Connecticut Children's CLASP Guideline:
Asthma *Easy Breathing©*

INTRODUCTION

Asthma is the most common chronic disease of childhood. It results in airway inflammation and hyper-reactivity, presenting with cough, wheezing, shortness of breath and/or chest tightness. The diagnosis of asthma can be challenging as spirometry with bronchodilator response remains the gold standard of diagnosis, but many children are unable to perform this test adequately. In addition, there are several different asthma phenotypes including cough variant, allergic, etc.

Other diagnoses that can mimic asthma include:

- Post-nasal drip syndrome (allergic asthma)
- Sinusitis
- Vocal cord dysfunction
- Gastro-esophageal reflux
- Broncho/tracheomalacia
- Chronic microaspiration
- Immune deficiency
- In many cases, a combination of these diagnoses are present

INITIAL EVALUATION AND MANAGEMENT

*CT Children's strongly recommends the use of **Easy Breathing©**, a (free) asthma management program for primary care clinicians. The program consists of 5 elements to aid in:*

1) *diagnosing asthma and assessing triggers*
2) *determining severity*
3) *treatment guide based on severity*
4) *creating severity-appropriate treatment plans*
5) *assessing asthma control*

TARGETED HISTORY & PHYSICAL EXAM:

Perform targeted history, including nighttime and daytime symptoms, albuterol use for symptom control, asthma interference with normal activity, exacerbations requiring systemic steroids

- Perform targeted physical exam
- Perform spirometry for children over 6 years of age at diagnosis and/or if asthma is poorly controlled (if in-office spirometry is not available, refer to CT Children's Pulmonary Function Lab: 860-545-9447)

INITIAL MANAGEMENT:

- Determine chronic asthma severity and level of control and then create or update asthma home treatment plan to match severity of disease
  - Any persistent disease should be treated with a daily inhaled corticosteroid (ICS) or ICS/LABA combination therapy
  - A written asthma treatment plan should be provided to patient and family
- Provide education regarding the proper inhaler technique and avoidance of environmental triggers ***(see Family Handouts in English and Spanish, and this link for infant mask and spacer use)***
- For patients with poor control and/or severe disease, screen for behavioral health concerns (i.e. depression, anxiety, ADHD)
- Assess if family has any unmet needs (**See Provider Handout: Center for Care Coordination Screener)** and refer to Center for Care Coordination via One Call (1-833-PEDS-NOW or 1-833-733-7669)

WHEN TO REFER	**ROUTINE REFERRAL:** Division of Pulmonary and Sleep Medicine ▪ Any child who is classified as severe persistent ▪ If asthma remains difficult to control despite appropriate therapy *(See APPENDIX A: Algorithm)* ▪ If signs and symptoms are atypical ▪ If there are concerns related to the differential diagnosis ▪ If additional education is desired **URGENT REFERRAL:** Emergency Department ▪ Respiratory distress ▪ Hypoxemia
HOW TO REFER	**Referral to Division of Pulmonary and Sleep Medicine via CT Children's One Call Access Center** **Phone:** 833.733.7669 **Fax:** 833.226.2329 Appointments available in Hartford, Farmington, Glastonbury and Shelton ***Information to be included with the referral:*** ▪ Any pertinent clinic notes, including growth chart and current asthma treatment plan ▪ Any pertinent lab results and spirometry results (if done) ▪ Any chest radiographs or other chest imaging, if done (not routinely indicated)
WHAT TO EXPECT	**What to expect from CT Children's Pulmonary visit:** ▪ Spirometry for children ≥ 6 years ▪ Asthma education regarding asthma symptoms and triggers, environmental trigger avoidance, and inhaler technique ▪ Allergy skin testing or blood work for specific IgE, if appropriate ▪ Evaluation for comorbid/complicating conditions (blood work for immune evaluation or allergies, sweat test, etc.) ▪ Referral for a home visitation program, if appropriate

APPENDIX A: ALGORITHM