

A 2018 HIMSS Media report suggests that combining wearables with health coaching may overcome some of the barriers facing PGHD integration within care delivery.

hen consumer wearables first came to market, many hospitals and health systems resisted the technology and questioned the value of patient-generated health data (PGHD). Their concerns were legitimate. Facing a new ecosystem of technology, providers lacked confidence in the new inputs: Would wearables bring quality data? Would the influx of information disrupt workflows? How exactly would providers be compensated for their time in relation to the data? How would they apply it to their practice in a sustainable, meaningful way?

Much has changed in the last decade. Some myths around PGHD have been debunked while healthy skepticism and improved technology continue to push the conversation forward. As a result, according to one recent survey, hospitals and health systems are no longer questioning the value – or desire – for PGHD. In fact, they are demanding it.

In *The Role of Wearables and PGHD in the Care Delivery Continuum*, a recent HIMSS Media report sponsored by Fitbit, 79 percent of respondents¹ agreed that they would like to have more data about patients in between encounters and 72 percent agreed that they need PGHD to make good decisions on chronic disease management.

79%

said they want more data

72%

agreed they need PGHD to make good decisions





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"It's encouraging news," said John Sharpe, Senior Manager of the Personal Connected Health Alliance at HIMSS. "We are learning to trust the data. Furthermore, we're learning how to make actual wearables and activity monitors more effective tools in both preventing disease and managing chronic disease."

Indeed, the 2018 HIMSS Media report found that 90 percent of those incorporating wearable devices in their workflow see it as a technology strategy that can positively impact chronic disease management.

Data drives decisions

When it comes to chronic diseases like type 2 diabetes, obesity, hypertension and smoking addiction, clinician-based interventions often require significant behavior and lifestyle changes from individuals. These habits – such as diet, exercise and medication adherence – are at the lowest rate of clinical control. As such, according to John Moore, MD, Medical Director at Fitbit, "these conditions lend themselves well to the value of wearable devices and PGHD because individuals need more constant guidance and self-reflection to succeed than can be provided with sporadic office visits."

According to the survey respondents, the top three reasons for incorporating wearables are more timely interventions, immediate feedback, and improved patient accountability and empowerment.

"If feedback only comes every few months during office visits, the possibility of reaching goals dramatically diminishes," said Moore. "Only about 30 percent of individuals diagnosed with hypertension reach goal blood pressure by the end of a year under the care of a provider, for example. The timeliness of interventions is closely tied to the importance of immediate feedback because if an individual gets feedback about blood pressure or blood glucose, for example, but no timely change is made in clinical care, that saps motivation and leads to failed behavior change."

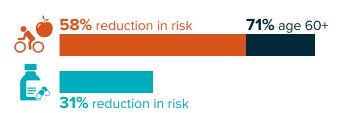
Beyond chronic-care management

This points to a critical change in the patient experience over the last several years. "In today's information age, where knowledge has been democratized, people do not want to be told what to do. They want agency." said Moore. The relevancy of wearables is not lost on either patient or provider, these tools can empower that individual to become a core member of the care team.

Put another way, "it's the Hawthorne effect," said Rob Havasy, Senior Director, Health Information Systems at HIMSS. "When patients believe their doctor or their nurse is looking at their data, they don't eat the cake, they take a walk rather than sit in front of the TV – they change their behaviors because they think someone is watching."

In fact, new research suggest that providers are going beyond chronic disease management, and are now integrating wearables and PGHD for disease prevention.

Sharpe, for instance, cited a 2014 study on a pre-diabetes intervention program with the YMCA. The study looked at the effects of health-coaching and PGHD in relation to exercise, tracking and managing food intake. It found that those paired with a tracking coach had a 58 percent reduction in their risk compared to those treated with medication at 31 percent. Moreover, if participants were 60 or older at the beginning of the study, their reduction was 71 percent.





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Sharpe is excited for more community health opportunities like this to become available, because "we can treat a population more directly now so they don't go into a category with all the potential risks and complications that would come in future years."

Overcoming barriers with health coaching

The HIMSS Media report also highlighted the hurdles providers face in deploying wearables and using patient-generated health data. Participants reported that cost to payers, providers and patients; integrating data into the patient record; and data overload on providers were the top barriers to wider integration of wearables. So, while participants may see the value of PGHD, questions of feasibility and integration remain.

