

Application of Normal and Log-Normal Distributions in Operating Theatre Management

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Abstract: *The efficient management of an operating theatre is crucial to the overall performance of healthcare facilities. It involves scheduling surgeries, managing resources, minimizing waiting times, and ensuring optimal patient outcomes. This paper explores the application of Normal and Log-Normal distributions in the management of operating theatres, focusing on how these statistical models help in forecasting surgical durations, patient arrivals, and resource utilization. Through case studies and statistical analysis, we demonstrate the relevance and utility of these distributions in managing uncertainty and variability in operating theatre environments.*

Keywords: Operating Theatre Management, Normal Distribution, Log-Normal Distribution, Surgery Scheduling, Resource Allocation, Healthcare Optimization