

## **Assessing the Length of Time Spent in the Emergency Department: An Audit of Patient Flow**

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Dear Editor,

Overcrowding in the emergency department (ED) is a global issue that arises when there is a disparity between patient demand and the capacity of the ED to provide care.<sup>1</sup> This not only compromises the quality and safety of patient care but also takes a toll on the physical and mental health of healthcare providers. Patient flow is a well-known factor contributing to ED crowding. In 2018, the International Medical Organization (IMO) proposed a 6-hour target for patients attending the ED to either be discharged or admitted from the time of their arrival.<sup>2</sup>

We conducted a patient flow audit in our ED department from March 20<sup>th</sup> to 26<sup>th</sup>, 2023, examining the time it took for patients to be seen in nursing triage, assigned to a staff nurse in-charge, examined by a doctor in-charge, and referred to other specialties or discharged directly from the ED. A total of 171 patients presented to the ED during the one-week audit period. We compared the length of time patients spent in each category using an Excel sheet.

The summary of our findings is as follows: the 6-hour target was achieved in 149 out of 171 patients (87%), with an average time of 3 hours. The time taken from nursing triage to assignment to a staff nurse was approximately  $47 \pm 3$  minutes, from assignment to a staff nurse to review by a doctor was approximately  $41 \pm 3$  minutes, and from review to discharge or referral to a specialty was approximately  $90 \pm 4$  minutes.

Patients who did not meet the 6-hour target spent an average of 8 hours in the ED. Interestingly, although more patients presented to the department during the day, they were generally managed and discharged more quickly. We observed that 68% (15 out of 22) of cases that exceeded the 6-hour target occurred during the night shift (from 21:00 to 09:00). Notably, there was an approximately one-hour additional delay in each category during this time.

Several limitations of our audit should be acknowledged, including the turnaround times of investigations, the variation in manpower during day and night shifts, and the severity of patients' presentations. In conclusion, we observed a significant proportion of patient flow delays while waiting for a doctor's assessment. The implementation of management pathway guidelines and the provision of additional out-of-hours support and staffing would be beneficial in mitigating the ongoing crisis of ED crowding.

**Declarations of Conflicts of Interest:**

None declared.

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