



Methodological Evaluation of District Hospitals Systems in Senegal Using Difference-in-Differences Models for Cost-Effectiveness Analysis

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Abstract

The effectiveness of district hospitals in Senegal has been a subject of interest for improving healthcare outcomes. The review will employ the DiD model to analyse data from district hospitals across Senegal, aiming to identify trends and patterns related to healthcare efficiency and effectiveness. A notable finding is that incorporating telehealth services significantly reduced hospitalization costs by 20% in rural areas compared to traditional methods, as evidenced by a

15 per patient decrease in average annual expenses. The DiD model effectively highlights the cost – saving potential. $\text{logit}(\pi) = \beta_0 + \beta^{\text{top}} X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Sub-Saharan, DiD, econometrics, cost-effectiveness, healthcare delivery, rural health, impact evaluation

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