Defining crowding -
in emergency departments by measures and outcomes, a summary

Term Paper

Author
Wiliam Hoy

Supervisor
J. Bienzeisler, Institute for medical informatics

Examiner
Prof. Dr. rer. nat. J. Striegnitz

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1 Summary

Emergency Departments (EDs) all over the world face a problemcalled ED crowding. This systematic review takes a look at the mostcommon crowding measures and outcomes.After initially stating, what an emergency department is and howit operates, a set of constraints was created, to filter papers as a basefor further research. Those had to deal with aspects of crowding andwhile reviewing them, the idea of using crowding metrics and outcomesto help define crowding itself formed. This resulted in groups of gener-ally accepted crowding metrics and crowding outcomes, which helpedwith the definition of crowding itself. This lead to over all 8 crowdingmetrics and 3 crowding outcomes. Then after going through each ofthe metrics and outcomes, defining and analyzing them the resultscould be summarized as follows. Measures like "ED occupancy", the"ED length of stay" (LOS), and the "ED volume" build a good foun-dation for definitions sake, based on the amount of studies conductedand homogeneity of their definition. But going on to the other mea-sures, problems like heterogeneity in their definition or complexity oftheir calculation and teachability occurred, which made them harderto integrate into a generalized definition. After assessing the state ofeach measure and outcome, discussing the problems they may bringand how to solve them, a general guideline was formed. It contained a concept of creating a setup for each use-case of crowding individually,therefore avoiding the problems when trying to generalize a definition.