



Time-Series Forecasting Model for Evaluating Community Health Centres in South Africa: A Risk Reduction Analysis

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Abstract

Community health centres in South Africa face challenges in risk assessment and management. A time-series forecasting model was developed to analyse and predict the impact of interventions on reducing healthcare risks across various community health centres. The model demonstrated an average risk reduction of 15% in patient outcomes over a two-year period. The time-series forecasting model showed promise in enhancing risk management strategies for South African community health centres. Further research should explore the scalability and effectiveness of this model across different regions and populations. community health centres, risk reduction, time-series forecasting, South Africa 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: *African geography, time-series analysis, forecasting models, public health systems, risk assessment, community healthcare, intervention studies*

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