

# Obamacare Meets Wearable Technology

Electronics companies think the Affordable Care Act will push us to embrace technology to track our health and lifestyles.

Natasha Dow Schüll



The Digital Health Zone at the CES 2014 Expo Hall (photo by the author).

Exactly a week after the Affordable Care Act’s mandate for universal coverage went into effect last month, I found myself standing in the back of a crowded conference room in the Las Vegas Convention Center. On the floor below, the annual Consumer Electronics Show was in full swing. Over the next two days, 750 of the roughly 150,000 attendees stream in and out of the room to hear the proceedings of the Digital Health Summit, a carefully curated lineup of keynotes, panels, and super-sessions on how the tech sector might “capitalize on the new opportunities” brought by health reform.

“Take a deep dive into the giant umbrella that is Digital Health,” invited the press release, explaining that the term encompassed “telehealth systems, diagnostics, mobile health applications and devices, sensor-based technologies, big data and predictive analytics, chronic care

management, genomics, wearables, and wellness and fitness devices.”

Throughout the proceedings, speakers described digital health technologies and the ACA as a “dynamic duo”, to take the title of one session. The new legislation would incentivize or compel insurers, healthcare providers, and consumers to cut costs, driving them into the arms of the Digital Health industry.

Attendees learned how big data analytics are transforming epidemiology and public health, how advances in electronic health records are streamlining the practice of medicine, and how continuous monitoring devices are shifting the management of chronic conditions like diabetes and heart disease away from hospitals and doctors and into the hands and homes of patients.

However, most of the discussion at the Digital Health Summit focused on the well, not the sick. As speakers frequently reminded attendees, half of the monstrous \$2.7 trillion expended annually in the US on healthcare is spent on conditions linked to everyday habits – and choices – such as overeating, under-exercising, and smoking. Individual self-management was held up as the ultimate key to controlling the physical – and financial – costs of these “lifestyle diseases.”

“Increasingly, we as consumers are asked to take on a role in our healthcare,” said Paul Slavin, COO for Everyday Health, which provides online tools to help people manage their health, during a panel called “The Empowered Consumer.” During another session, physician and author [Reed Tuckson](#) said that he advises patients to “Be the CEO of your own health.”

Downstairs on the expo floor, tech companies showed off a dizzying array of devices to help people do just this. In the lower back wing of the convention center’s South Hall, behind what felt like acres of ultra-HD, curved television screens and portable speakers, 36,000 square feet were dedicated to 135 exhibitors in the “Fitness Tech” and the “Digital Health” zones.

In those zones I found smart scales and water bottles, digital pedometers, electronic skin patches, heart-rate detecting earphones, and an impressive collection of wristbands packed with sensors to log a person’s steps, heart rate, sleep phases, and more. By way of demonstration gymnasts performed feats of physical prowess, showgirls danced, and athletically clad young women speed-walked on treadmills while wearing the bands, their data on view for spectators to ogle.

Most of the gadgets came paired with smartphone apps designed to extract meaningful, actionable information from an individual’s raw data, taking the guesswork out of everyday living. The pitch was that a person needing guidance on daily lifestyle decisions such as what to eat, when to sleep, and how much to exercise could simply consult her data dashboard.

One of the most popular booths on the expo floor offered a brain-sensing headband called the [Muse](#), a mobile EEG promising to reduce stress levels by training users to control their brainwaves. Behind me in the long queue to the demo tent was a representative from Xerox who was interested in incorporating the headbands into a corporate care program.

Back upstairs at the Summit, wearable-tech pundits discussed the potential role of health tracking

devices in our lives. Tens of millions of Americans check their smartphones more than 150 times a day, noted John Kvedar, director of the [Center for Connected Health](#) in Boston, speculating that the right use of technology could make health as addictive as other aspects of our digital lives, such as Facebook or email. During a session called “Track-a-holism: A Disorder Worth Having”, some attendees boasted that they were already hooked. One presenter explained his energetic pacing by pointing at the rubbery black armband stealthily recording his steps.

If industry forecasts are accurate, we should expect that by 2015 more than 500 million people will use mobile health applications. “Dashboards 24-7,” said Michael Yang of Comcast Ventures when pressed to give his prediction for digital health. He and others at the Summit envision a future in which Americans are always just one click away from a real-time digital dashboard tracking the impact of their lifestyle choices on their health. Although this vision wasn’t included in the Affordable Care Act, it will drive how the health and technology industries respond to the new legislation. “Health is not a side event, discrete and separate from everyday life,” said Tom Paul, Chief Consumer Officer for United Healthcare Group. “Now it can be a part of day to day living, everyday life.”

[Natasha Dow Schüll](#) is an associate professor in MIT’s program in Science, Technology, and Society.