COPD
Emergency Assessment Pathway

British Thoracic Society | Royal College of Emergency Medicine | Royal College of Physicians | NRAP National Respiratory Audit Programme | sam The Society for Acute Medicine

This pathway describes four high-impact actions to deliver the best clinical outcomes for patients presenting to hospital with an acute exacerbation of COPD, based on the risk associated with their exacerbation. It applies from arrival to hospital (not just ED) through to respiratory review.

Patient cohort: adults (18+)

NIV = Non-invasive ventilation | AHRF = acute hypercapnic respiratory failure

For life threatening COPD, time to NIV should be within 1 hour of diagnosis of persistent acute hypercapnic respiratory failure (which has not responded to initial treatment) **OR within 2 hours of arrival at hospital.**

ARRIVAL TIME: HH:MM

Patient name: .....
D.O.B: .....
NHS or Hospital Number: .....
Date of arrival: .....
(or patient sticker)
Provider Signature: .....

1 RISK ASSESSMENT
(Triage review)

- RR
- HR
- SpO_2*
- VBG
- ACVPU

*Pulse oximetry may overestimate oxygen saturations in people with darker skin tones.

Life Threatening Risk (25% inpatient mortality)

- If VBG pH <7.35 and PCO_2 >6.5 kPa: **Decompensated type 2 respiratory failure**

May require urgent ventilatory support
(typically NIV but also consider invasive ventilation)

Manage in resus or respiratory support unit

High Risk

- Evidence of systemic stress e.g. acute confusion, NEWS2 scale 2 score ≥5 (or ≥3 in any single parameter)
- New or worsening respiratory failure - sats <88%, VBG pH ≥7.35
- Unable to ambulate or manage at home

Manage in majors or medical admission bed

Moderate Risk

- No evidence of systemic stress, NEWS2 scale 2 score <5
- No evidence of new respiratory failure - sats ≥88%
- Able to perform daily activities

Potentially manage in ambulatory care setting

2 INITIAL MANAGEMENT & INVESTIGATIONS

Immediate in cases of Life Threatening Risk

- ☐ **Give** Prednisolone 30mg + Salbutamol 2.5mg nebulised +/- Ipratroprium 500mcg nebulised.
- ☐ **Give** antibiotics if bacterial infection suspected.
- ☐ **Prescribe and administer** controlled oxygen therapy to target saturation 88-92%.
- ☐ **Determine** and document escalation status; ascertain if there is an existing advance care plan.
- ☐ **Investigations to exclude alternative diagnosis:** Perform Bloods, CXR, and ECG. Review available spirometry to confirm COPD.

3 REASSESSMENT OF RISK

Within 1 hour for confirmed Life Threatening Risk

Aim for 4 hours for High Risk or Moderate Risk exacerbation

Life Threatening Risk: NIV decision

- If initial VBG pH <7.35, **perform ABG/CBG within 1 hour** of optimal medical therapy to assess for AHRF
- If ABG/CBG pH <7.35 and $PaCO_2$ >6.5 kPa, **diagnose AHRF and initiate NIV within 1 hour** if appropriate**
- If pH <7.25, seek Critical Care review
- If pH ≥7.35, manage as High Risk

TIME NIV INITIATED: HH:MM

**NIV Inappropriate if contraindicated or patient declined/not suitable for Level 2 Care

Reassess for Life Threatening Risk: is VBG pH <7.35 and PCO_2 >6.5kPa?

YES → **RECLASSIFY, treat as per Life Threatening Risk and move to resus**

NO → **Do any High Risk criteria remain after treatment?**

YES → **Admit to hospital**

NO → **Discharge**

4 DECISION
(Discharge or admit, and confirmation of diagnosis)

Life Threatening Risk / NIV

- Refer to medical team and/or RSU
- Critical Care/Resp/Outreach informed for ongoing care
- Admitting team request respiratory review within 24 hours

Admit to hospital

- Admitting team request respiratory review within 24 hours

Discharge

- Prednisolone 30 mg 5 days +/- antibiotics
- Discharge letter to GP
- Follow up per local respiratory pathway
- Consider BTS COPD Discharge Bundle

Published November 2026 | brit-thoracic.org.uk/COPD