Asthma

**Definition:**
Reversible airway obstruction manifesting with symptoms of cough, wheezing, and dyspnea which responds to beta-agonists and corticosteroids.

**History**
- History of recurrent cough, especially at night or with exercise, or persistent cough after illness, as well as wheezing, dyspnea, and chest tightness

**Examination/Evaluation**
- Acute exacerbation: wheezing, chest retractions, prolonged expiratory phase, cough, inability to speak in full sentences
- Studies:
  - Air flow obstruction documented by pulmonary function tests/spirometry
  - Hyperinflation on chest radiograph

**Management**
- Acute exacerbation
  - Administered inhaled beta-agonists every 20 minutes (or continuous depending on severity) until symptoms abate; utilize supplemental oxygen to keep saturations >95%.
  - Consider combined ipratropium bromide and albuterol
  - Consider systemic steroids
  - Consider magnesium sulfate, terbutaline, heliox,
  - Consider more definite airway for respiratory collapse
- Ongoing management
  - Intermittent asthma and exercise induced asthma: PRN beta-agonists; pre-treat before exercise 10 minutes before with 2 puffs of inhaled short acting beta agonists
  - Persistent asthma: initiate a controller medication
    - Leukotriene modifiers
    - Inhaled corticosteroids
    - Combined inhaled corticosteroid with long acting beta agonists

**Indications for referral**
- If diagnosis is unclear, consider PULMONARY referral for methacholine challenge and other pulmonary testing (laryngoscope, bronchoscopy) that Allergy clinic is unable to perform
  - WHASC is able to perform methacholine challenge however SAMMC is not
- Referral is indicated for patients with moderate to severe persistent asthma in whom an allergen trigger is suspected or who are uncontrolled and Xolair is being considered
UNCONTROLLED asthmatics are not candidates for allergen immunotherapy because of the risk of fatal or near-fatal reactions in this population.

In order to initiate allergen immunotherapy (“allergy shots”), asthma must be well controlled FIRST.

There are very few consults that warrant ASAP or Urgent status. If this is entered by the referring provider, it will be downgraded to Routine unless that provider calls and directly speaks with an allergist either at SAMMC or WHASC and it is confirmed as an urgent consult.