

## 8.19 Is the O<sub>2</sub> OK?

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**Background:** The British Thoracic Society (BTS) Home Oxygen Guideline (2015) provides a detailed evidence-based guidance for the use of home oxygen for patients out of hospital. The majority of evidence comes from the use of oxygen in patients with chronic obstructive pulmonary disease. The guideline makes recommendations for assessment, follow-up protocols, and risk assessments. The Irish Guidelines on Long Term Oxygen Therapy (LTOT) in Adults (2015) offer a standardised guide that can be adopted in all areas where home oxygen is being provided. They articulate most recent evidence from the BTS Guideline.

A review of Irish services (O'Donnell et al,2019) found 62% (n=20) had **no** dedicated oxygen assessment and review (OAR) clinic. Of the 38% (n=12) with OAR clinics, criteria for initial assessment and oxygen prescription were met. However, titration of oxygen and general follow up did not meet guideline recommendations. Centres without oxygen clinics generally prescribed oxygen following an in-patient stay (78%) however unable to provide any follow up for these patients.

The National Clinical Guideline published by the Department of Health in March 2021 "*Recommendation 15: Oxygen therapy provision*" states;

Oxygen (greater than 15 hours per day) to patients with chronic respiratory failure has been shown to increase survival in patients with severe resting hypoxemia (a pO<sub>2</sub> < 7.3kPa).

**Methods/Results:** A retrospective audit of 216 patients seen in OAR (Oxygen Assessment and Review) clinic from January 2022 to July 2023 examined the number of patients referred for Long Term Oxygen Therapy (LTOT) assessment and review post recent hospital discharge following an exacerbation.

15.27% (n=33) of patients were assessed following a recent discharge. The average pO<sub>2</sub> on discharge from hospital was 7.1kPa. The average pO<sub>2</sub> on assessment at OAR (6 weeks post exacerbation and discharge) was 10.1kPa.

63.63% (n=21) patients were discharged from the OAR with no requirement for LTOT in alignment with The National Clinical Guideline recommendations.

**Conclusion:** The goal of oxygen therapy is to achieve adequate tissue oxygenation using the lowest possible FiO<sub>2</sub> in severe hypoxemic patients (pO<sub>2</sub> <7.3kPa). While many patients can require LTOT following an exacerbation it is paramount to ensure they are followed up and guided in its correct use.

OAR Clinics provide evidenced based care in correct prescribing, assessment and follow up which is safe, cost effective and optimal for patients.

**Keywords:** Oxygen Assessment and Review Clinic, Long Term Oxygen Therapy, Ambulatory Oxygen Therapy

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