It's time to rethink the benchmarks of health behavior

Measuring health behavior is far more difficult than advertised. It's also a critical hurdle to clear before health programs can succeed.

Benefits managers spent nearly \$50 billion in 2019 on employee wellness programs, which are largely seen as a brake on skyrocketing healthcare costs. While the programs have shown some success in getting employees to exercise more and watch their weight, recent studies have found that many have no significant impact on important measures of success, such as lower cholesterol, reduced healthcare spending, less absenteeism or improved job performance.

Experts say the problem is that too many of these programs — designed to help employees lose weight or manage chronic health conditions like diabetes — rely on



the wrong benchmarks for defining and tracking success. Many focus on surface metrics, like regular weigh-ins or calorie counts, that by themselves don't signal meaningful behavior change. They also rely frequently on incentives, which tend to be fleeting and ineffective long-term.

Better measures of a successful program, experts say, are new behaviors that employees learn and repeat on their own, in between visits with a coach or caregiver. Health behavior research shows that those habits — paired with personalized goals and action plans to achieve those goals — are more likely to lead to desired outcomes.

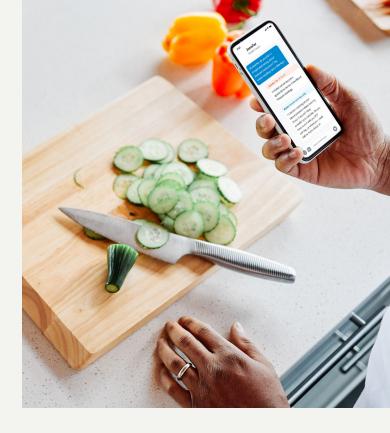
"When we think about clinical outcomes, there are clear targets or benchmarks to look for in terms of what science says," says Stephanie Fitzpatrick, senior investigator at Kaiser Permanente's Center for Health Research.

Here's a look at three areas — engagement, tracking and outcomes — where existing measures of health behavior fall short, and how evidence-based benchmarks defined by behavior research can lead to greater success.

Engagement

Focus on quality, not quantity

Benefits managers commonly look at engagement metrics as leading indicators of a program's effectiveness the number of times per day an employee clicks into a fitness app, or how much diet or exercise content they've consumed. The problem, healthcare professionals say, is that



engagement data doesn't signal whether people are adopting new behaviors that lead to meaningful changes.



"There's a tendency in digital health programs to try to generate more engagement under the hypothesis that more engagement will inevitably lead to better health outcomes," says Ryan Quan, director of data science at digital care provider Omada Health. "But our data shows that engagement quantity isn't the key to outcomes; instead, it's a combination of the consistency and quality of that engagement that matter at least as much."

Digital wellness programs don't work very well without the help of human coaches and peer-group communities. A far better predictor of success is how consistently employees engage with the coach or a community of other participants.

For example, members who begin working with a wellness coach in the first week after starting a program are 24% more likely to meet their health goals than those who delay their first interaction, according to research from Omada. Similarly, those who regularly messaged their coaches were more than twice as likely to meet their health goals.

Meanwhile, those who engage primarily with an app, but not a human — even if they do so frequently — are more likely to fade out of the program.

employees clicked on a lesson or logged a meal, coaches can tell whether they have put the lesson into practice or changed a diet.

Tracking

To create change, combine data insights with actionable steps

Digital wellness apps make it possible to track all sorts of health information, from heart rates, calories burned and time spent exercising to daily weigh-ins and meal-logging. But the data points don't always give the whole picture.

For example, participants in a diabetes management program can get continual readings of their glucose levels. But simply tracking that data doesn't help the participant change



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"People do better with the feeling that someone is watching them, monitoring them and there to help them figure out what they're going to do, how they're going to do it and to problem-solve and plan around those factors," Fitzpatrick says.

By working with coaches, it's possible to get a better sense of useful engagement than is possible with apps alone. Instead of simply counting when behaviors — such as cutting out an afternoon snack — or enable the program manager to track whether progress is being made.

Working with a coach or a peer group can help turn this information into action, Quan says. Coaches can help set goals and develop plans for meeting those goals; they can also identify other issues, such as stress or mental health concerns, which can compound chronic



health problems. Tracking with those types of approaches is a far better indicator of overall success, Quan adds.

Just as important is the "in-between data" — what a person does at home, before and after coach or caregiver visits, to make health changes. This can mean tracking something as simple as changes to a diet, such as replacing pastry desserts with fruit, or using the stairs at work instead of the elevator.

"These approximations towards behavior are what show people are beginning to move the needle on behavior change," Quan says.

Outcomes

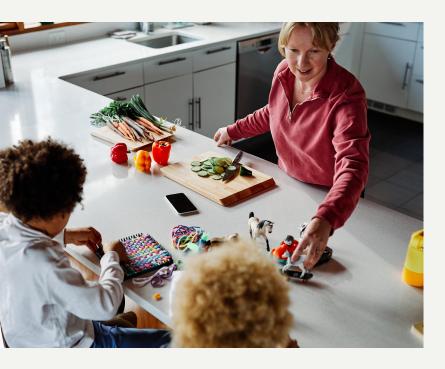
Long-term health gains matter more than short-term cost savings

Traditional measures of health program outcomes, like first-year ROI and healthcare savings, can be useful, but

they don't always describe or capture meaningful health improvements. They can also be misleading.

One study in 2013 of a wellness program at a Missouri hospital system found that while it reduced in-patient costs, other expenses rose, and the employer saw no net savings. At the same time, hospitalizations for conditions targeted by the program were 41% lower than for members in a comparable group — a significant benefit for those who avoided a hospital stay.

Even when a program's metrics show success, they can obscure the underlying reasons for the improvement. Another study, published in 2016, examined the effects of a digitally based "intensive behavioral counseling" program run by Omada and modeled on a National Diabetes Prevention program. The goal was to help a group of seniors lose weight and reduce the risk of diabetes and other chronic health problems.



Participants in the study reduced their weight on average by nearly 7% in 26 weeks. Researchers estimated that this would translate to medical-spending savings of as much as \$1,770 per person in three years and \$14,200 in 10 years — or \$12,840 after factoring in program costs.

The program continued to yield benefits even though the amount of weight loss fell after the first year, suggesting that weight loss wasn't the only factor contributing to the cost savings, says Quan. Other changes in behavior, such

as increased exercise or eating healthier diets, also played a role. "That might have a stronger correlation with ROI than weight loss alone," says Quan.

These programs also can take time to deliver the desired outcomes. When the Rand Corp. evaluated seven years of data from PepsiCo's employee wellness program, they found that participants in a chronic disease management component saved the company \$136 per person a month, or \$1,632 annually, driven by a 29% drop in hospital admissions. Those who added a lifestyle management program saved the company \$160 per month with a 66% drop in hospital admissions, but the costs of the lifestyle program exceeded the savings. And overall, the costs of the full wellness program only began to fall after the second year.

The takeaway for health plan managers: Patience pays. "When we look at the trajectory of long-standing behavior change, we see that success builds over time," says Quan. "The goal of a successful program should be optimizing for the long term.



Omada Health combines the latest clinical treatment guidelines with breakthrough behavior science to make it possible for people with chronic conditions to achieve long term improvements in their health.