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## **Wearable Healthcare Devices**

## Dear Readers,

As the prevalence of chronic ailments and diseases increase among the rapidly aging world population, the healthcare sector is looking more and more towards high-tech medical solutions and devices. This is the reason the world has seen a proliferation of advanced wearable electronics in the recent years. These devices have emerged as one of the most effective ways to improve patient outcomes and reduce medical costs.

The market for wearable devices has boomed in the last few years and there are no signs of slowdown. Wearable Health Devices (WHDs) are proving to be extremely helpful for people to keep a check on their health conditions. People can actually monitor their status at a fitness level and also at proper medical level. The Wearable Health Devices can also provide more data to the doctors and help in earlier effective diagnosis and guidance of treatment. The world of technology has seen a revolution that has led to the miniaturization of electronic devices. As a result, the world has witnessed the birth of more reliable and advanced wearables.

Before the advent of wearable devices, an individual was required to visit a doctor for the smallest of medical questions. Today, people have turned their attention to wearable devices that can monitor their vitals and help them avoid these visits. The orthodox ways to perform the most basic of acts like checking blood pressure or blood sugar require physical, complex, and time-consuming procedures. Moreover, one does not even get the results of these procedures instantly. With medical wearables available in the market today, people are getting rid of these invasive procedures and achieving instant results. The need for visiting a doctor is decreasing gradually. Moreover, as the WHDs get more popular, they will replace many instruments in the clinics and diagnostic centers as well.

The WHDs targeting self-management are also helping the physicians in improving the diagnostic processes. The data recorded in these devices can be transferred electronically and thus, the doctors can easily gain important information and make informed decisions. There are devices that come equipped with sensors such as electromyogram (EMG) and electroencephalogram (EEG) that can record muscle activity and simulations within the brain. Such critical data monitoring will soon lead to the end of the existing conventional monitoring systems. Moreover, the heavy adoption of WHDs will enhance the ability of a



physician to diagnose the condition of a remotely located user virtually.

With products like Cardiac monitors, Smart watches, Diagnostic wearables, and Glucose monitors already on the market, the healthcare sector is already embracing the growing number and quality of Wearable Health Devices. The wearable fitness technology is finding its way into the deep circles of society and are beginning to be watched as mainstream. The future of wearable devices displays no sign at all of slowing down in any manner.

Big medical and pharmaceutical companies are adopting engineering simulation and connect patient modelling to begin developing devices that provide more reliable and secure answers. With already a number of smart products in the market and the surge in the implementation IoT and AI in healthcare sector, it is safe to say that the future lies in virtual healthcare and Wearable Health Devices are to play a huge and significant role in this future.

With kindest regards

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