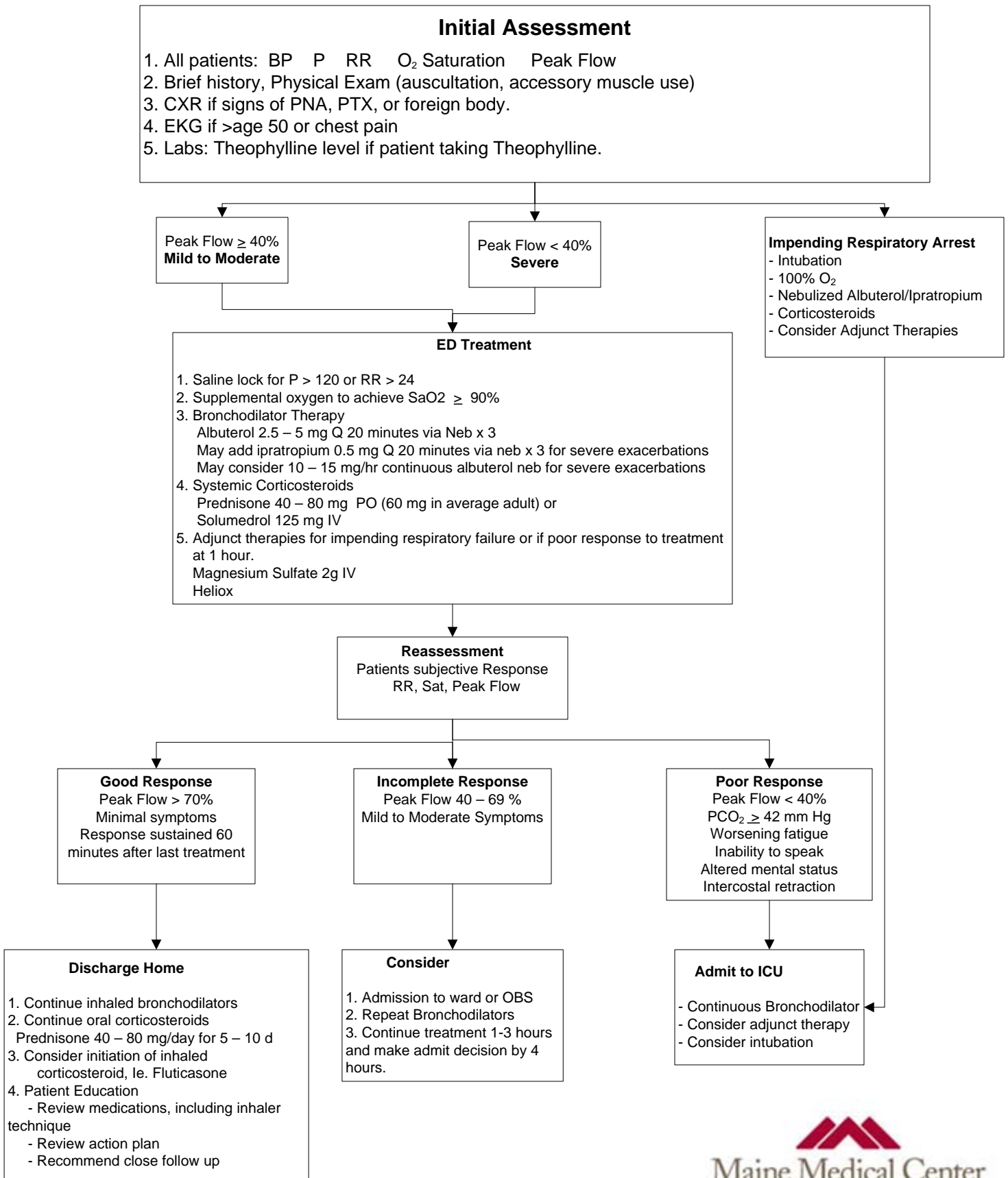


MMC Asthma Exacerbation Guideline



This guideline was ratified by the emergency department faculty at Maine Medical Center in June 2009. It reflects our expert opinion and is not necessarily applicable to all institutions. It is intended to be a reference for clinicians caring for patients and is not intended to replace providers' clinical judgment.

MMC EM Guideline Evidence

Guideline Topic: Asthma
 Author: Megan Fix
 Date of Creation: 2.24.09 Sugg Update: 2010
 Search Criteria: Asthma, acute exacerbations

Databases: Pubmed, National Guidelines Clearinghouse
 Key Guidelines (Dates): NAEPP 2007

Recommendation	Source	Classification	Level of Evidence
1 <u>Oxygen to relieve hypoxemia</u> 1) National Asthma Education and Prevention Program Expert Panel Report 2: Guidelines for the Diagnosis and Management of Asthma. National Institutes of Health: National Heart, Lung, and Blood Institute, July 1997; NIH Publication No. 97-4051. 2) Expert Panel Report 3 (EPR-3): Guidelines for the Diagnosis and Management of Asthma Summary Report 2007. J Allergy Clin Immunol, 2007. 120(5 Suppl): p. S94-138	NAEPP 1997 ¹	RCTs	A
2 <u>SABA to relieve airflow obstruction; ipratropium in severe exaserbations</u>	NAEPP 2007 ²	RCTs	A
3 <u>Systemic corticosteroids to decrease inflammation</u>	NAEPP 2007	RCTs	A
4 <u>Consider adjunct treatments (IV Mag; Heliox) in severe exaservations</u>	NAEPP 2007	RCTs limited data	B
5 <u>Monitoring response to therapy with serial measurements of lung function</u>	NAEPP 2007	RCTs limited data	B
6 <u>Prevent relapse by 1) referral to follow up 2) ED asthma discharge plan 3) Re</u>	NAEPP 2007	RCTs limited data	B
7 <u>In severe exaserbations PEF provides little additional info</u>	NAEPP 2007	Panel consensus	D
8 <u>Pulse oximetry indicated for pts in severe distress or PEF <40</u>	NAEPP 2007	RCTs limited data	B
9 <u>Levalbuterol may be used as SABA</u>	NAEPP 2007	RCTs	A
10 <u>PEF or FEV1 should be obtained on arrival and 30-60 min after treatment</u>	NAEPP 2007	RCTs limited data	B
11 <u>Any FEV1 or PEF value <25 percent of predicted that improves by <10 perce</u>	NAEPP 2007	Observational studies	C
12 <u>The following are not recommended methylxanthines</u>	NAEPP 2007	RCTs	A
13 <u>antibiotics (unless comorbid conditions)</u>	NAEPP 2007	RCTs limited data	B
14 <u>chest physical therapy</u>	NAEPP 2007	Panel consensus	D
15 <u>mucoytics</u>	NAEPP 2007	Observational studies	C
16 <u>sedation</u>	NAEPP 2007	Panel consensus	D
17 <u>Other adjunct therapies to avoid intubation include intravenous beta2-agonists, intravenous leukotriene receptor antagonists (LTRAs), noninvasive ventilation; insufficient data are available to make recommendations regarding these possible adjunct therapies</u>	NAEPP 2007	Panel consensus	D
18 <u>Patients given systemic corticosteroids should continue oral systemic corticosteroids for 3 to 10</u>	NAEPP 2007	RCTs	A
19 <u>Consider initiating an ICS at discharge, in addition to oral systemic corticosteroids</u>	NAEPP 2007	RCTs limited data	B
20 <u>Oral prednisone is equivalent to IV methylprednisolone</u>	NAEPP 1997	RCTs	A