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Wearable Technologies, Preventative Medicine, and Chronic Disease

As technology continues to grow more portable, efficient, and accessible it allows people as creators and consumers the ability to accomplish more than ever, quicker than ever. It's hard to argue this increase in productivity, accessibility, and ease of use brought about by technological advances have not contributed positively for people around the world. However along with these positive advancements sometimes these ease-of-use technologies can lead to lifestyle changes that are detrimental to individual health. It can be seen by policymakers in developed countries across the world reporting dramatic growth in obesity over the past several decades (Appleton). In fact, in today's America where technology is practically engrained in most aspects of our life, we have many alarming numbers of chronic diseases in our adult population. There is an estimated 66.9 million people in America alone with hypertension along with most of the population over the age of 65 also having the disease (Appleton). Darius Lakdawalla concluded through his research technology has essentially raised the cost of labor via a more sedentary homelife and lowered the cost of calories via increased agricultural efficiency therefore leading to increased rates of obesity (Lakdawalla). With information like this it's easy to see that there is a correlation between technology and certain chronic diseases.

Just because technological advances have correlated with negative side effects doesn't mean that America or other countries who rely on them to function can abandon it. Without various

technologies many people including Americans could not successfully sustain their lifestyles and provide for their family. The problem is how does an adult in modern developed countries keep track and maintain their health despite such a fast moving ever advancing society. The solution is combining wearable/smartphone technology with preventative medicine and chronic disease management.

By combining wearable/smartphone technology with preventative medicine and chronic disease management strategies it can provide an effective, modern, and convenient solution to this issue. Using the convenience of a modular wristwatch partnered with a smartphone application, it will provide convenience and streamlining making it easy to check and monitor vitals. There are many modern digital watches that provide the ability to check vitals such as the Apple Watch, Fitbit, or Galaxy Watch. What separates my modular wristwatch solution from the other solutions already found on the market is the addition of modularity. Other solutions don't encompass all vital checking features in one modular device giving the user the ability to only use one app to store and display all data. Someone who has diabetes and high blood pressure would have to buy two separate devices one to measure glucose and another for measuring blood pressure using current solutions. With the modular watch face the only change would be the watch face allowing for quicker, more efficient switching all the information would also be conveniently accessible on the same app making it easier to monitor. Properly monitoring a chronic disease is essential when you look at the fact seven out of 10 US deaths are from a chronic disease according to the CDC.

Even a person who doesn't suffer chronic diseases can benefit from this technology. Often the negative effects of technology on our health can be slow so we may not realize it initially, having the data presented in meaningful way can show changes over time. Using this device to keep track of important vitals by having all the data in one place is much more helpful and

informative. There is already a major challenge here in the United States of not only getting people to properly utilize preventative services but also providing general access to these resources (Healthy aging program). This allows us to use technology to close the gap between those who have quick access to and time for these preventative resources and those who do not.

Using a technological solution to this problem allows for a more seamless incorporation into everyday life for the user. Yet, that is far from the only benefit of a wearable technological approach to preventative medicine and chronic disease management. This approach also allows for better medical attention from doctors by having the data for analysis and granting the ability to monitor someone remotely. By incorporating technology back into its own negative effects, it is also possible to help the user be proactive in their own health. Building solutions in conjunction with, instead of against technology is crucial to creating lasting solutions that can be applicable for today's modern technology user.

References

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