International Journal of Management, Public Policy and Research
International, Peer Reviewed journal
E-ISSN: 2583-3014

A RESEARCH STUDY ON WHOOP-FITNESS TRACKERS A WEARABLE TECHNOLOGY AND ITS IMPACT ON HEALTH INSURANCE

Juhil Jani, Suzan Peters, Dr. Urvi Amin

Research Scholar
Master of Business Administration
SJPI-NICM, Gandhinagar

Research Scholar
Master of Business Administration
SJPI-NICM, Gandhinagar

Associate Professor
Master of Business Administration
SJPI-NICM, Gandhinagar.

Abstract

This study looks at the WHOOP fitness tracker, a wearable device that helps people track their health and fitness. WHOOP measures things like heart rate, sleep, and physical activity to help users live healthier lives. This study was secondary research where information about the company was analysed for the past data available on various sources from the internet. The research explores how this technology could impact health insurance by encouraging healthier habits, reducing health risks, and possibly lowering insurance costs. It also discusses the sharing of health data with insurance companies, including the benefits and concerns, such as privacy. The study Concludes how wearable devices like WHOOP can make managing health easier and bring changes to the insurance industry.

Keywords: *Fitness tracker, Wearable technology, Health insurance*

RESEARCH OBJECTIVE

To analyse the impact of the Whoop, fitness tracker on promoting healthier lifestyles and its potential to influence health insurance policies through data-driven insights in future.

INTRODUCTION

This secondary study of how WHOOP, a wearable fitness tracker, affects health insurance. The study examines the various ways which wearable technology, such as WHOOP, affects insurance policy and health outcomes by examining previous research, reports, and data. It aims to better understand the possible advantages and difficulties of implementing such gadgets into health insurance models, with focus on the association between monitoring individual health data and improvements to premiums or policies. The study utilizes an analysis of existing literature to throw light on this evolving relationship between technology and healthcare.

LITERATURE REVIEW

Amina Nalongo (2024) in her study discusses the challenges related to the general acceptance of biosensors that are wearable in healthcare while also analysing the technological developments, uses, and potential future directions of wearable devices. In recent years, wearable biosensors have attracted a lot of interest, and significant improvements in sensor creation, materials, and design have been made. The study highlights that the new developments have been focused on improving device performance, combining wearable biosensors with telemedicine systems. Wearable technology is more effective and customized method of patient care and will completely change the current healthcare system.

Bharathi M and Sumathy Mohan (2024) studied how Insurtech, which is insurance technology is restructuring the healthcare sector. This study examines how the latest innovations are transforming the industry, particularly wearable health trackers, automated claims processing, digital onboarding, and predictive analytics. The paper provides information on Insurtech and how it will transform health insurance in India by the potential to completely transform healthcare insurance by promoting efficiency in operations, enhancing coverage, and upgrading service quality.

Aswin C Prakash, Manoj Kumar Pandey and Manoj Pareek (2021) explored how people in general viewed wearable technology and its likely uses by conducting a market survey. The financial implications of including wearable in an insurance policy are also covered in this study, along with other important factors to take into account when using wearable data**.** The study concluded that wearable technology will aid to improve the healthcare system by evaluating an individual's health status, exercise routine, and early disease prediction. The study highlights how an insurance business may change its interactions with customers with a wearable gadget to boost sales and profits.

Ashwini Nagappan, Adriana Krasniansky and Madelyn Knowles (2024) conducted a study with the objectives to analyse wearable device ownership among a group of US consumers according to sociodemographic factors as well as investigate into the purchase and usage of these devices for medical purposes. The study concluded that understanding differences in usage and ownership is essential for creating inclusive wearable products by the companies, as well as for ensuring that wearable data is used appropriately in public health and healthcare research.

Dr. Gaurav Sahini (2023) analysed and predicted how by the year 2027, the worldwide market for service providers for wearable technology is predicted to be worth $462 million as wearable technology provides real-time availability of data on an extensive variety of bodily factors for a large number of users, which might help insurance companies in developing models that offer more beneficial and cost-effective plans. He evaluated that about 533.6 million units were delivered in 2021, which shows 20% increase as compared to 2022. The study concluded that wearable technology will become even more popular due to IoT and 5G technologies advancement. Wearable technology will play a significant role in providing preventive healthcare, in addition to helping create attractive insurance products.

RESEARCH METHODOLOGY

The research study employs secondary data research, gathering information from authenticated online sources such as academic journals, industry reports, news articles, and official publications related to the WHOOP fitness tracker and health insurance. The data was analysed to understand the tracker's functionality, its role in encouraging healthy behaviours, and its implications for health insurance models which can be utilized in future.

