SOUTHAMPTON Children's Hospital

Home oxygen reviews – how, when and why. C Crocker, S Harper, A McEvoy and A Harris, Southampton University Hospitals NHS Foundation Trust.

Background: The British Thoracic Society (BTS) guidelines for home oxygen in children (2009)[1] suggests regular reviews for babies on home oxygen for chronic lung disease but do not make any such recommendations for children and young people (CYP) who require oxygen for other reasons. A CYP's oxygen requirement can remain static for longer periods compared to babies but the mode of oxygen delivery may need to change in line with life events such as going to school and becoming more independent.
Home Oxygen Service – Assessment and Review (HOS-AR) is well established in adult services across the NHS, this service is less common for CYP. A HOS-AR has been shown to improve survival rates as patients are more likely to use their oxygen and achieve direct cost savings through more appropriate equipment and use[2]. In clinical practice we noticed that some CYP will have had home oxygen for many years without any review of their needs or equipment.

Aim: To undertake a review of all CYP over the age of 1 year with home oxygen prescribed by a clinical team at Southampton Children's Hospital (SCH).

Methods: The Paediatric Respiratory Nursing Team identified CYP using the online portal for the home oxygen supplier in the South-Central region. CYP who did not have a lead Consultant at SCH or were looked after by the Neonatal or Long-Term Ventilation teams were excluded. A telephone call was organised to review the oxygen requirements and equipment. During the review, the CYP's current oxygen requirements, prescription, equipment and delivery modalities were all discussed, and any changes agreed with family/CYP.

Results: The team carried out 67 reviews over a 12-month period. Outcomes (n=75) of the review included oxygen being removed as it was no longer used and a decrease in equipment due to changes in oxygen requirements. All outcomes are shown in figure 1.

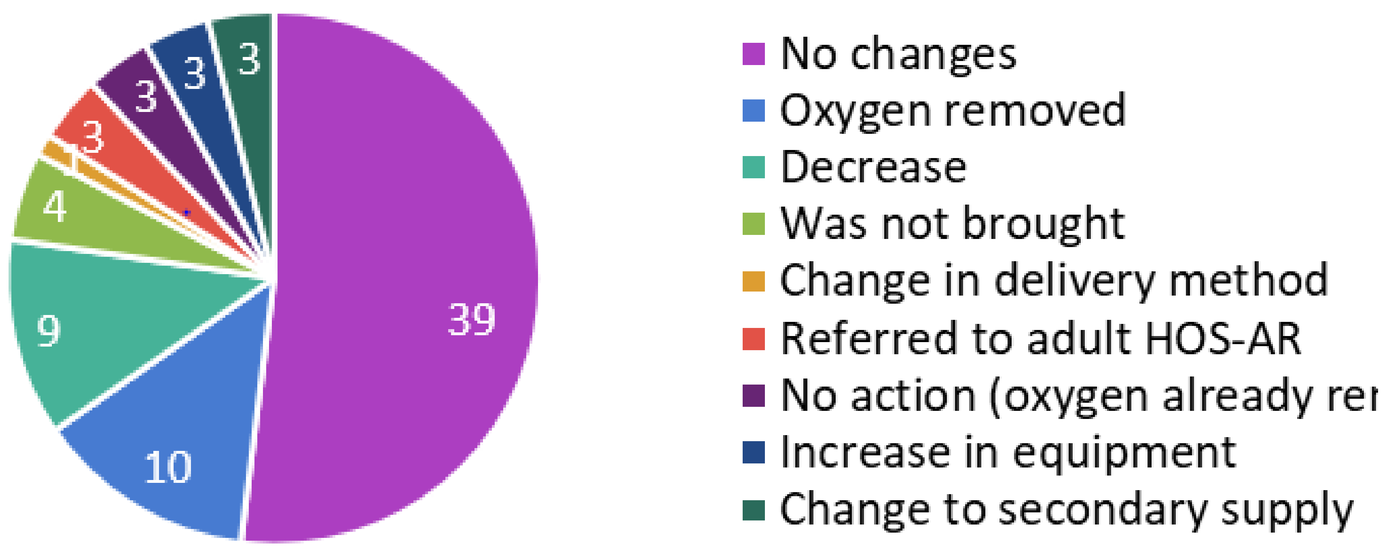

Figure 1.

Conclusions: The CYP and family have a better understanding of their prescription and correct flow rates. The removal and streamlining of unused equipment has resulted in a cost saving for the NHS, this enables the family to free up space in the home environment which will also have safety benefits. Changes in modalities will improve quality of life. A review and appropriate referral to an Adult HOS-AR ensures a safe and smooth transition to adult services and enables the YP to contact the team should their needs change. Finally, CYP and their family feel supported at the time of oxygen removal.

[1] Paediatric Section of the Home Oxygen Guidelines Development Group of the BTS Standards of Care Committee (2009) British Thoracic Society Guidelines for home oxygen in children. Thorax 64 (Suppl II):ii1-ii26.
[2] Duncan P and Okosi O (2011) Reviewing home oxygen services. Nursing Times, Vol 107 No 24.