

## **D12**

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### **Improving Asthma Control in Pediatric Patients by Including an Asthma Action Plan: A Quality Improvement Project**

**Background:** Asthma is a condition characterized by chronic inflammation in the airways that causes recurrent episodes of wheezing and breathlessness, and is a cause of morbidity and mortality. Asthma action plans (AAP) are a tool to assist patients and parents control asthma by outlining the medications used, recognize exacerbations, and identify signs of when to seek help. Previous studies have showed that using AAPs have increased patient's knowledge and decreased hospitalizations. Baseline data showed that 18% of pediatric patients were receiving the AAP in the inpatient unit as part of their discharge. A quality improvement project was initiated to improve the inclusion of an AAP to their discharge instructions.

**Objective:** To improve asthma control in pediatric patients aged 2-21 years by including an AAP from 18% to 80% of admitted patients with the primary diagnosis of asthma in 6 months.

**Design/methods:** The Electronic Medical Record (EMR) at our hospital can attach the AAP to a patient's discharge instructions. A series of interventions with multiple Plan-Do-Study-Act (PDSA) cycles were conducted. The first was 1:1 education with the residents in the inpatient unit. The second was placing a poster in the resident workroom; the third was sending a mass email to the residents informing them on how to include the AAP to the patients' discharge instructions. The EMR of the patients are being periodically reviewed. The results will be interpreted in a run chart.

**Results:** The first intervention, with resident education yielded a significant increase in AAP completion to 75%. With the introduction of PDSA 2 as a displayed poster in the resident workroom, we observed a slight decrease in AAP completion. At PDSA 3 cycle, we reached steady state with the AAP completion above 80%.

**Conclusion(s):** A series of successfully planned interventions increased the completion of AAPs in children with a diagnosis of asthma from 20% to above 80% in an urban safety net hospital.