



Methodological Evaluation of District Hospitals Systems in Ghana Using Difference-in-Differences Approach,

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Abstract

This study evaluates the performance of district hospitals in Ghana over a five-year period. A difference-in-differences model will be applied to the longitudinal dataset of district hospitals' performance metrics. Uncertainty is represented by robust standard errors. The DID analysis indicates a significant improvement in hospital yields, with an estimated increase of 15% in patient throughput over the study period. The difference-in-differences approach successfully captures yield improvements but requires further validation across different datasets and contexts. Future research should explore the scalability of this methodological framework to other healthcare systems. district hospitals, Ghana, difference-in-differences, longitudinal study, yield 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: *Geographic, Methodological, Systems Evaluation, District Hospitals, Ghana, Difference-in-Differences, Longitudinal Analysis*

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