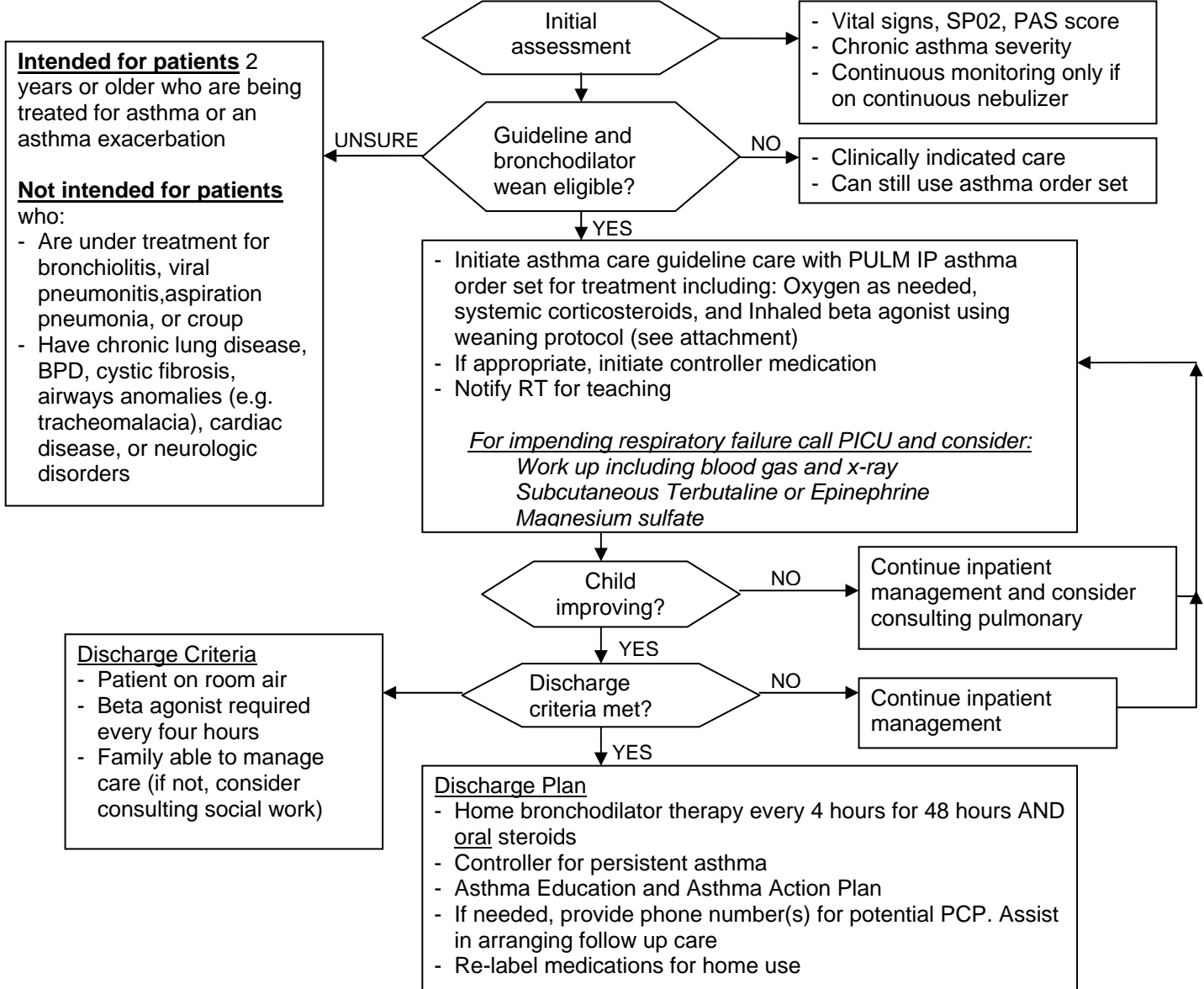


# The Children's Hospital, Colorado Inpatient Asthma Clinical Care Guideline

**Initial treatment:** Three back to back treatments in the ED will be the only time Atrovent is administered. Give combination Atrovent 0.5 mg nebulized with Albuterol (weight specific dosing) for a total of up to three initial treatments. Evaluate between treatments.

## **CLINICAL CARE GUIDELINE, ASTHMA: INPATIENT**



### Pediatric Asthma Score (PAS)

Score	1	2	3
<b>Respiratory rate</b>			
2-3 years	34 or less	35 – 39	40 or greater
4-5 years	30 or less	31 – 35	36 or greater
6-12 years	26 or less	27 – 30	31 or greater
older than 12 years	23 or less	24 – 27	28 or greater
<b>Oxygen requirements</b>	Greater than 90% on room air	85% to 90% on room air	Less than 85% on room air
<b>Auscultation</b>	Normal breath sounds to end-expiratory wheeze only	Expiratory wheezing	Inspiratory and expiratory wheezing to diminished breath sounds
<b>Retractions</b>	Zero to one site	Two sites	Three or more sites
<b>Dyspnea</b>	Speaks in sentences, coos and babbles	Speaks in partial sentences, short cry	Speaks in single words/short phrases/grunting

