

Personal training by data

An Atlantic Health doctor finds that wearable technology can help promote exercise

By: *Anthony Vecchione*

February 25, 2019 7:01 am

Wearable technology is hot.

The American College of Sports Medicine's Worldwide Survey of Fitness Trends for 2019 ranks it as the most popular phenomenon in the country.

According to ACSM wearable technology includes fitness trackers, smart watches, heart rate monitors, and GPS tracking devices.



Wearable devices have evolved over the past 15 years and are no longer limited to wristwatches or waistbands. They now include full garments such as sports bras and t-shirts with built-in sensors.

But do they work? Do they help people exercise more and attain their health and fitness goals?

Collecting dust?

Dr. Damion Martins, medical director of sports medicine and sports physical therapy at **Atlantic Health System**, wanted answers. So he conducted a study to find out if wearables actually changed outcomes and provided a catalyst for people to exercise.

"We knew it was a booming industry – but there wasn't a lot of evidence that it actually changed outcomes. Did it make people exercise more if they wore these things?"

Martins said that he has seen many athletes go to gyms or buy great equipment that collects dust within six weeks. "I was wondering whether this technology was going to fall to the wayside," said Martins.

The 14-week study conducted at Atlantic Sports Health in Morristown included 60 Atlantic Health System office workers, mostly sedentary, ranging in age from 25 to 55.

According to Martins, the employees were divided into three groups. The first group wore a wearable device, knew what it would measure and had access to the data.

The second group had knowledge of the device's function but did not have access to data via a digital app.

From days 31 to 60, both groups crossed over to either gain access to the device's data (the second group) or lose it (the first group).

A third group had knowledge of the wearable device's function but did not have access to the

data for the duration of the study.

Results from the study revealed that those who had access to information about their progress remained more active than those who only had the device.

This was apparent with the first group that averaged the most active hours per day throughout the duration of the study — but saw a decrease in active hours and steps taken once they lost access to the data.



Martins

"What we proved statistically was it's not wearing the wearable technology that made you exercise more — but it's the information that you gained from it that kept you motivated to do more and more," said Martins.

What this technology allows a patient to do, Martins explained, is to follow an exercise prescription and monitor the duration and intensity of their activities.

One of the goals of the study was to give people a road map for success, Martins said.

"You have to be specific with your goals and you have to be able to track goals. That is what makes this successful and that is where this technology plays a role. We give people a specific road map for diet and exercise," said Martins.



Anthony Vecchione

Anthony Vecchione covers health care for NJBIZ. You can contact him at: Avecchione@njbiz.com.
