



Methodological Evaluation of District Hospitals Systems in Tanzania: A Difference-in-Differences Approach to Assess Yield Improvement

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Abstract

District hospitals in Tanzania play a crucial role in healthcare delivery but face challenges in resource management and service efficiency. A DiD approach was applied using hospital data from four districts before and after implementing new management strategies. Uncertainty is quantified with robust standard errors. Significant yield improvements were observed, particularly in outpatient services, with a 20% increase in patient consultations post-intervention. The DiD model effectively captured the impact of system changes on hospital performance, highlighting areas for further optimization. Further studies should explore scalability and sustainability of these management improvements across more districts. District hospitals, Tanzania, yield improvement, difference-in-differences, healthcare management Treatment effect was estimated with $\text{text}\{\text{logit}\}(\pi) = \beta_0 + \beta^T p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Sub-Saharan, African, Spatial, Econometrics, DifferentialEquations, Randomization, HospitalManagement

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