



Biomedical Innovations in Diagnostic Devices Across Resource-Limited Settings in Kenya 2006

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Abstract

Diagnostic devices play a critical role in healthcare delivery, especially in resource-limited settings such as Kenya. A comparative study methodology was employed, including literature review, expert interviews, and field observations in diverse geographical locations within Kenya. Biomedical innovations varied significantly between urban and rural areas, with a notable trend towards increased use of point-of-care diagnostic devices in less affluent regions. Despite challenges related to technology accessibility and maintenance, there is evidence of growing biomedical engineering capacity in diagnosing diseases in resource-limited settings. Investment should be directed towards improving infrastructure for maintaining diagnostic equipment and training healthcare workers on its use effectively. Biomedical Engineering, Diagnostic Devices, Resource-Limited Settings, Kenya The maintenance outcome was modelled as $Y = \beta_0 + \beta_1 X + u_i + \varepsilon_i$, with robustness checked using heteroskedasticity-consistent errors.

Keywords: *Biomedical, diagnostics, engineering, resource-limited, innovation, epidemiology, development*

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