

The Effect Of Mandatory Nursing Ratios on Quality of Patient Care at a California Urban Emergency Department

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Study Objectives

In an effort to improve quality of patient care, some states have enacted regulations limiting the number of patients that can be cared for by a nurse. In January of 2004, California implemented mandatory nurse to patient ratios. Our objective was to determine the effect of such ratios on several indicators of quality of patient care in one urban emergency department (ED).

Methods

This was a retrospective time-series analysis that looked at several indicators of quality patient care one year before and one year after the introduction of mandatory nursing ratios at an urban ED that serves a mainly indigent population. Quality indicators examined included: Wait times; left without being seen (LWBS) rates; reported drug errors; percentage of patients with Acute Coronary Syndrome (ACS) who received aspirin in the ED; and time to antibiotics in patients with pneumonia.

Results

All measured wait times increased after introduction of nursing ratios, including total time in the ED, time from registration to being placed in a room and time from registration until admission paperwork was completed. The percentage of LWBS decreased from 11.9 to 11.2% ($p=0.001$). There were non-significant trends toward more reported drug errors and a lower percentage of ACS patients receiving aspirin in the ED. However, median time to antibiotics in patients with pneumonia decreased (70 versus 45 minutes, $p=0.002$).

Conclusions

Some indicators of quality patient care improved with the implementation of mandatory nursing ratios including LWBS rates and time to antibiotics in patients with pneumonia. However, other indicators showed negative trends and wait times increased significantly. Further study is needed to determine the true effects of mandatory nursing ratios on patient care in the ED.

Emergency Department Wait Times

