RESPIRATORY ASSESSMENT AND MANAGEMENT PROTOCOL (RAMP)

Patients ≥ 1 year of age with asthma/wheezing excluding bronchiolitis, cystic fibrosis, trach pts, neuromuscular diseases & cardiac pts

Alert: Consider Fast Tracking Life Threatening Asthma Clinic Patients
Brief history & physical exam w/CRS
Monitor oxygen saturation and administer oxygen to maintain SpO2 ≥ 92% in asthma/wheezing patients

CRS ≤ 3
- Albuterol MDI w/valved holding chamber X 1 dose: <20 kg: 4 puffs; ≥ 20 kg: 6 puffs.
- Consider steroids

CRS 4-6
- Albuterol MDI w/valved holding chamber: < 20 kg: 8 puffs; ≥ 20 kg: 8 puffs Q 20 min PRN up to 3x.
- If no response after 1 dose ADD Ipratropium MDI/neb (may give up to 3 doses ipratropium).
- Start Steroids (if AFTER trial of Albuterol there is difficulty in administrating, may consider Neb)

CRS 7
- Albuterol MDI w/valved holding chamber: < 20 kg: 8 puffs; ≥ 20 kg: 8 puffs Q 20 min PRN up to 3x.
- If no response after 1 dose ADD Ipratropium MDI/neb (may give up to 3 doses ipratropium).
- Start steroids (if AFTER trial of Albuterol there is difficulty in administrating, may replace with Neb)
- If no improvement after 3rd treatment, notify physician immediately, place on continuous albuterol, give 3rd dose of ipratropium.
- In ED: monitor 1hr post treatment if clinically improving for potential d/c

Repeat CRS Assessment after initial therapies

CRS ≤ 3
- V/S stable and on room air
- Step down to discharge

CRS 4-6
- Admit to Hospital if from ED
- If requiring more than Q 2 h X 12 h admit to Intermediate Care & re-evaluate diagnosis
- Obtain order to increase strength of albuterol: < 20 kg: 6 puffs ≥ 20 kg: 8 puffs Q 2-3 h
- Add Ipratropium if not already given three doses, Continue Steroids

CRS 7
- Despite initial therapy
- Admit to Intermediate Care Unit (IMC) based on patient care requirements
- Add Ipratropium if not already given 3 doses
- Change steroid to IV
- Begin continuous Albuterol (may stay on continuous albuterol for up to 24hrs in IMC)

Repeat Assessment after Continued Therapies

CRS ≤ 3
- V/S stable and on room air
- Step down to discharge

CRS 4-6
- If in Intermediate Care, transfer to Floor Status
- Continue weaning until CRS < 3
- CRS remains 7
- No improvement or worsening
- Begin IV Magnesium Sulfate
- Continue continuous Albuterol
- Consider Pulmonary consult

Repeat Assessment after Continued Therapies

CRS ≤ 3
- V/S stable and on room air
- Step down to discharge

CRS 4-6
- If in Intermediate Care transfer to Floor Status
- Continue weaning until CRS < 3
- CRS remains 7
- No improvement or worsening
- Continue continuous Albuterol
- Continue IV corticosteroids
- Oxygen to keep SpO2 ≥ 92%

Discharge Home
- Continue Albuterol MDI treatment as per Asthma Action Plan
- Complete course of oral systemic corticosteroid
- Initiate or continue long-term control meds (escalate if necessary)
- Patient education
- Review medications including drug delivery technique
- Review written Asthma Action Plan
- Recommend dose medical follow-up including discharge visit recommendations with appropriate phone numbers
- Perform med reconciliation

Key Points
1. RT may increase frequency/dosage with physician notification.
2. Weaning can only occur during the current treatment interval

Ipratropium: 1-12yo: 0.25-0.5 mg neb
>12yo: 0.5 mg neb

Albuterol neb dosing:
- 4 puffs = 2.5 mg neb
- 8 puffs = 5 mg neb

Albuterol Weaning Regimen & Discharge Criteria
- Albuterol will be administered via MDI unless otherwise ordered by a clinician for CRS 3-6 and improving, V/S stable, and weaning from O2.
- Previous TX Dose (mean dose first): Wean To:
- Albuterol MDI < 20 kg: 6 puffs → 4 puffs → taper interval ≥ 20 kg: 8 puffs → 6 puffs → 4 puffs → taper interval
- Albuterol Neb < 20 kg: 2.5 mg MDI 4 puffs → taper interval
- ≥ 20 kg 5 mg MDI 6 puffs → 4 puffs → taper interval

Interval (mean after weaning dose): Wean To:
- Continuous Albuterol → Q2h
- *RT to notify MD
- RN when receiving Q2h
- Q2h → Q3h

Q3h → Q4h (patients to not be spaced out further than q4h)

Complete asthma action plan and prepare for discharge

Discharge Criteria: Room air, SABA Q 4 h X 2 & CRS < 3

Note: RT Driven Protocol for medication titration. This protocol is not meant to be a substitute for clinical judgment.
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