



Southern Public Administration Education Foundation

[PAQ](#)[GVER](#)[IJED](#)[JHSA](#)[PAM](#)[GPS](#)[PFM](#)[Search](#)[RSS](#)

Disaster Recovery Plan Development for the Emergency Department - Case Study

Author: IBRAHIM AL-KATTAN and BAHAA ABBOUD

Published in PAM, Vol. 14 No. 1

Simulation is a powerful tool that can be utilized to measure and improve the performance of healthcare systems, such as the Emergency Department (ED). Simulation models were developed in this research to evaluate the performance of the normal operation of a specific ED. The study uses simulation to develop two models. The first model represents normal operations for an ED used as a case study. The second model represents the operations of the ED during disaster times. Real data was collected from the ED and used to check the validity of the simulation model for normal operations. The original model was modified to simulate several scenarios for disaster recovery plans. The impact of different scenarios generated during unusual conditions for all models were analyzed. These models only considered activities performed inside the ED which starts with the patient registration and ends when the patient is either discharged or admitted into the hospital. Hospitals regularly develop and revise their disaster recovery plans. However, the objective of these plans is to maximize the readiness of the ED and their facilities to enable them to carry out an unusual load created in the event of a disaster. The authors used an ED as a case study to set a procedure to develop several scenarios. The performance of the ED is evaluated under these conditions with the objective to maximize the ED readiness, maximize the patient throughput by minimizing the patient flow time.

[Download PDF](#)