GUIDELINE

Safety in Air Test and Home Oxygen Referral

Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations

Read the full statement here:
CAHS Child Safe Organisation Commitment Statement

This document should be read in conjunction with this disclaimer

Aim

To determine whether an oxygen dependent infant is safe to be considered for discharge on home oxygen. The Safety in Air test assesses the infant's ability to maintain safe SaO2 levels for a period of up to 4 hours during accidental disconnection from oxygen in the home environment (i.e., SaO2 > 80%).

Risk

Inaccurate assessment of an infant being discharged home on home oxygen may result in episodes of hypoxia should the oxygen become disconnected for an extended period of time.

Background

Premature infants or term infants with significant respiratory compromise at birth may require continual oxygen therapy for many weeks or months. At times, oxygen therapy is the only medical reason for the infant to remain in hospital. Oxygen therapy can be managed by the caregiver in the home with continued support from the Respiratory Team. Home oxygen requires a Safety in Air Test and review by the PCH Respiratory Team prior to discharge.

Key points

- Consultant to discuss with parents the possibility of home oxygen therapy.

- E-Referral must be sent to the PCH Respiratory Team **prior** to conducting an Air Test. PCH Respiratory Team determines the result of the Safety in Air Test and plans for discharge home. See Home Oxygen QRG.
- Discharge Coordinator will liaise with parents regarding ordering of oxygen and supplies
- Preterm infants requiring home oxygen during flu season are eligible for Palivizumab. These infants should receive their first dose prior to discharge as advised by PCH Respiratory Team.

Safety in Air Test

The Safety in Air Test is routinely conducted overnight when there are minimal interruptions and to allow a period of at least 2 hours sleep in a 4-6hour period. Ordered by the consultant and the overnight Consultant/Senior Registrar must be aware that an air test is taking place. One nurse must oversee the infant during the air test to allow for continual visualisation and documentation of monitoring should the infant deteriorate.

NOTE: Discontinue the test and recommence oxygen if the SaO_2 drops <75% continuously for more than 2 minutes, or if the infant will not settle and shows definite clinical signs of distress. Transient drops of less than 2 minutes to <75% SaO2 are acceptable if the infant does not show clinical signs of distress.

Process

- Ensure all safety equipment readily available
- Use the Nellcor pulse oximeter that allows data to be downloaded
- When the infant is asleep disconnect the oxygen source and record the time
- Continue to observe for the next 4-6 hours, document all observations on the Safety in Air Observation Sheet
- SaO2, respiratory rate, heart rate and sleep state every 15 minutes or whenever the alarm is triggered
- Document any findings/drops in SaO2 which may be due to movement artefact
- After the test is completed, recommence the original oxygen therapy and monitor the infant's condition until stable
- Download is completed by the Discharge Coordinator (KEMH NICU) and a copy of the Observation Sheet emailed for to the Respiratory Team at PCH for assessment Downloading Air Test Results
- Air Test passed - appointment is made for parents and infant to meet with respiratory team
- Air Test failed - the neonatology consultant must order a new Air Test when the infant is clinically suitable

Discharge Process

Parents attend Respiratory Clinic Appointment with a nurse escort. Appointment includes Home Oxygen Education Session by Respiratory Medicine.

- Respiratory Medicine will document the required oxygen amount in the medical record. Nurse escort to ensure documentation is complete prior to returning to KEMH
- Prior to discharge parents to complete CPR and SIDS education (with Neonatology staff)
- Appointment made with respiratory medicine for 1 week post discharge
- Referral for Home Visiting Nurse and Special Child Health Referral

References and related external legislation, policies, and guidelines
Discharge Process: Medical and Nursing Responsibility
Downloading Air Test Results
Follow Up Program
Safety in Air Observation Sheet
Health Facts Home Use Guide Covidien Nellcor Monitor
Palivizumab (Medication Monograph)

This document can be made available in alternative formats on request.

