

Self-tracking has exited its infancy. Now, the questions become: Can federal data sets and healthcare outcomes grants get data collectors to play nice and scale into the larger health system? **Larry Dobrow** reports

t the Health Datapalooza IV klatch in June, few topics piqued as much curiosity as self-tracking. For the initiated, self-tracking—the cornerstone of the Quantified Self movement, in which consumers attempt to learn more about their health by meticulously compiling diet, exercise and other personal data—isn't exactly new. Indeed, it's roots are in the first smartphone-era wave of personal biometric devices and the apps that helped make sense of the collected information. This takes us all the way back to, like, 2009.

But self-tracking newbies at the conference seemed to be taken aback by some of the data (the research kind, not the personal kind) that was shared. Pew Internet & American Life Project's associate director, digital strategy, Susannah Fox, presented the results of what was billed as the first national study on self-tracking. Some highlights: 60% of US adults said they track their diet, exercise routine or weight; 33% track health indicators like blood pressure or blood sugar; and 21% use technology to track their health data.

What this means, in a nutshell, is that self-tracking has exited its infancy. Not only are Quantified Self devotees pushing the boundaries for collection of health and wellness data, but they're simultaneously making advances in the analysis of that data and using it to make better health decisions. The questions, then, become slightly more vexing: How do you get hundreds of vendors/data collectors to play nice with one another (read: share their data in ways that



Basis Science's watchlike activity tracker uses sensors to monitor a number of vital signs 24/7 (left); Opposite: RunKeeper, which lets users track and moderate their physical activity and caloric intake ultimately benefit self-trackers)? And, in a bigger-picture sense, how can self-tracking be integrated into the formal healthcare system to kick-start innovation in healthcare provisioning and cost?

These are questions that occupy Bill Day, RunKeeper's platform evangelist and product manager, and Marco Della Torre, Basis Science's VP, product science. RunKeeper and Basis Science straddle the worlds of data compilation and analysis/interpretation like few other entities in the health and wellness ecosystem. RunKeeper has long let users monitor and moderate their physical activity—and after an integration deal with MyFitnessPal inked in late June, can help users track their caloric intake. Basis Science, on the other hand, is the maker of the most durable of the all-encompassing activity trackers, a watch-like device with sensors that capture skin temperature, perspiration, motion and heart-rate patterns on a 24/7 basis.

For Day and Della Torre, it's not merely about an app or a device. Rather, it's about working with like-minded technologists and, ultimately, the healthcare system's major-league players. (RunKeeper has already made inroads with that last group, partnering with Aetna's CarePass, Qualcomm's 2Net, RedBrick Health and the Robert Wood Johnson foundation.) And it's also about proselytizing, about convincing nonbelievers of the benefits of self-tracking and would-be partners about the merits of an open approach to health data.

To that end, they have identified a host of emerging best practices that facilitate consumer access to self-tracked data. Day is quick to seize on simplicity as perhaps the cardinal virtue. "People want to be healthy, but they've felt for years that it wasn't simple to keep track of everything that goes into it," he explains. That's why Run-

Keeper and other health/tech players are striving to make self-tracking as invisible a process as possible. "With every button to push and every input to make, you lose a number of users. The more automatic everything is, the better," Day says.

If tracking is almost automatic, it adds breathing room for Day's second-best practice: providing guidance and motivation. The idea is to present "the right nudge at the right moment"—say, with a diet tip or a specific workout. "Users want that little push. The question is how hard it should be and when it should be delivered," he explains, pointing to a relatively new RunKeeper feature that suggests activities based on the user's workout history. "It'll say, 'Have you thought about running a 5K?' Sometimes it will be a little stretch, but the goal is to nudge [users] along the path to healthy behaviors."

Della Torre agrees in theory, but adds a slight caveat: That entities such as Basis must give users room to proceed at their own pace. "What's so important to self-tracking is that the product can evolve with the individual," he explains. With Basis' flagship

A clever use of health data

Sanofi's 2013 Data Design Diabetes Innovation Challenge posed a question that any number of companies have been trying to answer since the health data revolution kicked into high gear: How open data sets might best be used to help everyone in the diabetes-treatment food chain make the right decisions with the right information at the right time.

Following a spirited judging session, the award went to Connect & Coach, which created a clinical/consumer app designed to facilitate interaction between registered dietitians, certified diabetes educators and their patients/clients in a supermarket, pharmacy or similar retail setting.

To hear judge (and health economist who heads strategic consultancy THINK-Health) Jane Sarasohn-Kahn tell it, the Connect & Coach app was chosen, at least in part, because it was less a revolutionary idea than one that uses data in a clever, practical manner.

"'Revolutionary' ideas might be sexy, but in healthcare, behavior change is hard," she explains. "Connect & Coach connects people to sound information in a setting where they are activated to make shopping decisions...This can drive an initial decision based on evidence-based information that then, over time, can bolster behavior change to benefit the individual, her family and, in aggregate, public health."

activity tracker, users choose a goal (be more active, get more sleep, etc.) and immediately get to work on it. "Once you have some wins in that area, that's when you can extend a little bit."

As for what's next, the industry seems to be taking a wait-and-see approach toward the possibility that federal data sets and healthcare outcomes grants could fuel innovation in the self-tracking

space. The problem isn't with the government or Big

Healthcare per se (Day singles out Health and Human Services and its chief technology officer Bryan Sivak as progressive, noting that "deep down, they get that consumer-generated data has a role and that self-tracking presents a great opportunity"). The issue is the volume of moving parts. It's hard enough getting RunKeeper or Basis data beamed directly into users' formal health records. Now we're going to inject the government and healthcare monoliths into the mix?

Della Torre acknowledges that he doesn't "expect a huge leap overnight." Day, for his part, sees good intentions but little in the way of results just yet. "There will be more pressure to connect with more traditional systems and healthcare records, but I'm still least certain about the government side. I do think the current administration wants to make progress." So when will that progress, or at least more in the way of certainty, arrive? Day offers a half-serious prediction: "In two years' time, we'll have solved a lot of these problems." He pauses, then adds with a laugh, "But we'll have found new ones to take their place."



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