Adoption Rates of Digital Diagnostics Tools in Rural Mozambique's Community Healthcare Settings: Impact on Diagnostic Accuracy,

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Abstract

Digital diagnostics tools have shown promise in improving diagnostic accuracy for colorectal conditions in urban settings; however, their adoption and impact on diagnostic outcomes in rural Mozambique's community healthcare settings remain underexplored. A mixed-methods approach combining quantitative data from electronic health records (EHR) with qualitative interviews to understand factors influencing tool adoption and effectiveness. In the study area, digital diagnostics tools were adopted by 45% of community healthcare centers. Diagnostic accuracy improved by an average of 15% when using these tools compared to traditional methods. The use of digital diagnostics significantly enhanced diagnostic outcomes in rural Mozambique's community settings, with a notable improvement in accuracy rates. Further implementation and ongoing evaluation are recommended to sustain the benefits observed and address challenges related to tool accessibility and maintenance. Treatment effect was estimated with $text\{logit\}(\pi)=beta\,0+\beta^{\rightarrow}\,p\,X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, Africanization, DigitalHealth, SystemsTheory, Telemedicine, DiagnosticAccuracy, Ethnography*

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