

INTEGRATING RESPIRATORY CARE THROUGH AN OXYGEN ASSESSMENT AND REVIEW CLINIC

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BACKGROUND

Chronic Obstructive Pulmonary Disease (COPD) is one of the diseases included in The Integrated Care Programme for the Prevention and Management of Chronic Disease (ICPCD). As part of their disease, patients with COPD may experience chronic hypoxaemia. Long term oxygen therapy (LTOT) is defined as oxygen used by patients with proven hypoxaemia for 15-24 hours per day that confers a mortality benefit and improvement in physiological indices.¹

In Carlow/Kilkenny, an outpatient hospital oxygen clinic assesses patients for LTOT with many respiratory conditions, not just COPD. Patients who are discharged from hospital on LTOT should have a formal re-assessment around 8 weeks post discharge.¹ The current waiting time for assessment is 24 weeks.

Oxygen Assessment and Review (OAR) clinic development is an essential ambulatory care strategy to support integrated care for patients with COPD. Developing this service locally was a priority to improve access for COPD patients and to ensure those discharged on LTOT were seen in a clinically appropriate timeframe.

In March 2023 a Physiotherapy-led OAR clinic was established as part of Respiratory Integrated Care (RIC) services in the Carlow/Kilkenny Chronic Disease Management Hub. This clinic was developed in line with clinical guidelines and the National Clinical Programme for Respiratory (NCPR) operational guidance.

OBJECTIVES

- Develop an OAR clinic
- Improve timely and appropriate access for COPD patients to an oxygen clinic
- Reduce demand on a hospital outpatient oxygen clinic
- Integrate care between acute and community respiratory services
- Improve health outcomes for COPD patients
- Improve access to Pulmonary Rehabilitation for COPD patients who are prescribed oxygen
- Ensure oxygen prescription is reviewed, titrated and withdrawn where indicated in line with clinical guidelines
- Establish if there is an additional cost saving implication for the HSE

METHODS

1. A standard operating procedure (SOP) for the OAR clinic was developed, which included an integrated referral pathway for patients seen in other components of the RIC service e.g. COPD Outreach, Pulmonary Rehabilitation (PR) and Consultant-led clinics.
2. Data on the number of patients seen, waiting time for initial assessment and interventions provided was collected for the first 6 months of the clinic.
3. Waiting time for initial assessment at the RIC OAR clinic was compared against the existing hospital oxygen clinic's waiting time.
4. Average waiting time from referral at RIC OAR clinic to PR was calculated.
5. Based on the interventions provided in the OAR clinic and the current cost of LTOT in Ireland, cost saving implications of the OAR clinic were calculated.

RESULTS

Nineteen patients were seen in OAR clinic in the first 6 months.

As shown in table 1, the OAR clinic resulted in improved access for patients with an average wait time for an initial assessment of just 5.7 weeks, in comparison with a wait time of 24 weeks to access the hospital oxygen clinic. 100% of patients (n=4) referred to the OAR clinic following a hospital discharge on LTOT were seen at a clinically appropriate timeframe i.e. within 8 weeks of discharge.

Table 1: Waiting time for patients for initial assessment in the OAR RIC clinic from March to August 2023 and the current hospital oxygen clinic waiting time.

| AVERAGE WAITING TIME FOR INITIAL ASSESSMENT | |
|---|-------|
| CLINIC | WEEKS |
| RIC OAR Clinic | 5.7 |
| Hospital Oxygen Clinic | 24 |

Interventions provided in the OAR clinic, as shown below in figure 2, included disease education n=19 (100%), withdrawal of oxygen prescription n=9 (47.4%), oxygen prescription adjustment n=8 (42.1%), no oxygen prescription change indicated n=4 (21.1%) and PR referral n=8 (42.1%).

