## **ABSTRACT**

The provision of effective health care is a critical component of a country's social and economic growth. Improving a person's health is essential to increase the quality of life. Many individuals and health care staff providing services in developing countries, particularly in rural and distant locations, still have no or limited access to the resources they need. On the other hand, mobile communication technologies play a significant role in improving healthcare services, becoming the future of health care in the world. There was a lot of promise in adopting mHealth as one of the healthcare sector's supporting systems to address healthcare delivery disparities and reduce the workload of ground-level healthcare workers. Mobile applications can reduce healthcare expenditures, enhance quality, and modify behaviour to strengthen prevention, benefiting long-term health outcomes. Sri Lanka has been using mHealth applications for years, targeting healthcare workers and the general population. Being a complicated field, There are so many factors affecting the sustainability of mobile health applications; the Health care ecosystem is one of the critical factors which hasn't been studied thoroughly.

After conducting a background study on the mHealth solutions available for field-level public health care workers in Sri Lanka, two mHealth applications used by PHMs were selected for the study. The first component of the study was conducted to identify and explore the impact of health care ecosystem factors affecting the sustainability of mHealth solutions across the implementation process. The second component was to identify challenges and strategies that have been adopted. In-depth interviews, document reviews and focus group discussions were used for data collection. Key health care ecosystem factors affecting the sustainability of mhealth solutions among field-level public health care workers in Sri Lanka were identified based on the responses received in the study, and recommendations for implementing an effective mobile healthcare system for field-level public health care workers in Sri Lanka were made.