Alleviating Emergency Department Congestion

TREO Talk Paper

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Abstract

Emergency Department (ED) congestion has been an issue in the performance of any hospital system (Shen and Wang, 2015). There are many past and ongoing researches on ways to rectify this issue. Some research outline solutions such as ambulance diversion, increasing hospital capacity in terms of both hospital beds and human resource (Alleon, Deo & Lin, 2013). However, these solutions are not always viable and tend to increase the operating cost. Therefore, this research focus on an alternative solution which is streamlining patient flow from ED to inpatient ward. Based on information processing theory, this research analyzes that early information access enables hospital staff to make a knowledgeable and timely decision to move ED patients to inpatient wards. Radio Frequency Identification (RFID) is suggested as a tool to help access the early information in this patient flow model. In the current scenario, RFID is activated once the patients reaches the ED triage, however this paper suggests that if RFID is enabled as soon as the patients are picked up by ambulance, then the early information gained by the ED triage in this process will help to not only alleviate information uncertainty (IU) but also increase information coordination (IC) amongst the multiple care providers working together in the ED. Hence, resulting in a more efficient patient flow between ED and inpatient ward and therefore, reducing in ED congestion. Furthermore, based on job satisfaction model, this research suggests that the early information access provided by RFID use will increase job satisfaction (JS) of the triage nurses in ED, resulting in better work condition and superior work performance in the ED triage system. This in turn aids in better patient flow from ED to inpatient ward, therefore reducing ED congestion. These effects are shown below in the model 1.

Model 1: Effects of Early Information on Increasing Patient Flow and Decreasing ED Congestion

References (optional)
