them at no-cost by their physician.

Willingness to Use a Free, Physician-Provided Fitness Tracker



⁷ <http://www.healthdatamanagement.com/news/Epic-Ties-MyChart-App-to-Apple-HealthKit-48845-1.html>

⁸ <http://www.forbes.com/sites/parmyolson/2014/06/19/wearable-tech-health-insurance/>

⁹ http://www.nytimes.com/2012/11/25/business/seeking-cheaper-insurance-drivers-accept-monitoring-devices.html?_r=0

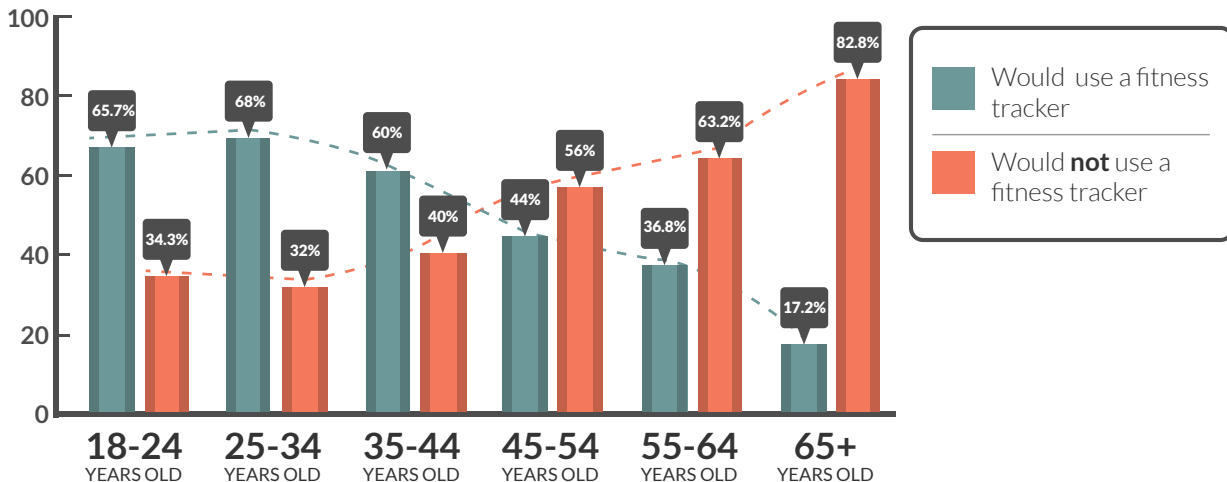
Although a slight majority (51.8 percent) of respondents said they would not use a fitness tracking device provided by their physician, 48.2 percent of non-tracking adults said they would use it. We consider this a positive outcome.

If healthcare providers were able to get approximately half of non-tracking adults to adopt and use fitness tracking devices (or apps), it would more than double the current user-base (from roughly 25 percent to 62 percent), and provide invaluable healthcare data.

The current price of a fitbit is \$60 to \$130, depending on the model¹⁰. Using this as a general approximation for fitness trackers, the current price is likely too high for physicians to give away to every patient. As the market continues to develop however, the price for single-use fitness tracking devices is likely to drop, making this a potentially realistic option.

Breaking down the responses by age, we can see that younger respondents would be much more likely to use a physician-provided device.

