

# Implementation of an Electronic Asthma Action Plan in a Pediatric Pulmonary Clinic

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## Problem Statement

- The American Academy of Pediatrics and the Global Initiative for Asthma (GINA) promote electronic Asthma Action Plans (eAAPs) as a necessity in asthma management
- Electronic AAP's (eAAPs) can be integrated into a patient's electronic health record to be personalized for their needs
- Published evidence supports the use of eAAPs for improving asthma education and overall asthma control

## Purpose of Project/ Goals

**Purpose Statement:** To implement routine usage of eAAPs for all asthma patients within an outpatient pediatric pulmonary clinic

### Process Goals:

100% of patients with asthma will receive a personalized eAAP within their after-visit summary (AVS)

### Outcome Goals:

- 100% of asthmatic patients will have no asthma related ER or Urgent Care visits
- 100% of asthmatic patients will not require oral steroid use

## Methods

### Setting:

- An outpatient pediatric pulmonary clinic

### Population:

- Pediatric patients between the ages of 0-21 with known asthma diagnosis

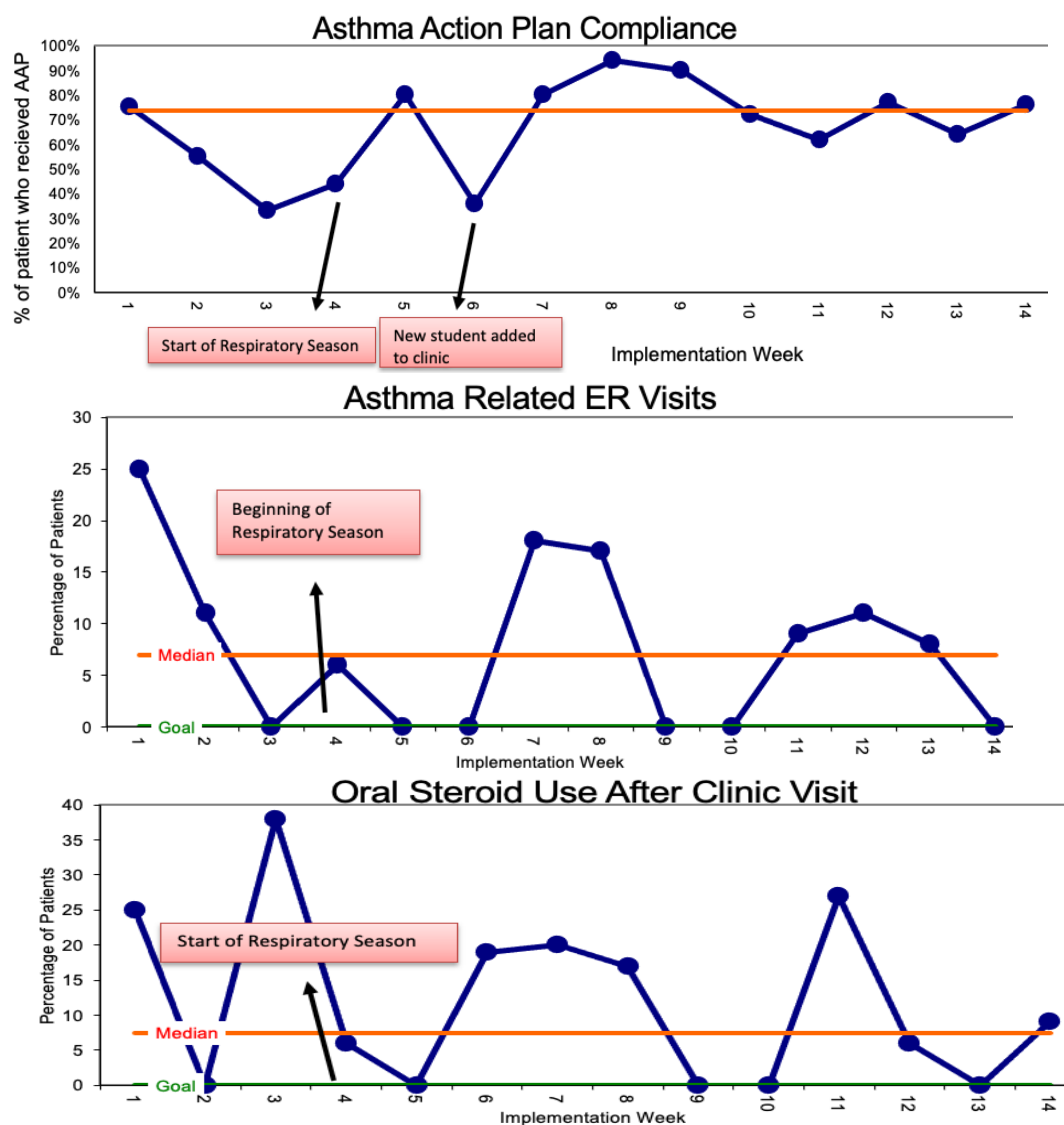
### Intervention:

- An eAAP smart phrase was created based on provider preferences
- Providers at this clinic personalized this smart phrase for the patient and included it in their AVS which was then printed and given to the patient and family at the end of the clinic visit

### Implementation Strategies:

- Weekly data collection via electronic health record chart audits
- The AVS with the eAAP was printed and given to the patient and family at the end of the clinic visit

## Results



154  
asthma  
patients were  
seen in clinic

eAAP  
smartphrase  
compliance  
was 67%

7.5% of  
patients had  
an ER visit  
within 6 weeks  
following their  
clinic visit

11% of patients  
required oral  
steroid use  
within 6 weeks  
following their  
clinic visit

## Discussion

- eAAP usage increased by 53% compared to the previous year
- Outcome goals of decreasing asthma related ER visits and oral steroid use were not met

### Process measures:

- Weekly rates of eAAP usage increased from 0-33% pre-implementation to 33-95% post implementation

### Outcome measures:

- Reported asthma-related ER or urgent care visits ranged from 0-25%
- Reported oral steroid use after clinic visit ranged from 0-38%

### Limitations

- Results of this QI project are not generalizable to other healthcare facilities
- Limited time frame of 14 weeks for implementation
- Respiratory season limited provider time with patients due to an increase in overall practice visits
- eAAP could not be integrated into EHR for compliance and tracking

## Conclusions

- Implementation of the eAAP smartphrase was successful in increasing the number of patients who received eAAP's
- Oral steroid use and ER visits showed no trends to be statistically significant

### Next Steps

- Disseminate eAAP smartphrase into the other three satellite clinics within this organization and into the allergy clinics

### Sustainability

- Designate a super user to educate medical and NP students rotating through these clinics

## References

Scan for  
bibliography and  
acknowledgments

