

# LESSONS LEARNED

## RISKS RAISED

## DATE

<ol style="list-style-type: none"> <li>1. Health &amp; safety concern - parent buying oxygen over the internet.</li> <li>2. Premature infant that was discharged home on oxygen and resulted in a near miss</li> </ol>	<p>10/08/2023</p>
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## RISK SUMMARY

### 1. **CASE 1 - Health & safety concern - parent buying oxygen over the internet.**

A consultant raised a concern following a review of a paediatric patient in clinic whereby the parent had been ordering oxygen (presumed oxygen) from Amazon for her child. The nurse was shocked when she heard this. The child is a 6-year-old with sickle disease who had history suggestive of hypoxemia for the past 3 years (slowly worsening from oximetry monitoring) presented with apnoea at night and generalised weakness. He went to the local hospital and had SpO2 monitoring which showed persistent low O2 at night and day. He was referred to a specialist hospital for further investigation and in the interim, mum ordered oxygen canister and oximeter off Amazon and was using it for a couple of night until the day of review in Respiratory clinic.

#### **The clinical risk**

- Potential worsening of hypoxemia which is masked by the intermittent use of O2 (although in this context was chronic but you will not know)
- Increasing CO2 which could drive the brain to shut down and stop breathing entirely.
- If the child is hypoxic and slowly worsening (although we do not have the detail to what degree) it is surprising the child was not admitted immediately. From a parent's perspective we can understand mum's concern as she probably was trying to do what is best for her child.
- What advice and support was given/offered to this family the last 3 years? Considering the child has been hypoxemia for 3 years and has no prescribed oxygen in the home.

#### **ACTION TAKEN**

At the time of the issue being raised the child was subject for admission and starting oxygen. Mum was advised not to use the O2 at home and to go to local hospital if she thinks the child is unwell for observation.

### 2. **CASE 2 - Premature infant that was discharged home on oxygen and resulted in a near miss.**

The infant was due to be discharged from the neonatal unit and met at home by a nurse that afternoon to do post discharge risk assessment and observations to ensure the baby was safe. The local team have a policy to

do a meet and greet as soon as the infant is discharged so that they can ensure that the oxygen is connected safely, and the parents are happy with turning the cylinders on and off.

The discharge was delayed, and the infant was discharged home in the evening when our team were not on duty. Luckily the parents were able to connect the tubing to the cylinder during the night but when they transferred the baby downstairs the following morning, they had not turned on the cylinder correctly. This was picked up by a nurse visiting the home later that morning.

### **The clinical risk**

The baby was demonstrating signs of respiratory distress and the oxygen saturations were 77%. These picked up when the infant was administered the correct amount of oxygen. It was also noted that the dial was quite stiff.

### **ACTION TAKEN**

The local Trust investigated what went wrong for future learning and to prevent this from happening again.

## **RECOMMENDATIONS**

- A. **CASE 1**- Oxygen is a recognised treatment for sickle cell disease with O<sub>2</sub> given overnight to support patients due to the reduced oxygen carrying capacity of haemoglobin. We strongly advise that this child is referred, or a follow up appointment is arranged with the haematology service, especially with a history of persistent low oxygen levels. Furthermore, we advise the child has local follow up from a community children team that can support children with sickle cell and/or oxygen.
- B. **ADVISE PARENTS/CARERS NOT TO BUY OXYGEN FROM THE INTERNET** - Newly diagnosed sickle cell patients should be advised not to buy oxygen from the internet and should be advised of the dangers of the use of oxygen not prescribed for them.
- C. **ORDERING OXYGEN** - We strongly advise that all children needing home oxygen should have Initial Home Oxygen Risk Mitigation Form (IHORM) and Home Oxygen Consent Form (HO CF).
- D. All home oxygen ordering should be via the Air Liquide portal or an Oxygen company that covers your geographically area e.g., BOC, Dolby Vivisol, Air Products etc not unauthorised suppliers.
- E. **DISCHARGE PLANNING MEETING** - should take place not at the time of discharge but should be a week or two weeks prior to this to ensure the environment, not only oxygen but social and environmental issues are met.

- The discharge of a child is heightened process and oxygen may be only one of many elements for parents to digest and remember.
- We strongly advise that discharges should be done in working hours so that back up is available.
- Home oxygen information leaflet and an escalation plan should be provided to parents.

F. **TRAINING NEEDS** - All parents/carers should have Home Oxygen Competency training prior to their child being discharged from hospital. This will include awareness of signs of respiratory distress and awareness of equipment necessary to administer oxygen.

- Parents/carers should be encouraged '*Rooming in*' within the hospital so that they build their confidence and can demonstrate the right skill sets in caring for the CYP on oxygen whilst under hospital staff supervision and support.

G. **OXYGEN EQUIPMENT** - There is a responsibility that the discharging and oxygen prescribing team explain to parents about the equipment.

- Parents should be educated about how to turn on/ off oxygen cylinders in hospital. This will support correct usage and practical tips when using cylinders at home and the community.
- This also enforces the safe usage of oxygen by a variety of agencies which helps parents to retain information.

H. **Hospital a home oxygen review should be conducted within 24 hours after discharge (MEET & GREET)**

- We advise that if a child or young person (CYP) is discharged from hospital a home oxygen review should be conducted within 24 hours after discharge.
- PPLOG has seen Trusts and community teams that have implemented best practice of all discharges especially those CYP needing community nurses follow up being discharged before 12pm. This gives time for the parents to take the CYP home and the nurse to do the '*meet and greet*' on the same day at the house. This is only achievable when a **HOME OXYGEN DISCHARGE PLANNING CHECKLIST** is completed, and the team agrees a discharge date during the discharge planning meeting.
- Contact details should be provided to parents in the event of emergency or to ask any questions, this can be included in the Care/escalation plan.
- Services and resources to '*meet and greet*' may not be achievable considering current staffing climate. Therefore, we recommend a local SOP should be written and disseminated to ensure the health and safety of CYP being discharged on home oxygen and the support given to parents/carers especially once discharged from hospital is robust.



- I. We recommend all incidents or near misses in relation to CYP home oxygen are reported following your local governance process. PPLOG is happy to be informed to ensure there is a mechanism of shared learning across the region.

All documents mentioned can be found on the PPLOG website  
<https://pplog.co.uk/blog/#documentation>

\*All cases were escalated/shared via relevant organisations including NHS London BCYP Programme and South West London Integrated Care System to ensure shared learning.

Thank you, written in partnership.

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Air Liquide Healthcare Limited
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