Willingness to Use a Free Fitness Tracker, Provided By a Physician; By Age



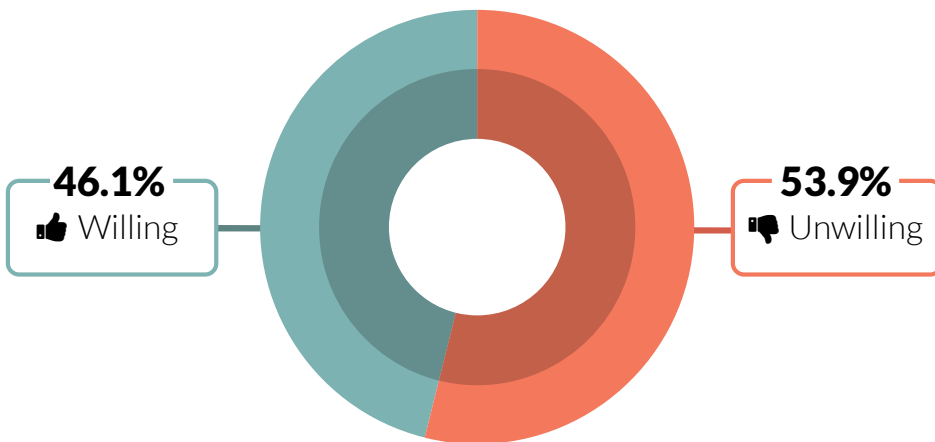
¹⁰ <http://www.fitbit.com/store>

65.7 percent of respondents aged 18-24 (and 68 percent of those aged 25-34) indicated they would use a fitness tracker provided by their physician, while just 17.2 percent of respondents aged 65 and older said the same. The overall trend line shows a near steady decline in positive responses as the respondent’s age increases. This could be due to a lack of familiarity with fitness tracking devices, a general disinterest in digital solutions, or a lack of understanding about the benefits of such devices.

This also indicates that the patients who would benefit the most from such devices (older patients), are the least receptive to using them. If physicians wish to encourage fitness tracking throughout their patient population, they will need to spend additional time highlighting the benefits of these devices to older patients.

We also asked respondents if they would use a free fitness tracking device if it was provided by their health insurance company, again at no-cost to them.

Willingness to Use a Free Fitness Tracker, Provided By a Health Insurance Company



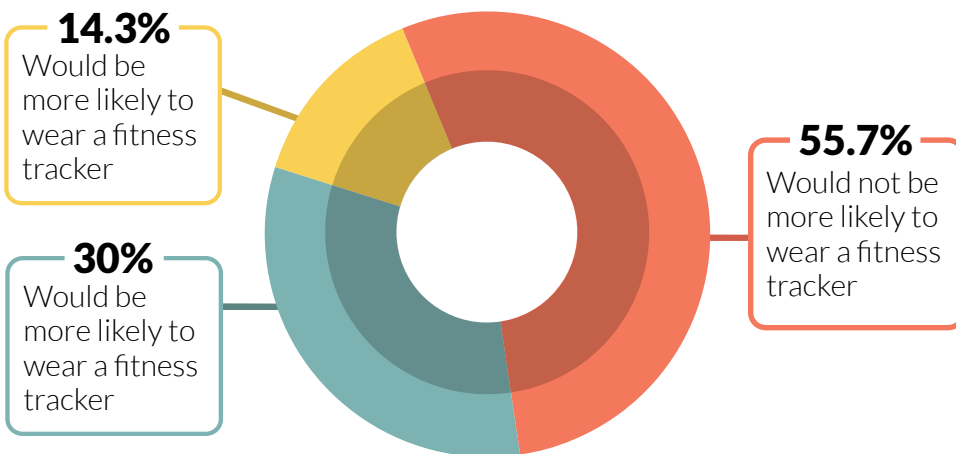
Respondents were approximately two percent less likely to say they would use a device provided by a health insurance company, compared to one provided by a physician. The generally positive, trustworthy image enjoyed by medical professionals likely explains this gap, as does the somewhat negative image of insurance companies among the general population.

Despite this, roughly half of adults again indicated they would use a free fitness tracker. This is an extremely large percentage, given the wide variety of people who currently do not track their fitness or health with such a device. When broken down by age, we again see a divide between answers from younger and older respondents. Younger respondents were more likely to indicate they would use such a device, while older respondents showed greater hesitation.

Providing free devices is not the only incentive that healthcare providers or insurance companies can leverage to encourage people to use fitness trackers. Physicians can market better, more personalized healthcare recommendations, while health insurance companies can offer the possibility of lower premiums (as car insurance companies have already done).

To measure the effectiveness of these more direct incentives, we asked respondents whether they would be more likely to wear a fitness tracking device if it allowed their physician to offer them better healthcare advice.

