



Methodological Assessment of District Hospital Systems in Kenya: A Review of Randomized Field Trials on Efficiency Enhancement

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Abstract

District hospitals in Kenya face challenges in delivering efficient healthcare services. A systematic review of randomized field trial methodologies, focusing on statistical models and data collection methods. Randomized field trials have shown mixed results, with some demonstrating significant efficiency gains (e.g., a 15% reduction in patient wait times). The reviewed studies highlight the importance of robust randomization procedures and standardised data collection to ensure valid efficiency assessments. District hospitals should adopt validated methodologies for future trials, including detailed pre-trial planning and post-trial analysis. Treatment effect was estimated with $\text{logit}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: Kenya, District Hospitals, Randomized Controlled Trials, Methodology, Evaluation, Health Services Research, Quality Improvement

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