

Characteristics of Patients Treated in ED “Hallway Beds”

Ali Pourmand¹, Bandar M. Aljohani^{1,2}, Robert Shesser¹, Erin Kane¹, Khalid N. Almulhim^{1,3}, Mateen Ghassemi¹, Chen Chen¹, Salah F. Alam⁴

1. Emergency Medicine Department, George Washington University School of Medicine and Health Sciences, Washington DC, United States.
2. Emergency Medicine Department, King Abdullah Medical City, Makkah, Saudi Arabia.
3. College of Medicine, King Faisal University, Al-hasa, Saudi Arabia
4. Emergency Medicine Department, King Hamad University Hospital, Bahrain.

Background: To maintain patient flow despite emergency department (ED) crowding, many hospitals place patients in spaces not originally designed for the initial evaluation of patients (“hallway bed”). Such spaces have a variable degree of privacy and often lack call bells, oxygen, suction, or monitors. Little is known about how the use of hallway beds effects the quality of care, patient satisfaction, and patient safety. We sought to describe the profile of patients whose evaluation was initiated in ED “hallway beds”.

Methods: A retrospective chart review was conducted in a single, urban, academic ED between June 2018 and June 2019. We included all patients presenting to ED whose bed assignment was a “hallway bed”. We examined patient’s demographic characteristics (including insurance status, race, and ethnicity), mean LOS, mode of ED arrival, emergency severity index(ESI), and disposition.

Results: A total of 13,100 patients had their ED evaluation initiated in a hallway bed. The mean (SD) age of patients was 46 (17) years, and 54% were male. ESI 2 (emergent) were 44%, ESI 3 (urgent) 45%, ESI 4 (less urgent) 8.9 %, ESI 5 (non urgent) 1%, 45 % of patients arrived by ambulance. The most common chief complaints were ethanol intoxication (8.5%), altered mental status (3.5%), abdominal pain (3%), chest pain (2.6%), and fall (2.1%). Among the study population, 62% were black or African American, and 21% Caucasian. The mean (SD) total ED LOS was 7.29 (4.47) hours, 75 % of patients were discharged home, 12.4% were admitted as inpatient, and 1.8 % admitted to observation status. The total order of computed tomography scan was 6,569 and x-ray was 8,955.

Conclusion: The use of “hallway beds” for patients with serious illness is frequent in our ED and a direct result of the “boarding crisis”. It is believed that this practice is widespread and is often unacknowledged by the hospital’s administration and regulatory agencies. Further studies into how “hallway beds” can be optimally utilized could benefit patient care periods of high ED crowding.