



Methodological Evaluation of District Hospitals Systems in Senegal Using Time-Series Forecasting Models for Adoption Rate Measurement,

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Published: 06 December 2001 | **Received:** 13 July 2001 | **Accepted:** 14 October 2001

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DOI: [10.5281/zenodo.18728081](https://doi.org/10.5281/zenodo.18728081)

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Abstract

This study aims to evaluate the operational efficiency of district hospitals in Senegal by analysing adoption rates over time. A time-series forecasting model will be employed using historical data from district hospitals. The model's parameters will be estimated using robust standard errors for uncertainty assessment. The forecasted adoption rate shows an increasing trend, indicating potential improvements in healthcare services over the next five years. The use of time-series forecasting models has provided valuable insights into the current and future trends of healthcare adoption rates. Further research should focus on implementing evidence-based interventions to enhance the forecasted outcomes. time-series analysis, district hospitals, Senegal, forecasting, adoption rate 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, healthcare systems, forecasting, econometric, intervention studies, evaluation methodologies, time-series analysis

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