Telemedicine Solution for Remote Patient Monitoring in South African Cape Town Slums: A Systematic Literature Review

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Abstract

Telemedicine solutions are increasingly being explored as a means to address healthcare disparities in underserved communities. A comprehensive search of academic databases was conducted using predefined inclusion criteria. The analysis revealed that telemedicine can be effective in improving access to healthcare services among vulnerable populations, with a notable proportion (35%) of studies reporting positive outcomes. Telemedicine solutions have the potential to significantly enhance remote patient monitoring and improve health outcomes in South African slums. Further research should focus on developing scalable telemedicine platforms that integrate existing healthcare infrastructure and support sustainable funding models. Model estimation used $\hat{\{}\theta\}=argmin\{\theta\}sumiell(yi,f\theta(\xi))+\lambda lVert\theta rVert2^{2}$, with performance evaluated using out-of-sample error.

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