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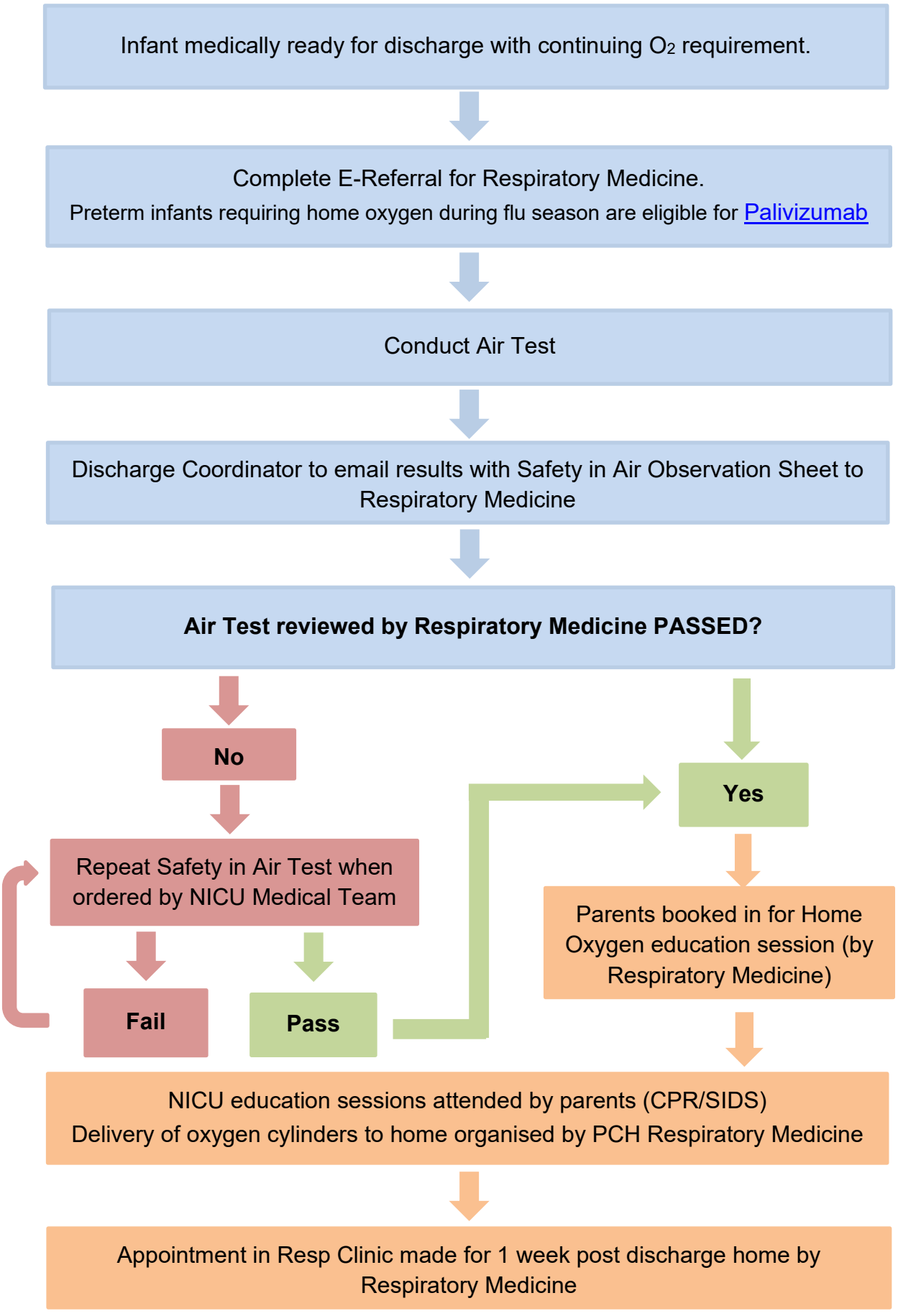
Appendix 1: Home Oxygen Referral Quick Reference