Sample Practice Scenario:

Status Asthmaticus

Goals:

- 1) Assess airway and breathing
- 2) Recognize status asthmaticus
- 3) Treat status asthmaticus
- 4) Recognize progressive respiratory distress

Scenario:

Parents present to the emergency department at the recommendation of the on call provider with their 3 year old son, Simon. They report that he was well until two days ago when he developed a runny nose, a cough, and a fever. They are bringing him in now because he says it hurts to breathe.

PMH: Born at 33 weeks via NSVD, hospitalized at 6 months for "wheezing" per dad, has had several courses of oral steroids from his pediatrician in the last year.. Has eczema.

FH: no history of asthma/atopy, older siblings are healthy

Allergies/Imm: NKDA, up to date on vaccines

Meds: albuterol PRN

VS: Temp: 37.5C HR:160 RR: 40 SpO2 90% on room air weight: 16kg

Critical Performance Steps Checklist: (with instructor answers in pink)

Perform initial assessment	Patient is sitting in father's lap, alert, crying,
	Patent airway, no lip or tongue swelling
	Intercostal, substernal, and supraclavicular retractions
	Prolonged expiratory phase
	Cap refill is less than 2 seconds
Assess breath sounds	Diminished breath sounds, faint wheeze

Support Airway/breathing with Duonebs, Steroids

Support circulation(NS bolus) HR decreases to 140

Reassess ABCs Minimal improvement in work of breathing

Wheezing more prominent

Saturations increase to 92% with non-rebreather

□ Recognize need for escalation

- □ Continuous albuterol/duonebs
- □ IV MgSO4
- Terbutaline
- Epinephrine

Contact PICU for support

□ Consider available resources

- □ Anesthesia?
- □ EMS/LifeFlight?
- □ Pediatric provider?
- □ Adult intensivist?
- □ Begin transport preparations
- □ Prepare intubation equipment

end scenario

Instructor Debrief

- Discuss findings that indicate a severe exacerbation
- Discuss additional treatments (other than steroids and albuterol) that are available for the treatment of severe asthma
- Discuss indications for intubation in asthma?
- Review available sources of help
- Ensure participants have methods to select drug doses and equipment sizes safely