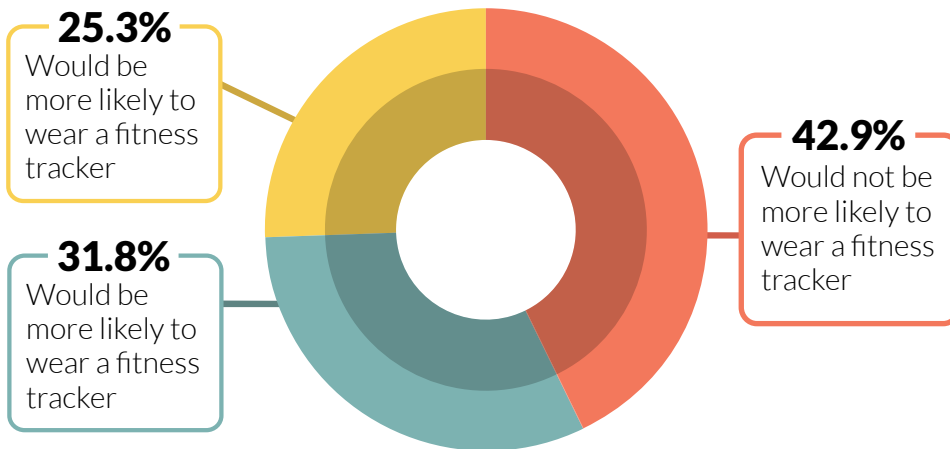
Degree to Which Better Health Care Advice Incentivizes Wearing a Fitness Tracker



For the majority of adults, receiving better healthcare advice is not an adequate incentive to use a fitness tracker. Just 14.3 percent of adults said that such an incentive would make them much more likely to use a device. This could be due to a lack of understanding about the benefits of such devices, given the short time they've been on the market.

While better healthcare recommendations are not a compelling incentive for most adults, lower health insurance premiums are far more enticing.

Degree to Which Lower Health Insurance Premiums Incentivize Wearing a Fitness Tracker



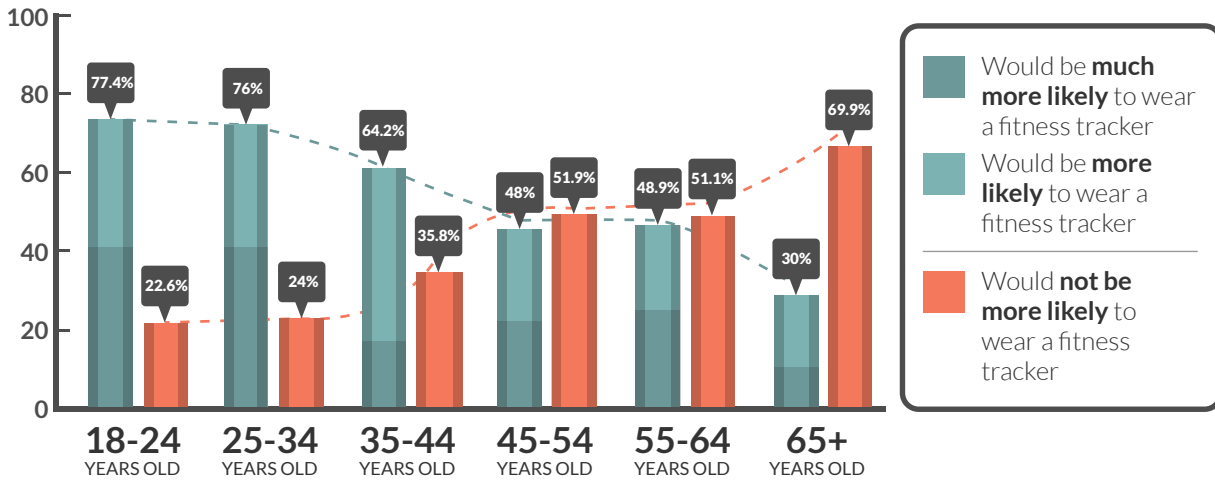
57.1 percent of non-tracking adults said the possibility of lower health insurance premiums would make them more likely (or much more likely) to use a fitness tracking device. That compares to just 44.3 percent of adults who said the same when offered better healthcare recommendations.

This result reinforces the power of monetary incentives to sway behavior, even for personal, health related goals such as fitness and exercise. Only 46.1 percent of respondents initially said they would use a free fitness tracker provided by their health insurance company. When presented with monetary incentives from that same company, the rate of positive responses is 11 percent higher.

Breaking down the results by age offers some additional insight into these results.

“This result reinforces the power of monetary incentives to sway behavior, even for personal, health related goals...”

Health Insurance Premiums as Fitness Tracking Incentive by Age



Young to middle-age adults likely possess a greater understanding of wearable technology, and have less overall income, making potential insurance discounts more appealing. Given that younger Americans are now required to purchase health insurance plans - many for the first time - such incentives may be particularly effective. Older adults, past the age of 45, may have less financial need for these discounts and are likely to be less familiar with wearable devices.

