## **D19** Julia Felsenstein

Advisor(s): Janelle Singh

## Implementation of asthma action plans upon discharge from an inpatient pediatric ward in Georgetown, Guyana

Introduction: Asthma is the most common chronic disease of childhood and affects nearly 300 million people worldwide. An asthma action plan (AAP) is a set of instructions given to a patient's caregiver that outlines daily disease management and what to do in the case of an exacerbation. While the use of AAPs is recommended by international asthma guidelines, they have not been implemented at Georgetown Public Hospital Corporation (GPHC), a national referral hospital in Guyana, where acute asthma is in the top five reasons for pediatric medical ward admission. For patients aged 3-12 years with asthma, reactive airway disease, or bronchospasm being discharged from GPHC with inhaled asthma medications, we aim to increase the median monthly distribution rate of AAPs from zero to greater than 90% within 2 years.

Methods: Using an AAP and medications at bedside, pediatric residents at GPHC provided education to caregivers of patients admitted to the ward with a diagnosis of asthma, reactive airway disease or bronchospasm who were being discharged on inhaled asthma medications. Residents kept a log of AAPs distributed and authors compared this to the ward's admission log to determine the distribution rate. The data was analyzed using a run chart and quality improvement (QI) tools were applied to identify change ideas for PDSA cycles.

Results: 13 months of data have been collected so far. The AAP distribution rate has increased from a baseline of 0% to a median of 60% at 13 months, peaking at 93% in month 4 and decreasing when the resident team changed every 3 months, when the local project co-lead was not on the ward, or when there was limited staffing. Change ideas that were implemented included: mentioning asthma education as part of the plan on rounds and in documentation, as well as educating ward interns on AAP use when they start their rotation.

Conclusion: A collaborative QI approach can be used to implement AAPs in a low-resource inpatient pediatric setting.