Standards for a Paediatric Respiratory Service in Secondary Care

Introduction

Secondary care paediatric respiratory services manage a broad spectrum of conditions, with asthma forming the largest patient group. Asthma is highly prevalent, affecting approximately one in eleven children and young people in the UK, and remains a significant cause of emergency admissions and mortality rates that are among the highest in Europe.

These services are also well placed to care for children with rarer respiratory conditions, such as bronchiectasis, often in a shared care model with tertiary paediatric respiratory teams.

This document sets out minimum standards for secondary care paediatric respiratory services. It is intended to:

- Support commissioners in effective service planning and contracting.
- Enable providers to undertake self-assessment against defined benchmarks.
- Drive quality improvement and improved outcomes for children and young people with respiratory conditions.

Standards emphasise the delivery of care as close to home as possible, with integrated working alongside primary and tertiary care.

Children and young people with cystic fibrosis are often seen within secondary care respiratory services; however, standards for this group are defined in the Cystic Fibrosis Trust's most recent UK guidelines (2024) and are not included here.

Intended outcomes:

- To minimise mortality and morbidity by providing the most appropriate care for children and young people with respiratory disease.
- To ensure that there is a sufficient, skilled, and competent multi-disciplinary workforce to manage children and young people with respiratory disease.
- To ensure children and young people with respiratory disease are treated in line with national guidance and agreed local pathways with onward referral to tertiary paediatric respiratory care where appropriate.
- To reduce the impact of health inequalities by providing care closer to home and reducing the need to travel where appropriate.

A Staffing

A secondary care paediatric respiratory team would consist as a minimum of:

1: Medical staff

- At least one Consultant or Associate Specialist as designated lead for the paediatric respiratory service with additional training in paediatric respiratory medicine (SPIN or equivalent ≥12 months' experience of paediatric respiratory medicine).
- The consultant should spend a significant amount of time per week looking after children with paediatric respiratory conditions.
- The consultant should maintain their practice with adequate time for respiratory CPD in their job plan and attend respiratory / asthma / LTV network meetings where available.
- The consultant should have time included in their job plan allocated to leading the paediatric respiratory service.
- Postgraduate doctors in training should be adequately supervised, with opportunities for those interested in respiratory paediatrics to gain required competencies.

2: Nursing

- There should be at least one paediatric respiratory clinical nurse specialist (CNS).
- Respiratory CNS posts should be a minimum of a band 6 but may be higher banded depending on experience, training and responsibilities.
- The CNS should be supported to be a member of NPRANG and keep up to date with changes in practice, with adequate time to attend training events including respiratory / asthma/ LTV network meetings where available.
- The CNS should work alongside the paediatric consultant with an interest in respiratory paediatrics and other members of the wider teams such as ED departments, ward and community paediatric teams and GPs.
- The CNS should act as a key contact to provide support and guidance to parents, children and young people and other professionals.
- The CNS should act as the main link professional for transition to adult care.
- The CNS may lead their own respiratory nurse led clinics depending on training and experience.

3: Physiotherapy

- This should be a senior physiotherapist post which should be a minimum of a band 6 but may be higher depending on experience and responsibilities.
- For children with bronchiectasis and complex neurodisability there should be access to a senior paediatric physiotherapist who is able to teach airway clearance techniques to children and young people of different ages.
- Physiotherapists are best placed to assess and recommend breathing exercises for breathing pattern disorders in children and young people.
- This post may be shared with another service such as a cystic fibrosis service.

4: Additional Staffing

- Access to a lung function technician or member(s) of MDT who are suitably trained to perform spirometry.

- Access to a paediatric dietitian, paediatric pharmacist, clinical psychologist, speech & language therapist and social worker.
- Access to transition pathways to adult services.

5: Recommended Minimum Staffing Standards

Paediatric Respiratory services should have a minimum level of staffing to support safe and effective care, and each team should comprise of the core members of the MDT. The recommended staffing ratios are based on asthma patient numbers for ease of calculation and comparison, but the staff groups will usually cover a wider respiratory service. There will be some variation in the breadth of diagnoses managed by each service, and additional staffing may be required depending on the additional patient groups managed, for example bronchiectasis and non-invasive ventilation. Please see section G for a list of conditions usually managed by a secondary care paediatric respiratory service. Some services may have separate physiology services performing and interpreting lung function testing and reporting oximetry studies.