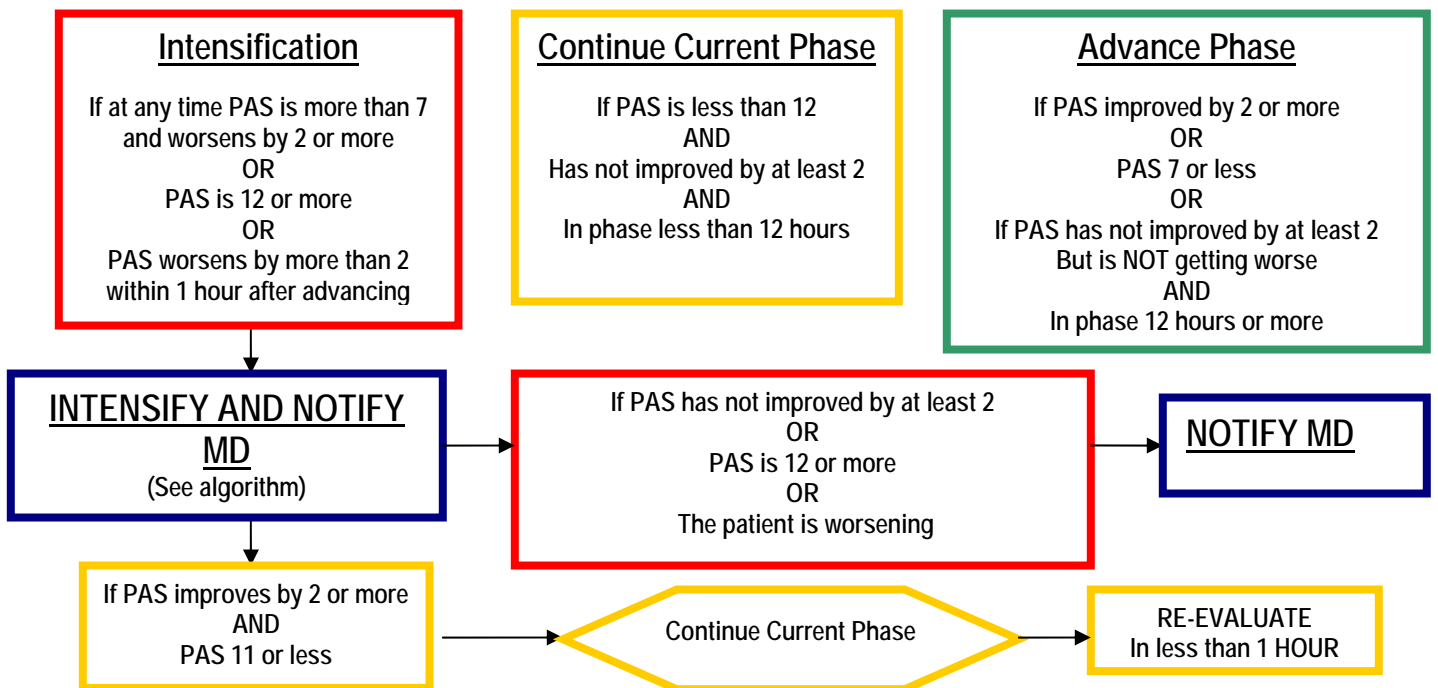
## The Children's Hospital, Colorado Inpatient Asthma Pathway

**Initial treatment:** Three back to back treatments in the ED will be the only time Atrovent is administered. Give combination Atrovent 0.5 mg nebulized with Albuterol (weight specific dosing) for a total of up to three initial treatments. Evaluate between treatments.

### Figures & Tables: Bronchodilator Weaning Protocol

PHASE 1	PHASE 2	PHASE 3	PHASE 4 Low Dose	INTENSIFICATION
Continuous Neb: <b>Albuterol</b> <u>Weight            Dose</u> 20 kg or more: 10 mg/hour Less than 20 kg: 7.5 mg/hour  **Patients requiring higher doses of continuous albuterol must be transferred to the PICU**	<b>Albuterol</b> every 2 hours via MDI/VHC <u>Weight            Dose</u> 20 kg or more: 8 puffs Less than 20 kg: 4 puffs  -OR- <b>Albuterol</b> every 2 hours via neb <u>Weight            Dose</u> 20 kg or more: 5 mg less than 20 kg: 2.5 mg	<b>Albuterol</b> every 3 hours via MDI/VHC <u>Weight            Dose</u> 20 kg or more: 8 puffs Less than 20 kg: 4 puffs  -OR- <b>Albuterol</b> every 3 hours via neb <u>Weight            Dose</u> 20 kg or more: 5 mg Less than 20 kg: 2.5 mg	<b>Albuterol</b> every 4 hours via MDI/VHC <u>Weight            Dose</u> 20 kg or more: 4 puffs Less than 20 kg: 2 puffs  -OR- <b>Albuterol</b> 2.5 mg every 4 hours via neb	<b>Albuterol</b> via nebulizer <u>times one</u> <u>Weight            Dose</u> More than 20kg: 10 mg Less than 20kg: 7.5 mg  -OR- <b>Albuterol</b> via MDI/VHC <u>Weight            Dose</u> More than 20kg: 10 puffs Less than 20kg: 6 puffs  Consider subcutaneous terbutaline 0.01mg/kg up to 0.3mg if intensifying while on continuous
Systemic Corticosteroids delivered every 12 hours at 1/mg/kg up to 80 mg/day. Peak flow per phase or when PAS changes by 2 (children 5 years or older)				

### Progression through the bronchodilator protocol



#### **TCH points of care:**

- No more than 2 doses of subcutaneous terbutaline can be given on the floor
- IV Magnesium bolus doses should be given in the PICU or the ED only
- Noninvasive ventilation can be used in the ED or the PICU only
- Asthma Action Plan should include: follow up physician and phone, asthma triggers, and the quick relief and controller medications that exactly match the discharge medications/scripts. Remember to re-label medications for discharge