



## **Wearable Health Technology Not Sufficient For Sustained Behaviour Changes**



Wearable technology can facilitate healthy changes in behaviour, encouraging optimal diet, sleep and activity patterns, but devices must be coupled with motivation in order to derive lasting changes. The simple recording of data which contributes to a so-called “quantified self” may be educational, but it is not enough to drive the adoption of healthy habits in the long term. If external drivers like wearable devices can prompt internal changes in attitudes, then sustained positive changes in population health are more likely.

### **Investing in Healthy Behaviour**

By 2018, annual sales of wearable health devices are expected to increase to \$50 billion in the United States, according to an article published online in *JAMA*. Technology giants like Apple, Google and Samsung have established themselves in the marketplace, and the growing number and variety of devices will warrant the validation of their usefulness, especially if new funding mechanisms are to be put in place to offset consumer costs.

Despite their growing popularity, less than two percent of the population has used a wearable health device. One reason for this is financial: devices can cost hundreds of dollars, limiting their audience to wealthier individuals. Among users of wearable technology devices, 29 percent reported earning an annual salary of more than \$100,000.

### **Targeting the Wrong Audience?**

The problem with limited access to wearable technology devices is not only that fewer people can afford to buy them, but that the people who do purchase them are likely to be those who are already practicing healthy behaviours or are less susceptible to chronic medical problems. According to a survey of wearable device users, 48 percent were under the age of 35.

Meanwhile, it is precisely those individuals who stand to benefit the most from such devices who either cannot afford them or who are older and uninformed of how they work. Individuals who need regular blood pressure measurements or who take medications are not always aware that there are wearable devices which can facilitate adherence to healthy behaviours, such as a smart watch which sends alerts when doses are missed. Or, they may not own the supplemental tools such as computers and smart phones which are a vital part of the feedback loop.

### **Solutions for Sustainable Change**

In order to promote lasting change in health behaviours, external motivations such as the tracking of activity patterns should be replaced, or at least supplemented, by internal ones. In other words, the changes which will be valuable in the long run will have become habits through effective user engagement strategies. Peer support, team-based reward systems such as those established by workplace wellness programs, and regular feedback from the devices can encourage individuals to eat well, get regular exercise and stay on top of medication routines.

Benefits are not guaranteed once a device is purchased, so the initially-motivated user should remember to wear it regularly and be sure it is charged. As more devices are tested and verified for efficiency, it is likely that they will become more user-friendly and familiar to more people. The most effective devices might one day be paid for by employers or insurers, with an eye toward downstream healthcare savings. The potential benefits of such sustained healthy changes facilitated by wearable technology devices will benefit not only individuals but the population at large.

Source: [JAMA](#)

Image Credit: Google Images

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