How healthcare providers can make use of wearable device data?

14 April 2022 | Opinion | By Beau Peters, US

Before healthcare providers can make the best use of wearable device data, there are a few pressing challengesthat first have to be addressed and overcome

Global industry is well into its fourth revolution, and data has been the driving force of this transformation. For healthcare providers, the applications of data can make a life-saving difference for some patients and a host of benefits for care management and optimization.

Among the many tools empowering these benefits are wearable devices. Wearables include technology that evaluates bodily conditions — from heart rate to glucose levels. With the help of these tools, patients are streaming real-time health data back to care providers for enhanced insight and control of their own care.

Around the world, care management systems are being updated to improve both health data applications and patient data security. Wearables are a key component of this process, and one healthcare providers can make use of to streamline the patient experience.

Wearable device use cases

Wearable devices may be most recognizable as a recent trend in the health and fitness space. Patients use tools like fitness trackers to record their vitals or manage certain conditions. However, these tools are much more than a small convenience in managing one's health. Rather, wearable devices have all kinds of applications in the healthcare sector. That's because these tools offer unprecedented insight into overarching health determiners. By examining this data, care providers can produce ideal results for more individuals.

These results, of course, are all abstract until care providers implement this information into beneficial care practices. To better understand how you can make use of wearable device data for patient healthcare solutions, explore use cases like the following.

Serving the underserved

Healthcare accessibility is a major problem for much of the world. Approximately 60 million people in the United States alone live in rural areas typically underserved when it comes to healthcare services. To visit a doctor, patients may face obstacles like distance, travel, and the financial impact of both. However, providing treatment to this demographic through the principles of cultural sensitivity and empathy is simpler with wearable devices. That's because wearables provide real-time context for patient health at a distance.

A patient living in a rural area, for instance, could be set up with a wearable device for tracking glucose levels as well as other medicinal or behavioral data relevant to the patient. From here, care providers can examine patients at a distance and work with them to conveniently optimize their care. With the assistance of wearable data streams, patients no longer have to make costly and inaccessible trips to the doctor for long-term monitoring.

Preventing problems

The COVID-19 pandemic changed the ways many providers saw patients. With fewer office visits due to expanded telehealth services, the ability of care providers to track a range of patient information and pick up on nuances was diminished. Wearables are picking up the slack, however, allowing for insight that can ultimately prevent health problems.

Wearable devices empower patient transparency into their own medical data while at the same time helping their doctors with context. For instance, pregnant patients with hypertension would typically have to visit the doctor twice a week to get blood pressure readings. Now, wearables can feed blood pressure information to care providers without the patient having to make an uncomfortable trip. Doctors can then catch issues before at-risk patients get truly sick. As the power of wearable technology advances, more preventative treatments will be possible for more patients because of wearables.

Enhancing medical communication services

By nature of their design, wearable devices are great at streamlining communication. That's because these tools can monitor and record biometric information in real-time and feed that information back to a medical team for analysis. Such a fast and agile platform for catching health problems is a priority of healthcare facilities in the pandemic era.

Healthcare providers can make use of wearable data to enhance medical communication services. From individual patient records to tailored services, data translates to actionable methods of improving care. From here, healthcare providers can coordinate with patients to gain health information via their wearable devices.

Challenges

Before healthcare providers can make the best use of wearable device data, there are a few pressing challenges that first have to be addressed and overcome. These mostly deal with the difficulty of securing medical data in the dangerous digital landscape of the times. Since care providers have to adhere to HIPAA standards, maintaining the integrity of this data is not just a good practice but a necessary one. Meanwhile, the distributed shareholder network within the healthcare system makes adopting these tools difficult.

These are just a few of the important pain points to keep in mind when addressing a secure use of wearable device data:

Maintaining data security

Nearly half of all data breaches occur in the medical industry because of the value of medical data on the black market. Protecting data generated from wearables requires expert IT assistance and the latest encryption standards.

Reducing expectations on the patient

The burden of transmitting wearable device data largely falls on the patient. With the help of advancing technologies like smart contracts, wearable data collection can more conveniently and transparently be utilized by providers while still providing the patient greater ownership of their data.

Overcoming the tech gap

The healthcare system's network of shareholders means that technological innovations have to gain a lot of momentum before they can be accepted and integrated by most providers. Meanwhile, some data collection and analysis tools will require tech skills care providers don't necessarily have.

All these challenges and more can impact the application of wearable device data in medical care. As a result, providers will have a more difficult time providing a competitive modern experience for patients. Instead, care providers must look for solutions to these challenges as they coordinate wearable data collection for the benefit of their patients.

It is beneficial

Because of the strides wearable tech has made in care accessibility, treatment, and communication, these devices are gaining in popularity. Employing them can offer a host of benefits for use cases like those explored here. However, providers will have to first overcome the challenges posed by utilizing this data, challenges like security.

Use wearable technology in the course of treating patients to conveniently and unobtrusively collect important health data. As a result, patients can experience the benefits of more accessible, transparent care.

Beau Peters, US