



Methodological Assessment of Rural Clinics Systems in Ethiopia Using Difference-in-Differences for Clinical Outcomes Measurement,

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Abstract

This study examines the clinical outcomes in rural clinics within Ethiopia to assess their effectiveness. A difference-in-differences (DiD) regression analysis was employed to estimate the impact of clinic interventions on patient health outcomes. The DiD method compares treated units with control units before and after treatment implementation. The analysis revealed a significant improvement in patient recovery rates by 15% within one year post-intervention, suggesting effective system upgrades. The rural clinics' upgraded systems have positively influenced clinical outcomes, particularly in terms of patient recovery rates. Further research should explore the sustainability and scalability of these improvements across different regions to ensure broad benefits. Rural Clinics, Ethiopia, DiD model, Clinical Outcomes, System Improvement 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: Ethiopia, Rural Clinics, Methodology, Difference-in-Differences, Regression Analysis, Clinical Outcomes, Public Health Systems

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