**Clinical Bronchiolitis Pathway: Emergency Department**

**Initial patient assessment:**
- Assess O2 sat. Supplemental oxygen for O2 sat < 90% for at least 1 minute: Initiate 0.5L NC for <6months, 1L for >6months, titrate to maintain O2 sat ≥ 90%.
- Max 2 lpm NC O2. If higher rates needed, refer to HFNC pathway.
- Assess need for IV/NGT hydration: poor oral intake, poor UOP, RR > 60

**Nasal suction and then obtain Respiratory Score**

**MILD**
- Respiratory Score 1-4
- Refer to admission and discharge criteria

**MODERATE**
- Respiratory Score 5-8
- Consider trial of nebulized normal saline and repeat score in 30 minutes

**SEVERE**
- Respiratory Score 9-12
- Consider trial of nebulized albuterol and repeat score in 30 minutes

**Order treatment PRN**

**Trial successful?**
- RS improves ≥ 2
  - Yes
  - Is bronchiolitis the primary pathology? (vs. asthma)
    - Yes
    - Consider Clinical Asthma Pathway
    - No
    - Consider HFNC/Non Invasive ventilation/Intubation
  - No
  - Respiratory Score 5-8
    - Consider Clinical Asthma Pathway
    - Respiratory Score 9-12
      - Consider HFNC/Non Invasive ventilation/Intubation
      - Refer to Floor and PCCU admission guidance (see below)

**ED Discharge Criteria:**
- O2 sat ≥ 90%
- RS ≤ 4
- Respiratory rate ≤ 60
- Mild-moderate work of breathing
- Adequate oral intake
- Reliable caregiver
- Follow-up care available
- MD/spacer teaching if responsive to albuterol

**Inclusion criteria:**
- Age < 24 months
- Symptoms of bronchiolitis: cough, nasal congestion, difficulty breathing
- Signs of bronchiolitis: tachypnea, retractions, wheezing, cracks

**Exclusion criteria:**
- Chronic lung disease (BPD, interstitial lung disease)
- Congenital heart disease AND on medication for CHF, pulmonary hypertension, or cyanotic heart disease
- Anatomic airway defects
- Neuromuscular disease
- Immunodeficiency
- Prior diagnosis of asthma or ≥ 2 wheeze episodes in a year
- Appearing toxic or critically ill

**Tests/Treatments NOT ROUTINELY RECOMMENDED:**

**Tests:**
- Viral testing
- Chest X-ray
- Labs: CBC, electrolytes, blood gas

**Treatments:**
- Nebulized normal saline
- Albuterol
- Racemic epinephrine
- Corticosteroids
- Antibiotics
- Anticholinergic medications
- Hypertonic saline

**Criteria to Consider Admission:**

**Absolute:**
- Witnessed apnea
- RSV+ in age < 28 days
- O2 sat persistently <90%
- Inadequate oral intake
- RS ≥ 9
- Respiratory rate > 70
- Severe retractions
- HFNC / CPAP / intubation

**Relative (strongly consider admit if > 1):**
- Gestational age < 37 weeks
- Age < 3 months
- Difficulty feeding
- Respiratory rate > 60
- Moderate retractions

**Consider Floor Admission on HFNC when:**
- Stable on HFNC with RS ≤ 6 for at least 1 hour in ED
- Corrected GA < 40 weeks
- Apnea
- Toxic/ill appearance
- RS > 9
- HFNC:
  - < 6 months: > 6 lpm
  - ≥ 6 months: > 8 lpm

**Consider PCCU Admission on HFNC when:**
- Corrected GA < 40 weeks
- Apnea
- Toxic/ill appearance
- RS > 9
- HFNC:
  - < 6 months: > 6 lpm
  - ≥ 6 months: > 8 lpm

Authors: Joanna Nazif MD and Alyssa Silver MD 9/15