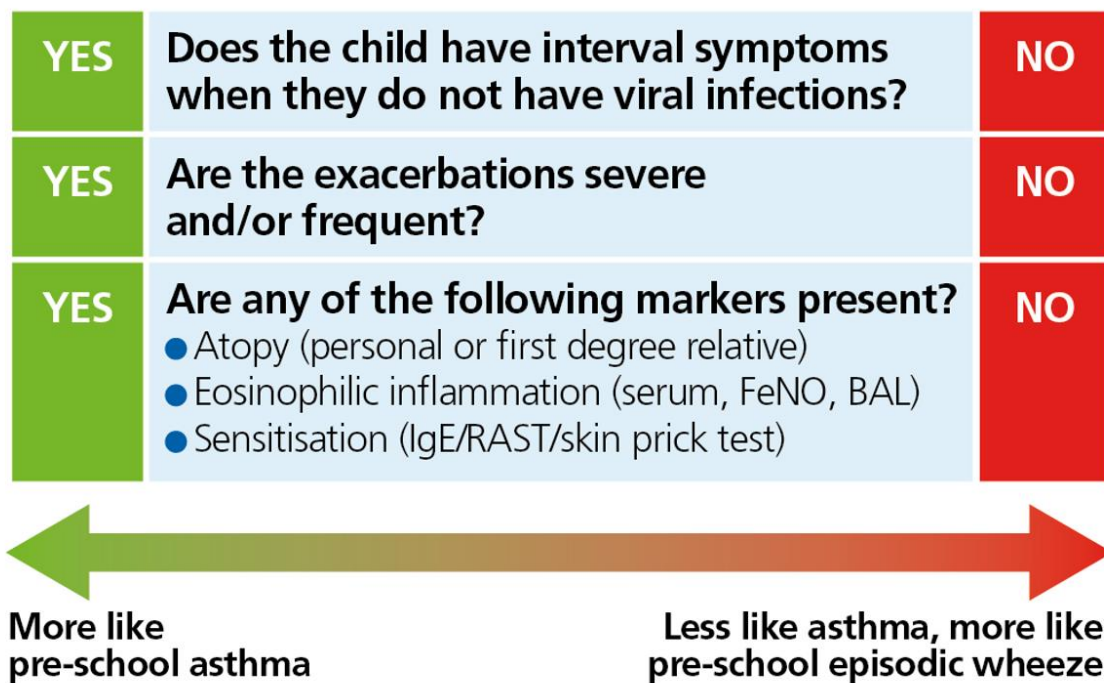


Resource Pack to accompany the National Bundle of Care for Children and Young People with Asthma

Contents

Resource One - Preschool Wheeze Consensus Guideline Decision Aid	3
Resource Two- An example of a children's PAAP	4
Resource Three – Home Visit Proforma	5
Resource Four - Difficult to Treat/Severe Asthma Service – National Standards of Care	14
Resource Five – Paediatric Severe Asthma: A Network Approach	23
Resource Six - Training Capabilities Framework	24

Resource One - Preschool Wheeze Consensus Guideline Decision Aid




Resource Two-An example of a children's PAAP

My asthma triggers:
List the things that make your asthma worse so you can try to avoid or treat them

I will see my doctor or asthma nurse at least once a year (but more if I need to)
Date my asthma plan was updated _____

Date of my next asthma review: _____

Doctor/asthma nurse contact details: _____



My Asthma Plan

Parents – get the most from your child's action plan

- **Take a photo** and keep it on your mobile (and your child's mobile if they have one)
- **Stick a copy** on your fridge door
- **Share** your child's action plan with school

Learn more about what to do during an asthma attack
www.asthma.org.uk/advice/asthma-attacks

Questions? Ask Asthma UK's nurses:

Call on
☎ **0300 222 5800** (9am-5pm; Mon-Fri)


Or message on **WhatsApp** (over 16 only)
☎ **07378 606 728** (9am-5pm; Mon-Fri)

Your asthma plan tells you what medicines to take to stay well


And what to do when your asthma gets worse


Always keep your reliever inhaler (usually blue) and your spacer with you.

You might need them if your asthma gets worse.




