

Service Priorities and Programmes Electronic Presentations

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Oxygen Therapy Clinic and Portable Oxygen Concentrator library in North District Hospital

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Introduction

Long Term Oxygen Therapy (LTOT) is a therapeutic treatment for hypoxia. As accurate oxygen dosage and optimal treatment compliance is crucial to achieve therapeutic benefits, there is a need for regular review and monitoring. The development of Portable oxygen concentrator (POC) facilitates LTOT users to engage in outdoor activities which in turn enhance their therapy compliance. As a service enhancement, an Oxygen Therapy Clinic (OTC) together with a POC library was set up by the Physiotherapy Department to cater the needs of the LTOT users.

Objectives

- 1. Monitor LTOT compliance and users' response
- 2. Facilitate POC trials for indicated users
- 3. Provide professional advices and education

Methodology

Patients with LTOT initiated during hospitalization were reviewed three months after discharge. At OTC, patients' conditions and their LTOT usage were reviewed, oxygen flow rate was titrated when necessary. Applications of ambulatory oxygen devices were assessed and trials of POC were arranged if indicated. For those with suspected poor compliance or nocturnal breathing problems, pulse oximetry telemonitoring would be arranged.

Result

From May 2016 to December 2017, forty-one LTOT users were seen at OTC. Two users (5%) were successfully terminated LTOT after clinical assessment and ABG evaluation. Six (15%) users were required to adjust oxygen flow rate either in upward (3) or downward (3) fashion. Telemonitoring was performed for five (12%) cases and desaturation was noted in three, all responded to subsequent oxygen titration. Twelve (29%) users were not utilizing any ambulatory oxygen device during outdoor activities. POC trials were given to six (12%) users and POCs were subsequently arranged in

three (7%) of them after POCs were loaned for home trial. Caregiver education was given to eleven (27%) cases.

Patients with LTOT initiated needs to be monitored as their conditions may change. Accurate prescription of oxygen has both clinical and financial implications: hypoxemic patients could be stabilized in the community whereas those suffered from short term hypoxia do not have to bear long term expenditures. OTC not only serves to facilitate oxygen titration but also promote therapy adherence. The use of POC would enhance patient's mobility and the POC library could facilitate machine trial for indicated patients.