

eHealth in the 21st Century: The Case of the Fitbit Versa 2

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ABSTRACT

- Non-communicable diseases, such as diabetes, are elevating the global burden of disease.
- The current discourse surrounding the incorporation of wearable health technologies into the healthcare system heavily focuses on the costs.
- This work frames the debate around the data collection mechanisms, privacy structures, and other mechanisms that are in place.

OBJECTIVES

- To explore the infrastructure of the Fitbit Versa 2; as a case study of wearable health technology
- To appraise its quality and investigate the possibility of incorporating the Fitbit into Canada's healthcare system

KEY TERMS

PHR: A personal health record is a health record where health data and other information related to the care of a patient is maintained by the patient.

PHIPA: Personal health information protection act establishes rules for the collection, use and disclosure of personal health.



A 2019 survey found that **1 in 5** Americans regularly use or wear a smartwatch or fitness tracker

METHODS

A SWOT analysis (strengths, weakness, opportunities, and threats). Peer-reviewed articles, grey literature, course readings, and news media were included.

RESULTS

Strengths

- Efficient
- Enhances Quality
- Evidence Based
- Empowering
- Encouraging
- Educating
- Enabling

Opportunities

- Price reduction
- Predictive guidance
- Increasing the multiple functionalities
- Increasing the available apps that are compatible with the Fitbit
- Expanding the health measurement indicators
- More options for customization

Weaknesses

- Technical difficulties
- Poor data quality
- Unwillingness to deliver insights, interpretation or coaching
- Impracticality of device designs
- The cost of inactivity
- The actual costs

Threats

- Dehumanizes Care
- Lack of health literacy
- Misinterpreted information
- Privacy
- Safety
- Competitors

RECOMMENDATIONS

- Use disease-specific predictive guidance
- Allow the current rendition of predictive guidance (basic height/weight goal metrics) to be available to all end-users
- Update privacy policy to explicitly state data will not be sold or used for advertising purposes
- Introduce voice-commands for accessibility
- Integrate data into personal health record

CONCLUSIONS

Fitbit has formidable opportunity for improvement as identified in its technology, privacy, and capacity to be equitable as seen with its iterations.

Not to mention as competitors like the Apple Watch vies for more share of the market, Fitbit can capitalize on the opportunities available to it and its unique attributes to hold its place as a leader and grow.

All in all, as non-communicable diseases chronically overwhelm healthcare systems and the population alike, Fitbit can emerge as a tool that can transform users' lives and lighten the load on the system.