

## Nurse-Patient Assignment: Case of Pediatrics Department

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**Abstract :** The objectives of Nurse-Patient Assignment are the minimization of the overall hospital cost and the maximization of nurses' preferences. This paper aims to assess nurses' satisfaction related to the implementation of patient acuity tool-based assignments. So, we used an integer linear program that assigns patients to nurses while balancing nurse workloads. Then, the proposed model is applied to the Paediatrics Department at Kasserine Hospital Tunisia. Where patients need special acuties and high-level nursing skills and care. Hence, numerical results suggested that proposed nurse-patient assignment models can achieve a balanced assignment

**Keywords :** nurse-patient assignment, mathematical model, logistics, pediatrics department, balanced assignment

**Conference Title :** ICHME 2022 : International Conference on Healthcare and Humanitarian Logistics

**Conference Location :** Barcelona, Spain

**Conference Dates :** June 09-10, 2022