Fitness Trackers Predict How Cancer Patients Will Respond to Treatment

Doctors say the high-tech health devices are also good at objectively measuring patients' quality of life.

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Wearable fitness trackers like the Fitbit, Apple Watch and Garmin Forerunner have the potential to help doctors predict which cancer patients will respond well to chemotherapy treatment, according to a new study presented at the American Society of Clinical Oncologists annual meeting this month.

Recently reported in The Guardian, the findings essentially suggest that more active patients are less likely to have adverse events and unexpected admissions to the hospital. Researchers said that in the future, doctors might be able to use wearable technology in a number of ways, using it to predict such matters as which patients would not perform well in clinical trials or to intervene in patients' care during a health crisis before hospitalization becomes necessary.

For the study, researchers captured data from 65 people with tumors undergoing difficult courses of chemotherapy associated with severe side effects, such as nausea and vomiting. They used the health trackers to measure patients' physical data from 10 a.m. to 7 p.m. for 60 days using one of Microsoft's fitness bands, collecting the information via an accompanying smartphone app.

Findings showed that while just nine out of 41 patients who ended up wearing the devices got more than the recommended 60 hours of non-sedentary activity, those patients had significantly fewer unexpected hospitalizations during treatment. Activities included cooking, cleaning and even simply getting up from a seated position for more than an hour every three days.

"What we've learned is that we can get an objective metric of patient performance with the use of these modern technological tools," said Jorge Nieva, MD, associate professor of clinical medicine at the University of Southern California in Los Angeles, who led the study. "We've all got our home sprinkler systems and our thermostats, all connected to the internet —there's no reason that our patients shouldn't also be connected to the internet and have the potential to have monitoring and smart interventions."

In the past, research using fitness trackers has also examined the association between breast cancer survivors' fitness levels and cognitive decline, how exercise can help cancer patients avoid

readmission into the hospital post-surgery and whether patients with multiple myeloma are getting enough sleep. Cancer researchers are also increasingly using the technologies as a way to objectively measure patients' quality of life, with nearly 300 clinical trials incorporating fitness trackers to collect personal data during treatment.

Click here to read the ASCO study abstract.

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http://beta.docker.realhealthmag.com/article/fitness-trackers-help-doctors-predict-cancer-patients-will-respond-treatment