

Optimizing Length of Stay by Reducing Emergency Department Boarding Time

Author/s: Daniel Mansour

Emergency Department (ED) boarding—when admitted patients wait for inpatient beds—poses significant safety risks, including increased medical errors and higher mortality. This retrospective study at the University of Minnesota Medical Center analyzed 40 ED admissions between April and July 2023 to assess the impact of ED boarding on length of stay (LOS). The average boarding time was 14.76 hours, with an average LOS of 5.41 days, far exceeding the Joint Commission’s recommended 4-hour boarding limit. To address this issue, we propose innovative, data-driven solutions such as automated bed capacity alerts, predictive modeling for peak admission periods, and enhanced ED-inpatient communication to streamline patient flow. These interventions aim to reduce ED boarding, improve hospital efficiency, and enhance patient outcomes, offering a sustainable approach to optimizing healthcare delivery.