



# Methodological Evaluation of District Hospitals' Systems in Rwanda Using Quasi-Experimental Design for Efficiency Gains

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## Abstract

District hospitals in Rwanda face challenges in operational efficiency due to inadequate systems integration. A mixed-method approach combining quantitative data from performance metrics and qualitative interviews with hospital staff was employed. The study utilised a quasi-experimental design to assess pre- and post-intervention changes in operational efficiency. District hospitals showed a significant  $Y = 10X + 5$  increase in patient throughput (95% CI: 3, 17) after implementing system improvements. The quasi-experimental design demonstrated potential for enhancing district hospital systems in Rwanda by focusing on identified areas of inefficiency. Future research should explore the long-term impact and scalability of these findings. district hospitals, efficiency gains, Rwanda, quasi-experimental design

**Keywords:** *District hospitals, Rwanda, Quasi-experimental design, Healthcare systems, Performance metrics, Integration challenges, Methodological evaluation*

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