### **CLINICAL PATHWAY:**

# **Emergency Department Asthma**

THIS PATHWAY SERVES AS A GUIDE AND DOES NOT REPLACE CLINICAL

The following tests and treatments are NOT routinely indicated for the treatment of asthma

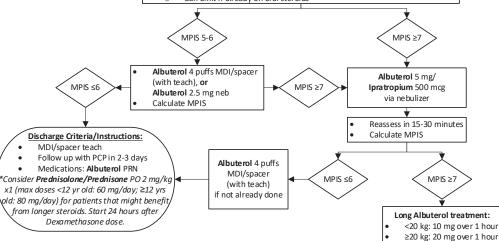
- Chest x-rays (features typically associated with positive chest x-ray findings include fever, no family history of asthma, and localized lung findings on physical exam)
- Antibiotics (unless diagnosed with a bacterial infection)

Inclusion Criteria: ≥1 years old; previous diagnosis of asthma or ≥2 previous episodes of wheezing; MPIS ≥5; patients who were given epinephrine in the ambulance or at an outlying hospital; patients with history of prior ICU admissions who present more than once to the Emergency Department during an exacerbation

clusion Criteria: <1 years old; primary diagnosis of bronchiolitis or pneumonia (see Bronchiolitis Clinical Pathw Community Acquired Pneumonia Clinical Pathway); chronic cardiac or lung disease other than asthma

#### Initial Assessment (MPIS ≥5):

- Dexamethasone 0.6 mg/kg (max 16 mg) PO/IM
- Alternatives per initial provider's discretion:
  - Prednisolone/prednisone PO 2 mg/kg x1 (max doses <12 yr old: 60 mg/day; ≥12 yrs old: 80 mg/day), or
  - Methylprednisolone IV 2 mg/kg x1 (max 60 mg/dose)
  - Can omit if already on oral steroids



## for High Risk Populations:

Special Considerations

#### Admissions recommended for the following patients, regardless of their current MPIS score:

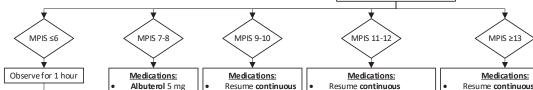
- Patients who were given epinephrine in the ambulance or at an outlying hospital
- Patients with a history of prior ICU admissions who present more than once to the ED during an exacerbation

#### Admission Location:

- Current MPIS ≤12:
- Current MPIS ≥13:

#### Management:

- Steroids should be started regardless of current MPIS
- Bronchodilator therapy per pathway recommendations



### MPIS ≤6 MPIS ≥7

Reass ess

Calculate MPIS

#### Discharge Criteria and Instructions:

- MDI/spacer teach F/u with PCP in 2-3 days Medications: Albuterol q4hr
- \*Consider **Prednisolone/** Prednisone PO 2 mg/kg x1 (max doses <12 yr old: 60 mg/day; ≥12 yrs old: 80 mg/day) for patients that might benefit from longer steroids. Start 24 hours after

Dexamethasone dose.

- neb q2hr ED provider to place order . "Initiate Albuterol wean'
- RT will rescore MPIS and speak with provider to place appropriate Albuterol order
- Nursing: Place PIV if inadequate oral intake, or unable to take oral steroids

#### Resume continuous Albuterol at

- previous dose ED provider to place order "Initiate
- Albuterol wean" RT will rescore MPIS and speak with provider to place appropriate Albuterol order

#### Nursing: Place PIV if

inadequate oral intake, or unable to take oral steroids

Albuterol at previous dose ED provider to place order

Reassess in 15-30 minutes Calculate MPIS

- "Initiate Albuterol wean" RT will rescore MPIS and speak with provider to place appropriate Albuterol order Consider starting IVFs
- Consider methylprednisolone load 2 mg/kg x1 (max 60 mg/ dose)
- Consider magnesium sulfate 50 mg/kg (max 2 g) over 20 minutes

#### Nursing: Place PIV (if not done)

- Resume continuous Albuterol at 20 mg/hr Consider additional therapies per PICU consultation (e.g, methylprednisolone load 2 mg/kg x1 IV with max of 60 mg/dose; magnesium sulfate: terbutaline)
  - Consider starting IVFs Nursing:

#### Place PIV (if not done)

Consults: Consult PICU attending in ED: observe in ED for further improvement vs admission

to PICU

Admission: - Admit to MS floor or PICU in discussion with PHM and PICU attending

If to be admitted to MS floor, ED provider to place order "Initiate Albuterol wean". RT will rescore MPIS and speak with provider to place appropriate Albuterol order.

#### Admission:

- Admit to MS (PHM or Pulmonary if patient is known to them)
- If symptomatic or concern for COVID-19 infection, send COVID-19 testing per COVID-19 ED and Inpatient Clinical Pathway
- See Inpatient Asthma Pathway

#### At time of transfer:

- Re-assess patient and calculate MPIS
- Inform attending and admitting team if MPIS is increasing
- Hold transfer if MPIS ≥13 and consider PICU consult