The paper stochastically investigates a two unit cold-standby system with a server subject to failure and getting delayed treatment thereafter. Semi-Markov process is used to develop the system model. The model is analyzed at different regeneration points using regenerative-point technique. The steady-state expressions are derived for various system performance measures such as mean time to failure, availability, busy period of server, expected number of treatments, profit etc. Finally, numerical examples are given to discuss the effect of various parameters on system performance measures.

Index Terms
Keywords