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How Long is too Long?

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How Long is too Long? An Emergency Department Dilemma

Background: The United States is experiencing a nationwide shortage of nurses. Emergency departments (EDs) are at the forefront of this crisis which is contributing to long wait times for patients. Existing literature shows a strong correlation between increased wait times and patients leaving without being seen (LWBS). This likely increases the incidence of adverse events (AE).

Studies examining the impact of nursing coverage on the incidence of AE have been conducted primarily in inpatient settings. Our study aims to assess the relationship between nursing coverage and incidence of LWBS/AE in the ED.

Methods: This is a retrospective cohort study from January 2019 to December 2023. The eligible participant population is adults presenting to Detroit Receiving Hospital (DRH), Harper University Hospital (HUH), or Sinai Grace Hospital (SGH) EDs and then LWBS. Data will be collected from the respective EMR databases, Detroit Medical Center nursing office (DMCNO), and Data to Intelligence.

Results: Data from the DMCNO will be used to calculate the total number of nursing hours worked divided by the total number of patients in the ED in a given 24-hours. A logistic regression analysis will determine how variations in nurse staffing correlate with the incidence of LWBS/AE.

Discussion: We hypothesize that the emergency nursing shortage will lead to an increase in the incidence of both LWBS and AE. Based on data obtained from this pilot study, we hope to compile a data registry from EDs nationwide to gain a better understanding of how alterations in nursing coverage impacts LWBS/AE.