Reducing Average Admission Boarding Time From Pediatric Emergency Department To Pediatric Inpatient Unit At King’s County Hospital: A Multidisciplinary QI Project

Introduction: Admission Boarding Time (ABT) is the interval between the emergency department (ED) physician’s decision-to-admit a patient and the patient’s arrival at the inpatient unit (IPU). Longer ABTs are associated with lower quality of care, increased medical errors, prolonged hospital stays, increased ICU admissions, and increased in-hospital mortality. Our project aims to reduce the average ABT from the pediatric ED to the pediatric IPU from 165 minutes to 120 minutes at Kings County Hospital (KCH) in 6 months which amounts to a 27% reduction.

Methods: We used Plan-Do-Study-Act (PDSA) methodology for this QI. We conducted a needs assessment in Dec 2023 by involving key stakeholders including pediatric and ED residents, physicians and nurses, the admitting team, and the transport team. Factors responsible for prolonged ABT were identified as unawareness about the concept of ABT, and delay in inpatient bed assignment, transportation, and nursing handoffs. Monthly PDSA cycles were started to address these barriers in Jan 2024. Interventions include circulating mass awareness emails, awareness sessions with pediatric and ED residents, workflow changes to ensure efficient bed assignment, partnership with the transport team, simultaneous nurses and resident signouts, and need-based assignment of IPU nurses.

Results: We are presenting preliminary results of our QI after the first two interventions. After PDSA#1 (circulating mass awareness email) in Jan 24, no significant change was noted in ABT. After PDSA#2 (awareness sessions for pediatric and ED residents) in Feb 24, the ABT was 154 minutes (6% reduction). PDSA cycle 3 is currently ongoing which involves changing bed assignment workflow where inpatient nurses will assign beds rather than the admitting team. PDSA 4 and 5 will target transportation and nursing handoff delays, respectively.

Conclusion: A multidisciplinary approach involving several key stakeholders is needed to reduce ABT.