## Diagnosis/Definition:

Asthma is a chronic inflammatory disorder of the airways. This inflammation results in bronchial hyperactivity, airway inflammation, and airways narrowing. Asthma is characterized by wheezing, breathlessness, chest tightness, and coughing. Multiple factors may elicit or exacerbate symptoms, including allergies, infections, irritant exposures, exercise gastroesophageal reflux and certain medications.

## Initial Diagnosis and Management:

A reliable history of recurrent dyspnea, wheezing, chest tightness, or nocturnal cough. See National Heart, Lung and Blood Institute Report 2 (NHLBI Guidelines) for more details. A thorough history physical exam, chest x-ray should rule out other common reasons for symptoms such as cardiac disease or other pulmonary disease. Worsening of symptoms in association with specific allergies, exercise or viral upper respiratory tract infections. Obstructive lung disease demonstrated on spirometry with 200cc or 12% reversibility with therapy or spontaneously. Classify asthma to severity: mild intermittent, mild, moderate, or severe persistent. A methacholine or other broncho provocation challenge test may be useful in establishing the diagnosis of asthma in patient with a present chronic cough. Management of asthma should be per the NHLBI and the MAMC Asthma Clinical Pathways. Inhaled steroids are the mainstay of treatment for patients with moderate or severe persistent asthma. Skin prick testing for allergens should be considered in patients with persistent asthma symptoms and an exposure history suggesting specific triggers. All patients with asthma should receive asthma education as well as written asthma plan. Patient's requirement Advair or Serevent must be seen in pulmonary clinic for refill at 6 month intervals. Test prior to referral, 1. spirometry with and without bronchochilaler challenge.

## Ongoing Management and Objectives:

Patients should be treated: 1) Have good exercise tolerance; 2) Infrequent episodes of wheezing; 3) Nocturnal awakenings with dyspnea and 4) Near normal pulmonary function tests/PEFRs. An established asthma plan which results in good control of patient's symptoms.

## Indications for Specialty Care Referral:

Any patient who has severe persistent asthma and/or one of the following risk factors: a) History of respiratory failure requiring an ICU admission (especially if mechanical ventilation was required); b) Chronic or frequent use of oral corticosteroid bursts (2/yr); c) has had more than two emergency department visits per year to treat acute asthma. Any patient whose skin prick testing for allergens is deemed necessary. Patients with moderate persistent asthma who are not well controlled on 1600 mcg/day (16 puffs) of Azmacort or 880 mcg/day of fluticasone (Flovent). Patient may be referred to either the Allergy or Pulmonary Service. Patients with a suspected strong allergy component should be preferentially referred to the Allergy Service.

## Test(s) to Prepare for Consult:

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## Criteria for Return to Primary Care:

Upon completion of allergy evaluation immunotherapy, if this has been prescribed, the patient is no longer considered to be a “high risk” asthmatic. The patient is no longer considered to have severe persistent asthma. The patient’s asthma is in good control, and there is an established management plan.

## Revision History:

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## Disclaimer:

Adherence to these guidelines will not ensure successful treatment in every situation. Further, these guidelines should not be considered inclusive of all accepted methods of care or exclusive of other methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the appropriateness of any specific procedure, therapy, or referral must be made by the physician/provider in light of all circumstances presented by an individual patient.