The Asthma UK and British Lung Foundation Partnership is a company limited by guarantee 01863614 (England and Wales). VAT number 648 8121 18. Registered charity in England and Wales (126730), Scotland (SC038415) and the Isle of Man (1177). Registered office: 18 Mansell Street, London, E1 8AA. Last reviewed 2021; next review 2024





Name: _____



My Asthma Plan

2 My asthma is getting worse if...

- I wheeze or cough, my chest hurts or it's hard to breathe **or**
- I need my reliever inhaler (usually blue) three or more times a week **or**
- My peak flow is less than _____ **or**
- I'm waking up at night because of my asthma (this is an important sign and I will book a next day appointment)

3 I'm having an asthma attack if...

- My reliever inhaler isn't helping or I need it more than every four hours **or**
- I can't talk, walk or eat easily **or**
- I'm finding it hard to breathe **or**
- I'm coughing or wheezing a lot or my chest is tight/hurts **or**
- My peak flow is less than _____

1 My usual asthma medicines

- I need to take my preventer inhaler every day. It is called _____ and its colour is _____
- I take _____ puff/s of my preventer inhaler in the morning and _____ puff/s at night. I do this every day even if my asthma's OK.
- Other asthma medicines I take every day: _____
- My reliever inhaler helps when I have symptoms. It is called _____ and its colour is _____
- I take _____ puff/s of my reliever inhaler when I wheeze or cough, my chest hurts or it's hard to breathe.
- My best peak flow is _____

If my asthma gets worse, I will:

- Take my preventer medicines as normal
- And also take _____ puff/s of my blue reliever inhaler every four hours
- See my doctor or nurse within 24 hours if I don't feel better

URGENT! If your blue reliever inhaler isn't lasting four hours you need to take emergency action now (see section 3)

Other things to do if my asthma is getting worse

If I have an asthma attack, I will:

Call for help


Sit up — don't lie down. Try to be calm.

Take one puff of my reliever inhaler (with my spacer if I have it) **every 30 to 60 seconds** up to a total of 10 puffs.

If I don't have my blue inhaler, or it's not helping, I need to call 999 straightaway.

While I wait for an ambulance I can use my blue reliever again, every 30 to 60 seconds (up to 10 puffs) if I need to.

If I need my blue inhaler when I do sports or activity, I need to see my doctor or asthma nurse.



Remember to use my spacer with my inhaler if I have one.

(If I don't have one, I'll check with my doctor or nurse if it would help me)

Even if I start to feel better, I don't want this to happen again, so I need to see my doctor or asthma nurse **today.**

Resource Three – Home Visit Proforma

Home visit (Summary)

Home visit carried out by (circle): specialist asthma nurse / local nurse / other / not done

Date of home visit:

Type of home: House ☐ Flat ☐ Other ☐

If flat, which floor?

Garden directly accessible from property: yes ☐ no ☐

Medications available: yes ☐ no ☐ some ☐

Medications within use by date: yes ☐ no ☐ some ☐

Medications supervised: yes ☐ no ☐

Parental smoking: yes ☐ no ☐

Smoking indoors: yes ☐ no ☐ N/A ☐

HDM reduction measures in place:

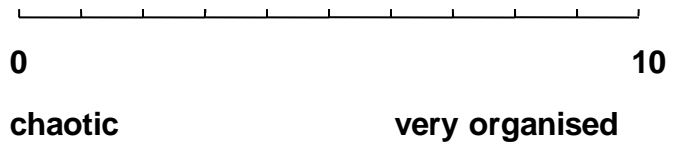
yes ☐ no ☐ some ☐ N/A ☐

Pet avoidance: yes ☐ no ☐ no pets ☐ N/A ☐

Damp / moldy housing: yes ☐ no ☐

Other significant exposure: yes ☐ no ☐

Overall impression of home



Other comments:

Positive SPT results:

House Dust Mite (HDM) avoidance if applicable: yes / no

HDM measures (please circle as appropriate)

Bed: bunk bed top/bunk bed bottom/single

Mattress cover, pillow protection, linen regularly washed at 60°C, damp dusting.

Flooring: wood (or similar)/carpet/rugs

Windows: wipe clean blinds / curtains/double glazing

Rest of home:

Carpet / fabric sofas and chairs / rugs / evidence of damp dusting / HEPA filter vacuum cleaner

Other information: _____

Allergy advice given: _____

Pets

Pets in the home: 1. 2. 3.

