COPD Exacerbation Protocol

S/Sx: Hx of COPD, Acute on Chronic Hypercapnic and/or hypoxemic respiratory failure/acidosis, wheezing, dyspnea, worsening cough/sputum production.

First-->Beta Adrenergic Agonist:
Albuterol (2.5mg) OR
Levalbuterol (restricted to Cardiology at USA).
PLUS
Anticholinergic:
Ipratropium (0.5 mg)
q4h scheduled AND as needed

...if unimproved after 24 hours OR progressive worsening symptoms with breathing treatments consider systemic glucocorticoids
Mild to Moderate: 40mg PO Prednisone daily
Moderate to Severe: 60mg IV Solu-Medrol q8h x5 days then reassess for continued need
*No need to taper if therapy < 3 weeks

Antibiotics for Moderate-Severe Exacerbation (Duration 5-7 days):
Risk for Pseudomonas?
Yes = Cefepime IV, Zosyn (4.5g) IV, Levaquin IV/PO
No= Ceftriazone IV, Levaquin IV/PO
OR
Continue usual ICU sepsis work up if patient meets criteria
*If concern for Atypical Pneumonia add Azithromycin OR Doxycycline for M. pneumoniae coverage

Goal: Target SpO2 88-92%, PaO2 60-70
NIPPV is first line treatment in patient’s who do not have a contraindication (pneumothorax without CT, nausea/vomiting) unless hemodynamically unstable then intubate.

Criteria for Moderate to Severe Exacerbation:
At least 2-3 cardinal symptoms
1. Increased Dyspnea, 2. Increased Sputum Volume, 3. Increased Purulence
AND
Complicated COPD (at least 1 risk factor)
1. Age > 65 years, 2. > 2 exacerbations/year 3. Cardiac Disease 4. FEV1 < 50% predicted