African Nanopharmacology and Delivery (Applied aspect)

Time-Series Forecasting Model for Evaluating Cost-Effectiveness of Community Health Centres in Rwanda

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Abstract

Community health centres in Rwanda have been established to improve access to healthcare services for rural populations. A time-series forecasting model was developed using historical data from -, incorporating economic indicators and service utilization rates to predict future trends. The forecast indicated a steady increase in patient visits per year with an average growth rate of 5% over the period. The time-series model provided insights into cost-effectiveness metrics but did not include empirical data due to limited historical records. Further research should focus on collecting more comprehensive and consistent data for robust forecasting models. Treatment effect was estimated with $text\{logit\}(\pi) = beta0 + \beta^{\rightarrow} p X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *African geography, econometrics, forecasting models, health economics, intervention effectiveness, longitudinal analysis, resource allocation*

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