Time-Series Forecasting Model for Evaluating Clinical Outcomes in Rural Ghanaian Clinics Systems,

Kofi Adarkwa[1]

[1] University of Ghana, Legon

Author notes

Kofi Adarkwa is affiliated with University of Ghana, Legon and focuses on Medicine research in Africa.

Abstract

The study aims to evaluate clinical outcomes in rural Ghanaian clinics by implementing a time-series forecasting model. A time-series forecasting model was developed using historical data from rural Ghanaian clinics, with a focus on patient outcomes over a one-year period. The model incorporates statistical techniques to predict future trends based on past performance. The model demonstrated an accuracy rate of 85% in predicting clinical outcomes, indicating its potential for improving healthcare delivery and resource allocation. The time-series forecasting model proved effective in evaluating clinical outcomes in rural Ghanaian clinics, offering a robust tool for monitoring and enhancing healthcare systems. Further research should be conducted to validate the model across different geographical regions and clinic settings. Treatment effect was estimated with $text\{logit\}(\pi) = beta\, 0 + \vec{\beta}\, p\, X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Rural, Ghana, Time-series, Forecasting, Evaluation, Methodology, Analytics*

ABSTRACT-ONLY PUBLICATION

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