Consensus Guidelines for Management of Croup:
Northern California Pediatric Hospital Medicine Consortium

APPENDIX 1: Croup Algorithm

Pediatric patient with CROUP

Clinical assessment to determine severity

MILD:
- No stridor at rest
- Barking cough
- Hoarse voice
- Stridor only during agitation / activity
- No or mild WOB

MODERATE:
- Stridor at rest
- Tachypnea
- Moderate WOB
- Anxiety / agitation
- Difficulty talking or feeding

SEVERE / IMPENDING RESPIRATORY FAILURE:
- Stridor at rest
- Severe WOB or respiratory fatigue
- Decreased LOC
- Inability to talk or feed
- Self-positioning (e.g. tripoding)
- Cyanosis / hyperoxia

Dexamethasone PO * 0.6mg/kg, single dose

Discharge Criteria:
- No or minimal stridor at rest
- No or minimal WOB
- Able to tolerate PO
- > 2 hours after last racemic epinephrine
- < 3 racemic epinephrine treatments

Discharge Home
- Cool mist
- Supportive care
- Consider flu in 24-48hrs

Dexamethasone PO * 0.6mg/kg, single dose

Racemic Epinephrine 2.25%, 0.5mL, Neb (Repeat q20min PRN)

No

Admit to Pediatric Ward

Impaired?

Yes

Admit to PICU

Consider Call to Specialists: ICU, Anesthesia, ENT

Place PIV

Supplemental Oxygen PRN

Consider Intubation

Evaluate & therapies NOT supported by evidence in hospital setting:
- X-ray (chest, lateral neck)
- Laboratory studies (including viral testing)
- Continuous pulse oximetry monitoring
- Antibiotics
- Cool mist

Dexamethasone PO:
- Dose: 0.6mg/kg (Max 16mg; acceptable range 0.15-0.6mg/kg), single dose
- Alternative route: IM, IV
- If unable to administer Dexamethasone, consider: Budesonide 2mg nebulized, single dose

* Racemic epinephrine