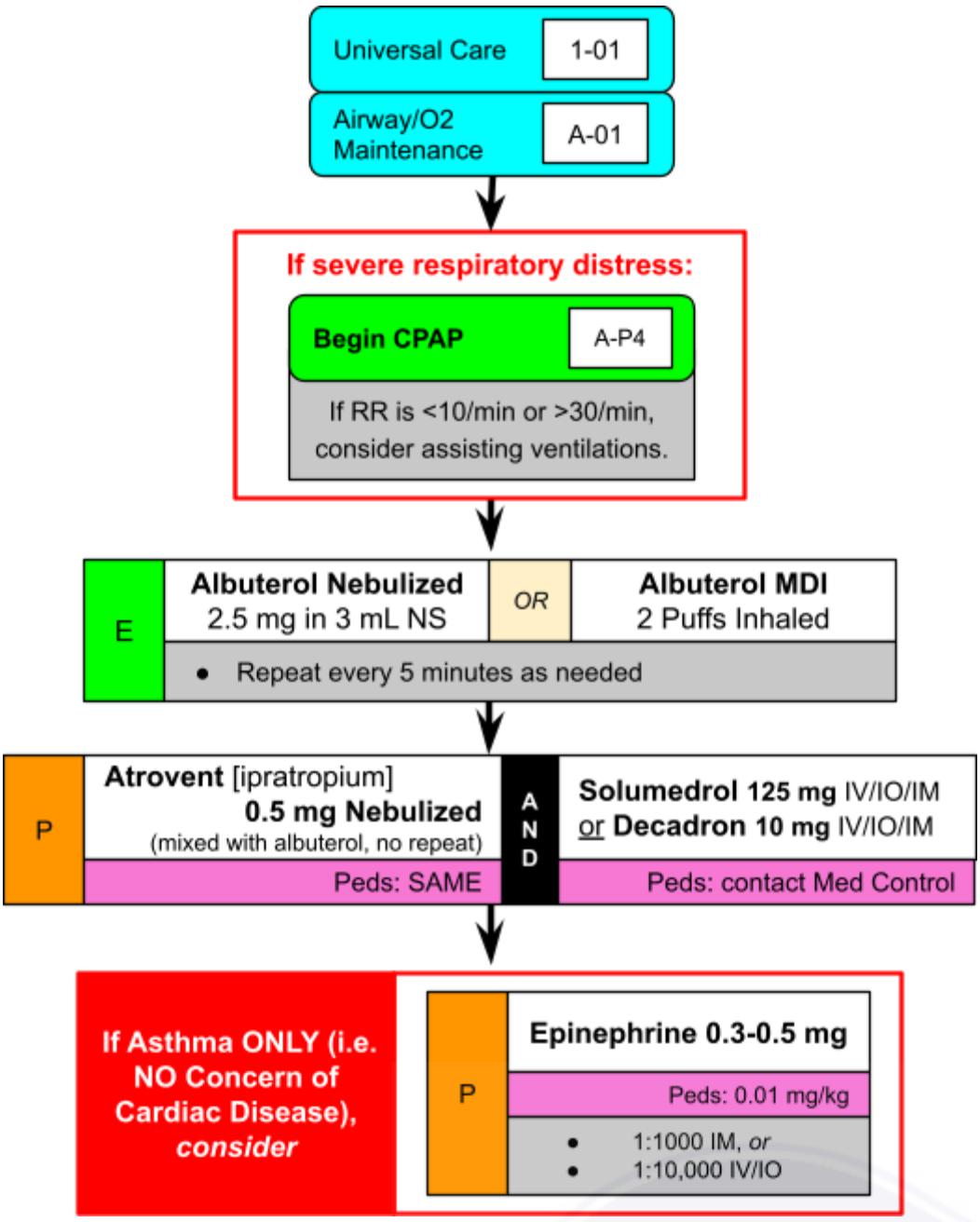

A-07 ASTHMA/COPD		First Responder EMT AEMT Paramedic

KEY POINTS:

- **<u>Rule #1 = Always correct hypoxia</u>**: do not withhold oxygen for fear of CO2 retention.
- The physiology of a person with COPD (emphysema/bronchitis) differs from that of a healthy person in that the primary stimulus to breathe comes from a decrease of pO2 in the blood rather than an increase in pCO2. Providing high concentrations of oxygen could theoretically depress their respiratory drive.
- As long as they are not in severe distress, it is advisable to provide COPD patients with lower levels of oxygen initially. If they do not improve, increase oxygen as needed.
- **ETCO2 (when available) & Pulse Oximetry should be monitored continuously in any patient with hypoxia, increased work of breathing or altered mental status.** If the patient's mental status or respiratory drive begins decreasing, be prepared to assist ventilations.
- COPD exacerbations are particularly responsive to CPAP, which may help avoid the need for intubation and should be considered early in treatment.
- Wheezing may be a presentation of pulmonary edema, i.e. “cardiac asthma”. See Acute Pulmonary Edema guidelines [**A-05**] as needed.

A-07 ASTHMA/COPD		First Responder EMT AEMT Paramedic

SPECIAL SITUATIONS:

Steroids: methylprednisolone OR dexamethasone (Decadron) will help resolve acute asthma/COPD exacerbation over hours, without immediate effect. Focus of initial management should be on nebulizer treatments and additional oxygen/ventilatory support as needed (CPAP, intubation, etc.)

Epinephrine: Only indicated for severe attacks deemed life-threatening and not responding to inhaled bronchodilators. **Use extreme caution when administering, and it should be avoided if at all possible for patients with known or possible cardiac disease.**

Magnesium: Smooth muscle relaxation properties may be beneficial in some patients with severe attacks. It has historically been used as an adjunct to conventional nebs and supplemental O_2 in severe exacerbations to try and prevent the need for intubation. Since the addition of positive pressure ventilation (i.e. CPAP/BiPAP), it is no longer needed except in extreme circumstances, and should not be given routinely. You may contact online medical control for permission for use, but attention should be focused on CPAP or other interventions if hypoxic. **If other medications/interventions are not available or not working, consider contacting medical control for orders for:**

P	**Magnesium 2 grams IV/IO SLOWLY over 30 mins**
	Peds: 25-50 mg/kg

Peds: Bronchiolitis and asthma are the most common causes of wheezing in infants and children, respectively. However, always consider other pulmonary and nonpulmonary causes of respiratory distress, especially if patient not responding as expected to treatment: pneumonia, pulmonary edema, congenital heart disease, anaphylaxis, pneumothorax, sepsis, metabolic acidosis (e.g.: DKA, toxic ingestion), foreign body aspiration, and croup.

QI Review Parameters:

1.