This data supports the idea that health insurance customers will embrace self-monitoring for their bodies in the same way that auto insurance customers have so far embraced self-monitoring for their cars. It also suggests that health insurance providers are in a better position to encourage the adoption of health and fitness tracking than healthcare providers.





Summary

Given the results of our study, we believe there exists significant potential for the healthcare community to incentivize the use of wearable fitness trackers and apps among currently non-tracking adults. Working to provide patients with such devices (or offer them at a discounted rate) could boost current US tracking rates by over 100 percent. If such a program is financially unsustainable, offering patients a downloadable smartphone-based fitness app through a patient portal could also encourage self-tracking and increased fitness.

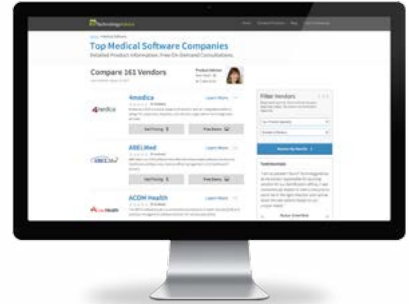
The greatest opportunity for increasing adoption of fitness and health tracking lies with insurance companies. Over 57 percent of adults indicated that the possibility of lower premiums would make them more likely to use a fitness tracking device. Health insurance companies have greater means to subsidize the cost of such devices, and stand to benefit from the collected data in the form of better risk profiles. If healthcare providers worked in tandem with health insurance companies, both stakeholders could benefit from the collected population health data.

Age-bias towards wearable fitness trackers and smartphone apps will remain an obstacle to widespread adoption of fitness tracking for the foreseeable future. Respondents under 45 were significantly more likely to say that they would use fitness devices provided by their physician and health insurance companies, and found lower premiums to be a much more effective incentive. If providers wish to encourage adoption among older, generally higher-risk patients, they will need to find alternate ways to encourage participation, or better explain the benefits of such technology.

As the wearable device market continues to grow, we see a large opportunity to increase the use of fitness tracking devices among US adults. A coordinated effort between healthcare providers and health insurance companies would be the most effective strategy, but there also exist significant opportunities for both parties to encourage adoption themselves.

Expert Healthcare Recommendations

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Sources

Apple. (2014). Apple Watch: Learn About Apple Watch. <<http://www.apple.com/watch/>>

Fitbit. (2014). Online store. <<https://www.fitbit.com/store>>

Fox, Susannah and Duggen, Maeve. “Tracking for Health,” Pew Research Internet Project, January 28, 2013. <<http://www.pewinternet.org/2013/01/28/tracking-for-health/>>

“Mobile Continues to Steal Share of US Adults’ Daily Time Spent with Media,” Emarketer, April 22, 2014. <<http://www.emarketer.com/Article/Mobile-Continues-Steal-Share-of-US-Adults-Daily-Time-Spent-with-Media/1010782>>

“Mobile Technology Fact Sheet,” Pew Research Internet Project, <<http://www.pewinternet.org/fact-sheets/mobile-technology-fact-sheet/>>, accessed September 29, 2014.

Olson, Parmy. “Wearable Tech Is Plugging Into Health Insurance,” Forbes, June 19, 2014. <<http://www.forbes.com/sites/parmyolson/2014/06/19/wearable-tech-health-insurance/>>

Sacco, Al. “Fashionable Wearables: Ralph Lauren Unveils Smart Shirt at U.S. Open.” CIO, August 26, 2014. <<http://www.cio.com/article/2489094/wearable-technology/fashionable-wearables-ralph-lauren-unveils-smart-shirt-at-u-s-open.html>>

Slabodkin, Greg. “Epic Ties MyChart App to Apple Healthkit,” Health Data Management, September 22, 2014. <<http://www.healthdatamanagement.com/news/Epic-Ties-MyChart-App-to-Apple-HealthKit-48845-1.html>>

Stross, Randall. “So You’re a Good Driver? Let’s Go to the Monitor,” The New York Times, November 24, 2012. <http://www.nytimes.com/2012/11/25/business/seeking-cheaper-insurance-drivers-accept-monitoring-devices.html?_r=0>

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