African Security Studies (Interdisciplinary - Social/Political focus)

Wearable Technology for Remote Patient Monitoring in Uganda: Adoption Rates and Use Cases

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Abstract

Wearable technology has gained traction in various healthcare applications globally, including remote patient monitoring (RPM). In Uganda, where access to healthcare services is limited, RPM through wearable devices could significantly improve health outcomes. A mixed-methods approach was employed, combining quantitative data from surveys with qualitative insights through interviews and focus groups. Data collection occurred between October and January . Data analysis revealed that 75% of participants reported satisfaction levels above 8 on a 10-point scale for RPM use, indicating positive user experience. Users preferred heart rate monitoring ($n = 60\frac{)}{glucose}monitoring(n = 45)$. Wearable technology shows promise in enhancing patient engagement and health management in Uganda, particularly through tailored RPM solutions that address common health concerns. Healthcare providers should prioritise training on wearable device use for patients and incorporate RPM into routine care to maximise its benefits. Government initiatives could support the rollout of these devices in underserved areas. Wearable Technology, Remote Patient Monitoring, Health Outcomes, User Satisfaction, Uganda

Keywords: *African Geography, Remote Patient Monitoring, Wearable Devices, Technological Adoption, Health Informatics, Geographic Information Systems, User Experience Studies*

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