The good news is that new solutions, such as progress in interoperability and the aid of health coaches, can accelerate the integration and deployment of PGHD from wearables. During an August summit at the White House, tech giants, such as Google, IBM and Microsoft, pledged to remove barriers to health data exchange. This marks a significant crossroads in healthcare, where vendors and providers are working together to dismantle the high obstacles to interoperability.

Furthermore, the HIMSS report found that half of hospitals and health systems in the survey reported using or planning to digitally connect patients with a health coach – a trend mid- to large-sized organizations are three times as likely to embrace as small healthcare systems.

Health coaches can be seen as an extension of care; practitioners who facilitate patient treatment and education on behalf of physicians. This is especially true today, when providers are pressed for time. According to the report, only about one in four respondents felt that healthcare professionals have sufficient time to visit with patients to address all their medical needs.

"Health coaches aren't calling into question the role of other clinicians, they are simply filling the gaps between visits with cost-effective and needs-appropriate support," said Moore. "We need to rethink workflows and roles in this information age so that providers can free up time to practice at the top of their licenses with more asynchronous work."

Wearables + health coaching: Improving patient motivation and self-care

Havasy, however, is skeptical of any approach that fails to address the one thing coaching can do over data alone: Personalize information and align it with the goals of the patient, as well as the goals of the provider.

"Driving long-term behavior change is difficult, but health coaches as individuals can do what machines can't yet do. They can intuitively understand what matters to a particular individual and build a coaching program around it," he said. While a provider may want a healthy patient, that patient may only want to get out to a Red Sox's game come September. Recalling his six years with Partners Connected Health establishing a remote patient monitoring platform, Havasy noted, "personalization works and coaching has to be given in context."

Engagement is hard but crucial. "Patient engagement is more important than any other factor in wellness and chronic disease management," Moore said. "Unlike in acute illness where appropriate and timely diagnosis and proper therapy is key, health-related behaviors such as medication adherence, diet improvement, exercise, etc. are the most important factors in optimizing outcomes."

The combination of wearables and health coaching can help to increase patient motivation and engagement with their care. As the healthcare landscape continues to change, the old paradigm



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of the passive, receiving patient is also changing. "When individuals are empowered to be a collaborative partner in their healthcare, they thrive," said Moore.

The future of PHGD and wearables

The HIMSS Media report revealed that PGHD is highly valued and providers would like more data integrated in their care delivery. Yet, many healthcare organizations are still not collecting, integrating or analyzing PGHD to enable its use at point of care. The conversation is at an inflection point. As Havasy reflected, while providers understand the value and the utility of PGHD now, "they just want to know how to make it work for their team and their patients."

Moore is confident that the combination of wearables and health coaching will transform the landscape of chronic disease management and prevention. "The combination of wearables and health coaching allows for the blend of immediate feedback, timely interventions, accountability and support that people need to succeed in health behavior change," he said. "And they will allow all of this to be delivered at a cost that can provide a return on investment that could have the potential of impacting the economics of healthcare and the well-being of populations."

As more providers incorporate PGHD programs and personalized health coaching in their practice, they will develop a clearer, more enriched understanding of the benefits of wearable integration. "Wearables and PGHD are not just able reminders," Havasy said. "It's more than just reminding patients to check their blood sugar and take their insulin. There's complex psychology at work." Work that will likely require creative combinations like cutting-edge technology and human pathos to yield better, healthier outcomes.

¹ This research was conducted online among a mix of IT decision makers, business/administrative decision makers and healthcare professionals at hospitals and health systems. A total of 101 qualified respondents completed the survey.



About Fitbit Health Solutions:

Fitbit Health Solutions delivers software and services designed to drive healthy behavior change. Our solutions motivate and engage people in a personalized health experience across the full spectrum of care, from wellness and prevention to chronic condition management. We deliver a comprehensive, personalized health experience powered by self-tracking technology, digital interventions and human health coaching. Our enterprise health platform, Fitbit Care, helps organizations empower individuals to improve their health in order to manage the health of their population. healthsolutions.fitbit.com.