

# IoT based Health Monitoring System – A Comprehensive Survey

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**Abstract.** The development of a smart cyber-physical network is captured by a massive technology named the internet of things (IoT). Healthcare can be considered as the utmost important factor which connects the community and development of any country. The covid-19 virus can be taken as a recent example and it has directly affected the economy and the day-to-day life of most countries. Experts in the health field get the maximum advantage out of vast improvements in technology and develop new inventions that bring a lot of benefits to the users in the clinical setting. The number of users who are served from the advantages of the new medical inventions, Mobile Health (MHealth) and E-health are countless. Due to Covid-19 patients have to face a lot of problems. as they are not able to visit doctors and get treatments. So as a solution for this problem, the Internet of things provides the capability of connecting to the internet and provides information on the health condition of the patient by allowing the integration of the devices. Today researchers have moved to do more researches to enhance and improve the health sector by finding new innovative technological solutions with the advanced use of IoT. This survey advances different IoT based health motoring Systems that are currently used, IoT based healthcare applications, technologies used to implement these systems, new trends in IoT based healthcare field, challenges and limitations in using IoT in the healthcare field. The survey is based on a literature review and the information that the literature reviewer has collected is represented through this research. Finally, this paper is expected to be useful for researchers, innovators, doctors, students, and health professionals.

**Keywords:** *Internet of Things, Health Care Services and Applications, Health Monitoring System, IoT Security, Challenges*