



Multilevel Regression Analysis to Evaluate and Enhance Community Health Centre Efficiency in Nigeria: An Assessment of Systems and Governance Structures

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Abstract

Community health centres in Nigeria face challenges related to efficiency and governance structures. A multilevel regression model will be employed to assess the influence of various factors on health centre efficiency. The study will utilise data from 20 community health centres across Nigeria over a two-year period. The analysis reveals significant variations in service delivery and financial management among centres, with certain governance structures associated with higher efficiency gains (e.g., improved patient flow). The multilevel regression model provides insights into the most effective systems for enhancing community health centre performance. Implementing structured governance frameworks and continuous training programmes can lead to substantial improvements in service delivery and financial stability. Community Health Centres, Nigeria, Multilevel Regression Analysis, Efficiency Gains, Governance Structures Treatment effect was estimated with $\text{text}\{ \text{logit} \}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Nigerian, Multilevel, Regression, Governance, Efficiency, Health, Evaluation

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