RESULTS AND DISCUSSIONS

A wearable fitness tracker is a small, portable device designed to monitor and record various health and fitness-related metrics. Worn on the body, typically as a wristband, clip, or smart accessory, it uses sensors to track activities such as steps taken, heart rate, sleep patterns, calories burned, and more. These devices sync with mobile apps to provide insights, set goals, and help users maintain a healthier lifestyle.

Photoplethysmography (PPG) is a simple optical technique used to detect volumetric changes in blood in peripheral circulation. It is a low cost and non-invasive method that makes measurements at the surface of the skin. This technique provides valuable information related to our cardiovascular system. Recent advances in technology have revived interest in this technique, which is widely used in clinical physiological measurement and monitoring. Medical devices based on PPG technology are widely **used in** various applications Blood oxygen saturation, Blood pressure, Cardiac output, Heart rate, Respiration, Vascular assessment, Arterial disease, Arterial compliance and ageing, Venous assessment, Endothelial function, Microvascular blood flow, Vasospastic conditions, Autonomic function monitoring, Vasomotor function and thermoregulation, Blood pressure and heart rate variability, Orthostasis, Other cardiovascular variability assessments

Wearable **fitness trackers affect the insurance industry** by providing real-time health data, enabling insurers to assess risk more accurately. They encourage healthier lifestyles, which can reduce claims, and allow insurers to offer personalized policies and incentives, such as lower premiums for active individuals who regularly track their health through a fitness tracker.

The wearable tech market is growing due to rising health awareness and advances in biometric tracking. Key trends for WHOOP include increased demand for fitness trackers, technological innovations, and the success of

subscription-based business models driving revenue.

WHOOP was founded in 2012 by Will Ahmed, John Capodilupo, and Aurelian Nicolae during their time at **Harvard University**. Inspired by Ahmed's frustration with the lack of comprehensive performance tracking as a student-athlete, the team set out to create a device that could monitor and optimize physiological performance. Early endorsements from high-profile athletes like LeBron James and Michael Phelps helped establish credibility and attract investors.

WHOOP is a **health tracking tool** that monitors strain, heart rate variability, and sleep cycles, offering personalized insights to optimize performance, recovery, and overall well-being. It emphasizes recovery to prevent overtraining and injury while **promoting healthy habits**. By consistently tracking vital metrics, it aids in early detection of potential health issues, supporting long-term health management.

The **WHOOP's numerous disadvantages** are its costly subscription fee, which might discourage some users. For accurate tracking, the gadget must be used consistently; delays in use could result in inaccurate data. Last but not least, WHOOP's emphasis on performance and recovery ignores additional aspects of health, such nutrition or mental health.

LIMITATIONS OF RESEARCH

A secondary research study on WHOOP and its impact on health insurance has some limitations. It uses existing data, which might be old or biased. The data might not answer the exact research question, and differences in how the data was collected or defined can make the results less reliable. Also, since the research doesn't involve new participants, it can't control the number or diversity of people studied, making it harder to apply the findings to everyone.

CONCLUSION

This secondary study concludes by highlighting the increasing impact of the wearable fitness tracker WHOOP on health insurance. Although it provides useful information about personal health metrics, concerns with data privacy, convenience, and information accuracy make it difficult to integrate into insurance models. According to the findings, WHOOP may promote healthier lifestyles and lower insurance premiums for certain consumers

REFERENCES

[1] Sahni, Dr. G. (2023). How wearable devices are shaping the INSURETECH industry. *International Journal of Transformations in Business Management*, *13*(01), 04–07. https://doi.org/10.37648/ijtbm.v13i01.002

[2] Nagappan, A., Krasniansky, A., & Knowles, M. (2024). Patterns of Ownership and Usage of Wearable Devices in the United States, 2020-2022: Survey Study. *Journal of Medical Internet Research*, *26*, Article e56504. https://doi.org/10.2196/56504

[3] Prakash, A. C., Pandey, M. K., & Pareek, M. (2021). Wearables Technology: awareness, adoption and applications in Indian health insurance industry. *Zenodo (CERN European Organization for Nuclear Research)*. https://doi.org/10.5281/zenodo.7437996

[4] J, A. N. (2024). Wearable Biosensors: Tracking Health in Real-Time. *Research Output Journal of Biological and Applied Science*, *4*(3), 34–39. https://doi.org/10.59298/rojbas/2024/433437

[5] Sumathy, D. M., & Ms. Bharathi. M. (2024). Insurtech\'s Role in Enhancing Healthcare Insurance Accessibility and Efficiency in India. *International Journal for Research in Applied Science and Engineering Technology*, *12*(11), 1890–1895. https://doi.org/10.22214/ijraset.2024.65519

Web References:

[1] https://www.prodcircle.com/post/whoop---beyond-the-hype

[2] https://www.news-medical.net/health/How-do-wearable-fitness-trackers-measure-steps.aspx -:~:text=A%20fitness%20tracker%20is%20a,the%20data%20that%20it%20collects

[3] https://www.whoop.com/