



Improving Asthma H&Ps at Norton Children's Hospital

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Introduction

- Asthma is a chronic inflammatory respiratory condition affecting 8.3% of children in the United States¹
- Poor asthma control frequently results in ED visits and hospital admissions²
- Asthma can be well controlled if practitioners obtain a complete patient history, including identifying barriers to care and triggers for asthma
- Use of a specific and structured H&P template for asthma was shown to be associated with more complete and less variable documentation of important history elements³
- Prior to this study, there was no standardized asthma template used by pediatric residents for hospital admission at Norton Children's Hospital

Methods

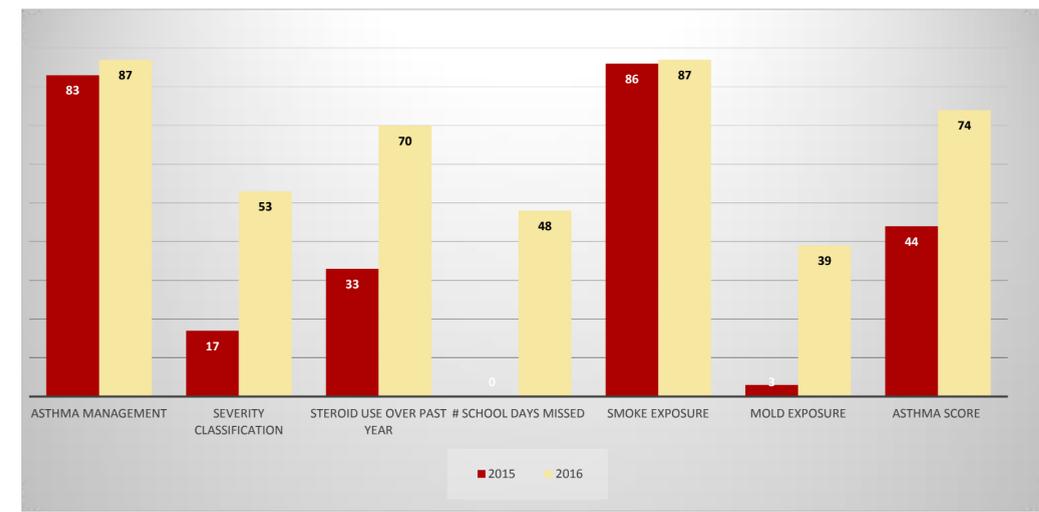
- An asthma specific H&P template was created by the Division of Pediatric Pulmonology and reviewed by the NCH Asthma Task Force
- It was released to pediatric wards teams in February 2016
- The template included questions about severity, control, and other key elements suggested by the NHLBI EPR-3 asthma guidelines
- A chart review was done of asthma admissions in September 2015 and September 2016 to analyze documentation of these elements pre- and post-template
- Specific elements of the history reviewed for this study included steroid use, school days missed, exposure to smoke and mold, and asthma score
- Fischer's exact test was used to determine if there was a statistically significant difference in documentation between the years

Prior Asthma Management:
 Current controller regimen? {SGBCONTROLLER:27492}
 Patient/Caregiver reported adherence with controller: {sgbNo Current Controller:
 Prior hospitalizations for asthma? {sgblistnumbers:27494} QVAR 40mcg (NUMBER 1-4:20983) inhalations (Daily Control Freq:25210)
 Visits to ER or urgent care center in past year (excluding PICU admissions: {sgblistnumbers:27494::"None"}) QVAR 80mcg (NUMBER 1-4:20983) inhalations (Daily Control Freq:25210)
 Intubations: {sgblistnumbers:27494::"None"} Pulmicort 0.25mg nebulized (Daily Control Freq:25210)
 Followed by Pulmonologist or Allergist? {sgbnumbers:27497} Pulmicort 0.5mg nebulized (Daily Control Freq:25210)
 Pulmicort 1mg nebulized (Daily Control Freq:25210)
 Prior Allergy Testing? {sgbALLERGYtesting:27496::"None"} Duleria 100mcg/5mcg 2 inhalations BID
 Duleria 200mcg/5mcg 2 inhalations BID
 Symbicort 160mcg/4.5mcg 2 inhalations BID
 Symbicort 80mcg/4.5mcg 2 inhalations BID
Severity and Control Assessment:
 Symptoms: {sgbDAYTIMESymptoms:27565}
 Nighttime Awakenings: (Nighttime awakening frequency:27566) Singulair 4mg daily
 Short acting bronchodilator use: {sgbSABAuse:27497} Singulair 5mg daily
 Activity Limitation: {sgbACTIVITYlimitations:27498} Singulair 10mg daily
 Oral steroid courses over the past year? {sgblistnumbers:27499} Theophylline
 Number of school days missed in past year due to asthma****

Severity: Based on 2007 NHLBI Guidelines, patient's severity classification is: {sgbSEVERITY:27501}

Control: At baseline, patient is {sgbCONTROLLED:27511}.

Results



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- In 2016, the H&P template was used in 53% of encounters
- Documentation improved post-template implementation in every element analyzed
- The categories with the most significant increases were number of school days missed and mold exposure (P<0.0001)
- Documentation of severity classification (p=0.008) and steroid use (p=0.0084) also significantly increased
- There was no statistically significant change in documentation of asthma management or smoke exposure

Discussion

Conclusions

- Implementation of an asthma specific template for inpatient H&Ps leads to improved documentation
- A template will also help practitioners meet the requirements for ICD-10 coding
- Further study is needed to see if improved documentation results in changes to patient care or outcomes

References

- Control CfD. Asthma Surveillance Data. 2013; <http://www.cdc.gov/asthma/asthmadata.htm>. Accessed October 22, 2015.
- O'Byrne PM, Pedersen S, Schatz M, et al. The poorly explored impact of uncontrolled asthma. Chest. 2013;143(2):511-523.
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Disclosure

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