

## Appendix A: Assessment Starting at Triage

**Inclusion Criteria:** Children ages 1 year of age to 17 years of age less 1 day\* Presenting with wheezing, or respiratory distress, **AND**

- Diagnosed to have asthma, **OR**
- Treated 2 times prior with a bronchodilator for wheezing

*\*While children less than 1 year of age with their first known episode of wheeze should not be routinely treated as a part of the pathway, treating physicians may choose to include these children in the pathway.*

### Inquire specifically about the:

- Duration and nature of symptoms
- Treatments used-reliever, preventer (number of puffs used at home and frequency)
- Trigger factors
- Previous admissions or similar presentations

### Assess:

- Level of Consciousness
- Respiratory Rate, Heart Rate, Blood Pressure, Temperature, Oxygen Saturation on Room Air
- PRAM score

### Treatment:

- Initiate treatment based on severity as determined by PRAM score (mild and moderate pathways may be nurse initiated in known asthmatics following BCCNP limits and conditions)
- Older children may present with a lower PRAM score despite having a low FEV1 (Forced expiratory volume).

Consider supplementing the PRAM score with objective markers of airway obstruction such as peak-flow or spirometry

### Dose References

#### salbutamol:

**Less than 20 kgs:** 5 puffs by Metered-Dose Inhaler (MDI) and Spacer Or 2.5 mg by nebulizer

**20 kgs or Greater:** 10 puffs by MDI and Spacer Or 5 mg by nebulizer

#### ipratropium:

**Less than 20 kgs:** 3 puffs by MDI Spacer Or 250 mcg by nebulizer

**20 kgs or Greater:** 6 puffs by MDI and Spacer Or 500 mcg by nebulizer

#### dexamethasone:

0.3 to 0.6 mg/kg/dose (max dose 16 mg per dose) PO daily x 1-2 days

#### prednisone/prednisolone:

1-2 mg/kg/dose (max dose 60 mg per dose) PO daily x 5 days

#### methylprednisolone:

1 mg/kg/dose (max dose 60 mg per dose) IV q 6 hours

#### magnesium sulfate:

40 to 50 mg/kg/dose (max dose 2 g per dose) IV x 1 dose over 20 minutes

**\*\*Avoid in children with neuromuscular disease**

#### sodium chloride:

0.9% 20 mL/kg bolus IV (over 15 to 30 minutes)

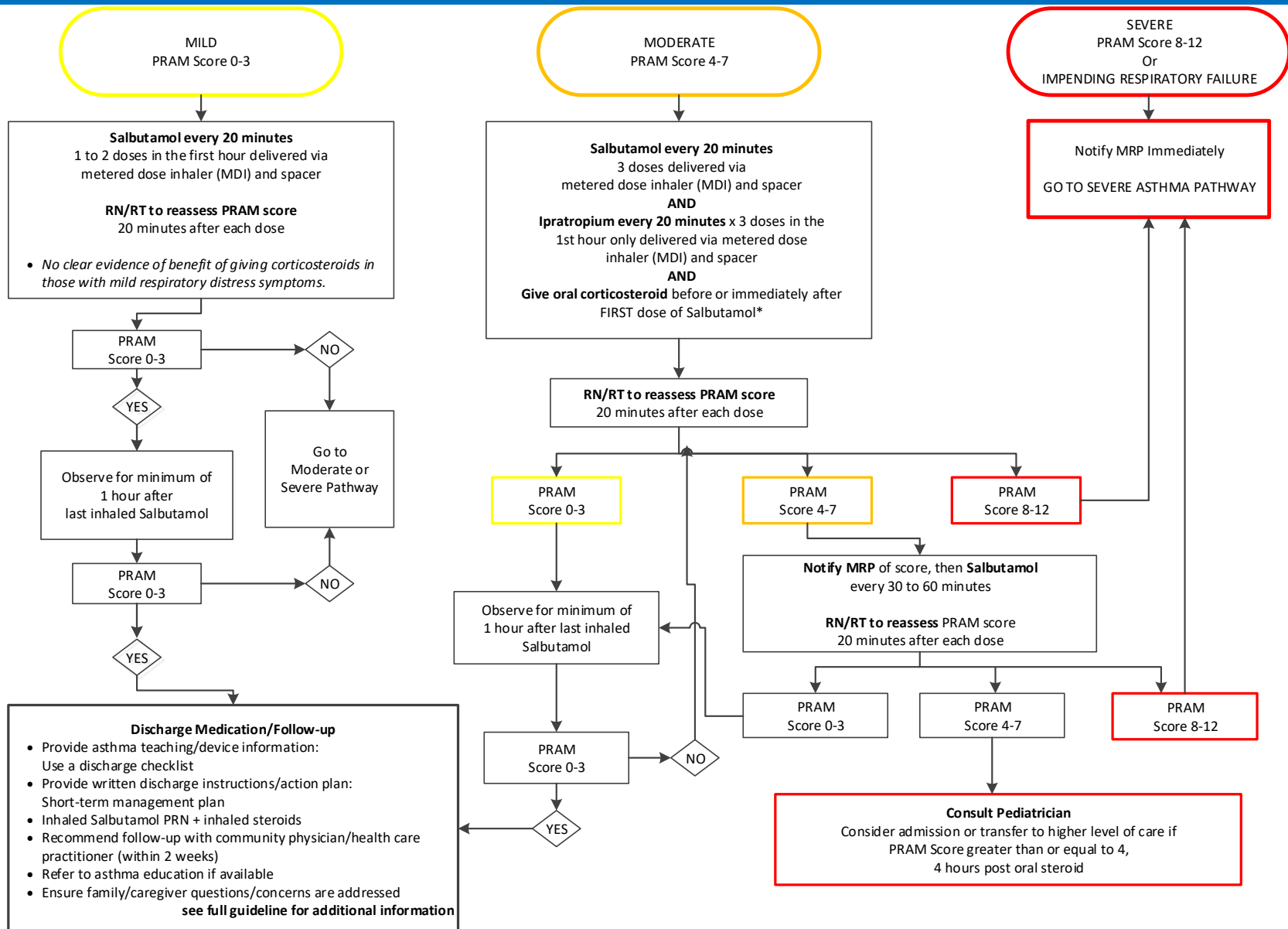
**Asthma Clinical Score (PRAM): Mild, Moderate, Severe or Impending Respiratory Failure**

Signs	0	1	2	3
Suprasternal Retractions	Absent		Present	
Scalene Muscle Contractions	Absent		Present	
Wheezing	Absent	Expiratory only	Inspiratory and expiratory	Audible without stethoscope/silent chest with minimal air entry
Air entry/Breath Sounds Intensity	Normal	Decreased at bases	Widespread decrease	Absent/minimal
Oxygen saturation On room air	Greater than or equal to 95%	92-94%	Less than 92%	

Severity Classification	PRAM Clinical Score
Mild	0-3
Moderate	4-7
Severe	8-12
Impending Respiratory Failure	Regardless of score, presence of lethargy, cyanosis, decreasing respiratory effort, and/or rising CO <sub>2</sub>

**Suprasternal Retractions:** Notch seen above the clavicle and sternum-may appear to sink in with each breath. May cause an involuntary shoulder shrug in small children.

**Scalene Muscle Contractions:** The scalenes are deep cervical muscles located in the floor of the lateral aspect of the neck. Scalene contraction cannot be seen. This is a palpable assessment. Occurs in about 10% of all patients – only those with severe asthma exacerbations.



\*Algorithm Revised September 2023