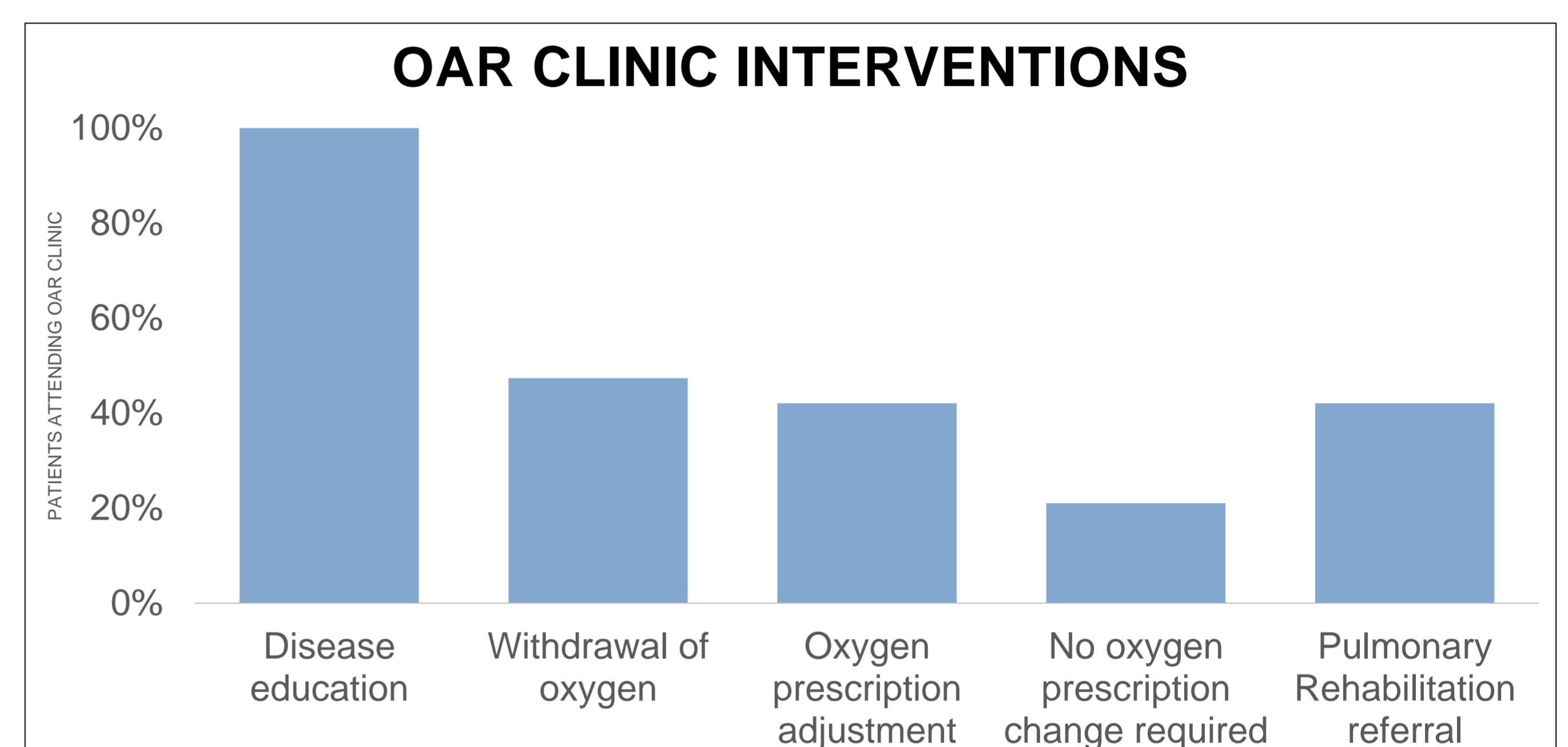


Figure 2: Graph displaying interventions provided in the OAR clinic in the first 6 months.

The development of the integrated care pathway from the OAR clinic to PR also led to timely access for patients with patients waiting on average 2 weeks between OAR clinic assessment and their first PR appointment.

Nine patients seen in the OAR clinic (47.4%) no longer met the criteria for LTOT¹ and had it withdrawn. The average cost of LTOT per patient per month in Ireland is €203. Our OAR clinic resulted in a monthly cost saving of €1,827 thus far, with a prospective annual saving of €21,924.

CONCLUSION

The development of the OAR clinic has improved access for COPD patients to this service, while reducing pressure on the hospital oxygen clinic. It has supported the transition for patients from hospital to community services and allowed for timely referral to Pulmonary Rehabilitation, enabling the delivery of true integrated care in line with ECC aims. It has also resulted in additional cost saving benefits for the HSE.

REFERENCES

1. Anáil and Irish Thoracic Society (2015), "Irish Guidelines on Long Term Oxygen Therapy in Adults"