Recommended Minimum Staffing Standards for a Paediatric Respiratory Service in Secondary Care

Staff Groups	WTE / asthma admissions per year (10 PAs = 1WTE)
	250 patients
Medical Consultants*	0.4
Clinical Nurse Specialist*	1.5
Senior Physiotherapist**	0.2

*The staffing figures represent minimum requirements, based on average admission numbers in a district general hospital (to correspond with similar existing recommendations in adult respiratory medicine). Some services may require more staff than indicated by admission numbers, particularly in settings where effective asthma management contributes to reduced hospital admissions. In addition, some services may operate Advanced Nurse Practitioner (ANP) or Advanced Clinical Practitioner (ACP) led clinics and a lower number of consultant led clinics. The clinical nurse specialist (CNS) role may also include a substantial educational component. These alternative models of care and additional roles are not reflected within the staffing recommendations.

**The key role of the physiotherapist will be supporting children and young people with bronchiectasis, complex neurodisability and breathing pattern disorders in outpatients. Staffing standards for on-call physiotherapy to cover acute respiratory patients (including patients with exacerbations of bronchiectasis and respiratory complications of complex neurodisability/ LTV) are not included here and would need to be considered separately.

B Facilities

- Sufficient clinic capacity to enable appropriate follow-up. Children and young people admitted with asthma should be followed up in an asthma clinic within 4 weeks.
- Clinics should be run in a child friendly environment with adequate and appropriate waiting space.
- Adequate consultation time (minimum 30 minutes for a new patient).
- Training and education in inhaler technique and airway clearance as required.
- Availability of Personalised Asthma Action Plans.

- Facilities for disposal of used inhalers or signposting to appropriate pharmacy facilities for disposal.

The facilities and ability to perform a range of investigations
- Spirometry including bronchodilator reversibility (a longer appointment time will be required for reversibility).
- FeNO (Fractional exhaled Nitric Oxide) measurement.
- Microbiological surveillance.
- Blood tests.
- Skin prick testing and / or specific IgE blood testing.
- Chest x-rays.

C Access to other investigations
- Access to sweat testing and genetic testing.
- Access to HRCT scans (it may be more appropriate for young children or those requiring general anaesthesia for CT scans to be undertaken at a tertiary centre).
- Exercise testing.
- Overnight oxygen saturation monitoring.

D Access to other specialists and services
- Have the availability to consult with and refer patients to specialists in paediatric allergy, paediatric gastroenterology, dermatology and ENT surgeons.
- Close links with a tertiary paediatric respiratory service for training and support and referral of more complex patients (including sleep services).
- Links with adult respiratory services to facilitate transition to adult respiratory services.
- Information on and links to smoking and vaping cessation services for children and young people and their parents or carers.
- Information on and links to support housing issues in relation to damp and mould.

E Clinical governance and audit
- The service should have easy access to nationally and internationally accepted guidelines for the management of respiratory conditions.
- The service should take part in the NACAP audit and other national audits as they arise.
- Complaints and incidents should be recorded and responded to following local Trust guidance.
- Fatal and near fatal asthma attacks should be investigated via an MDT process and learning identified and disseminated.
- Local multidisciplinary team meetings should be held to include discussion of complex patients, service development and informal CPD. These meetings may be held jointly with other teams such as a paediatric allergy service in smaller trusts.

F Transition to adult services
- Time should be allocated to enable the young person to be seen on their own for part of the appointment.
- Transition to adult services paperwork should be used, such as the 'Ready Steady Go' programme to identify areas of additional support required to enable increasing independence.

- There should be clearly identified pathways to transition to adult services.
- As a minimum, at the end of the transition pathway there should be a handover clinic jointly with an adult respiratory physician or a handover conversation with the GP practice. If transitioning care to an adult respiratory service, a couple of joint appointments are preferable. This could involve additional members of the adult MDT such as adult respiratory CNS and lung function technicians.

G Patient Pathways

The patient pathways will be a mixture of joint primary and secondary care, sole secondary care and shared care with tertiary services.

Conditions usually managed solely by a secondary care paediatric respiratory service

- Asthma
- Preschool wheeze
- Respiratory complications of complex neurodisability
- Bronchopulmonary dysplasia
- Protracted bacterial bronchitis (PBB) and chronic cough
- Breathing pattern disorders (BPD)

Conditions usually managed in shared care model with a tertiary paediatric respiratory service

- Complicated pneumonia
- Difficult asthma
- Bronchiectasis or suspected bronchiectasis
- Congenital lung problems
- Rare lung diseases - Interstitial lung disease / Bronchiolitis Obliterans
- Long term ventilation (LTV) / Non-Invasive Ventilation (NIV)
- Respiratory complications of neuromuscular disease
- Primary ciliary dyskinesia
- TB (may be managed by a specialist in Infectious Diseases)
- Cystic fibrosis (not covered in this document)

H Further Research

Further research is needed to determine how secondary care centres can best support and influence outcomes and quality of respiratory care across various childhood respiratory conditions and pathways.

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