Supplementary file.1

Emergency Department (ED) electronic Integrated COPD proforma (e-ICP) Triage to discharge

Oxygen therapy

Inhaled bronchodilators

- Maintain oxygen saturation of 88-92% (Use nasal prongs at 0.5–2.0 L/minute or a Venturi mask at 24% or 28%)
- Short acting bronchodilators, Inhaled beta-agonist (e.g., salbutamol, 400–800mcg; terbutaline, 500–100mcg) and antimuscarinic agent (ipratropium, 80mcg) can be given by pressurised metered dose inhaler and spacer, or by jet nebulisation (salbutamol, 2.5–5 mg; terbutaline, 5 mg; ipratropium, 500mcg).

Diagnostics

Arterial blood gas

Corticosteroids

Antibiotics

Non-Invasive Ventilation

- In case of FEV1 < 40% predicted perform: COPD severity score, blood gas measurements, chest x- rays and electrocardiography
- FEV1 is less than 1.0 L or less than 40% predicted, or if percutaneous oxygen saturation is less than 90% in the presence of adequate peripheral perfusion or cor- pulmonale.
- Up to two weeks therapy with prednisolone (40–50 mg daily) is adequate
- Antibiotics are given for purulent sputum to cover for typical and atypical organisms
- Indicated for increasing hypercapnia and acidosis. (Non-invasive ventilation

Pulmonary rehabilitation referral criteria

ED discharge criteria

by means of a mask is the preferred method)

- Pulmonary rehabilitation should be offered to patients with COPD following hospitalisation for an exacerbation of COPD within 2 weeks
- Clinically stable condition with no parenteral therapy
- Inhaled bronchodilators are required less than four-hourly
- Oxygen delivery has ceased
 If previously able, the patient is ambulating safely and independently, and performing activities of daily living
- The patient or caregiver understands and can administer medications
- Follow-up and home care arrangements arranged

ED discharge template to General practitioner or Outpatient Patient Clinic

- Discharge summary will be linked here electronically
- Provide COPD patient information pack by Lung foundation Australia

Supplementary file.2

Emergency Department electronic Integrated COPD care proforma (e-ICP) Triage to discharge

1) Oxygen therapy

- Maintain oxygen saturation of 88-92% (Use nasal prongs at 0.5–2.0 L/minute or a Venturi mask at 24% or 28%)
- 2) Inhaled bronchodilators
- Short acting bronchodilators [dose interval is titrated to the response and can range hourly to six hourly]
- Inhaled beta-agonist [Salbutamol MDI 100 mcg (4 to 8 puffs), Ipratropium MDI 21 mcg (4 puffs)]
- Jet nebulisation (Salbutamol, 2.5–5 mg; Terbutaline, 5 mg; Ipratropium, 500mcg)

3) Diagnostics

- Modified Medical Research Council (mMRC) Dyspnoea Scale to assess severity in the absence of FeV1
- In case of FEV1 < 40% predicted perform: COPD severity score, blood gas measurements, chest x- rays and electrocardiography
- ABG recommended if the VBG pH ≤7.34

4) Corticostero	d	S
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• Oral corticosteroids for 5 days and up to 14 days (prednisolone 40–50 mg daily)

5) Antibiotics

• Antibiotics are recommended for purulent sputum only to cover for typical and atypical organisms.

6) Non-Invasive Ventilation

• NIV for increasing hypercapnia and acidosis (ABG with a PaCO2 above 45mmHg and a pH less than 7.35)

7) ED discharge criteria

- Clinically stable condition with no parenteral therapy
- Inhaled bronchodilators are required less than four-hourly
- Inhaler technique assessed by ED clinician or a nurse
- Oxygen delivery has ceased unless patient is on home oxygen
- If previously able, the patient is ambulating safely and independently, and performing activities of daily living (3–6-minute walk test recommended)
- The patient can eat and sleep without significant episodes of dyspnoea

• The patient or caregiver understands and is able to administer medications

- 8) ED discharge template to primary care or OPC
- 9) Resp Nurse outpatient's clinic (OPC) referral

- Follow-up and home care arrangements (e.g.: home oxygen, homecare, Meals on Wheels, community nurse, allied health, GP, specialist)
- Discharge summary template for convenience (will be linked electronically)
- Provide COPD patient information pack by Lung foundation
 Australia (will be linked electronically) All AECOPD ED
 discharges are highly recommended to have Respiratory CNC
 referral (Direct electronic referrals from ED will be linked here)