Pets living outside: 1. 2. 3.

Other information and advice given: _____

Moulds

Evidence of damp yes / no Details:

Evidence of mould on walls yes / no Details:

Evidence of mould on windows yes / no Details:

Other allergens/irritants: (i.e. air fresheners, poor ventilation, mouldy food, rodent infestations etc) _____

Smoke exposure

Do parents smoke yes / no If yes; inside / outside

Other household members? yes / no

Evidence of smoke in home yes / no details:

Evidence of active smoking yes / no

Cotinine done? yes / no

Current medication

Name	Dose/Frequency	Route	Available	In date
			Yes / no	Yes / no
			Yes / no	Yes / no
			Yes / no	Yes / no
			Yes / no	Yes / no
			Yes / no	Yes / no
			Yes / no	Yes / no
			Yes / no	Yes / no

Medication location:

Spares available: yes / no / some

Appropriate devices: yes / no / some details:
Do parents supervise yes / no / sometimes
Inappropriate amount of un-used med (stockpiling) yes / no comment:
Prescription pick up rate: <50% / 50% ☐ 80% / >80%

Details of medications issues discussed: *(ie understanding of medication regime, knowledge of drug types, management of exacerbations etc)*

Management plan in place?

Advice given:

Psychosocial issues

Previously identified issues pre home visit: yes / no

If yes give details:

Appropriate perception of asthma severity: yes / no

If yes give details:

Psychosocial issues discussed at home visit:

(continue on separate page if necessary)

Referral to psychology made: yes / no

Plan:

- 1.
- 2.
- 3.
- 4.

Summary of home visit:

--

Signed:

Print:

PRESCRIPTION CHECK

Name:

CRN:

DOB:

Date of check:

Who By:

Uptake =

$$\left(\frac{\text{Total number of inhalers collected}}{(360 / \text{Number of days one inhaler should last})} \right) \times 100$$

	Medication	Strength	Total daily dose	Number of days 1 inhaler should last	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Total	% uptake
ICS (ICS/LABA)																		
Prednisolone																		
LRTA																		
Salbutamol																		

Number of doses in frequently used inhalers:

Name of inhaler

Number of doses

MDI

Flixotide 125mcg and 250mcg 120

Pulmicort 200mcg 200

Seretide all strengths 120

Serevent 25mcg 120

Turbohaler

Pulmicort 100mcg 200

To be used in conjunction with the National Bundle of Care for CYP with Asthma and associated ICS deliverables

Pulmicort 200mcg	100	
Pulmicort 400 mcg	50	
Symbicort 100/6 and 200/6		120
Symbicort 400/12	60	
Oxis 6mcg or 12 mcg	60	

Accuhaler

Flixotide, Seretide and Serevent

Resource Four - Difficult to Treat/Severe Asthma Service – National Standards of Care

This document sets out the requirements of a specialist paediatric severe asthma service, both in terms of personnel and facilities available; the assessments which should be undertaken and management options:

Aims

- To confirm the diagnosis of asthma
- To identify and treat co-morbidities
- To perform an initial assessment to identify severe asthma, difficult asthma and refractory difficult asthma
- To assess and address all aspects of asthma care including treatment, treatment effects, psychosocial and school related issues that impact on the child and their family
- To carry out careful characterisation of children with problematic severe asthma including measures of inflammation, lung function and asthma control to enable a targeted approach to treatment
- To perform an in-depth annual review of all children continuing to fulfil the criteria for problematic severe asthma
- To implement targeted and appropriate pharmacological treatments including omalizumab and mepolizumab and novel monoclonals
- To implement targeted and appropriate non-pharmacological treatments such as breathing control exercises.
- To monitor and screen for side effects of treatment, in particular long-term effects of oral steroids and to implement a steroid sparing management strategy and wean oral steroids safely
- To improve patient adherence to treatment by improving health education and psychological support
- To offer psychological support to all children and their families to address issues including adherence, anxiety, needle phobia and depression
- To liaise with secondary and primary care in terms of the management of individual patients and more widely for education and health service development
- To enter data on all children with severe asthma / refractory difficult asthma onto the National Difficult Asthma registry to inform our knowledge of the prevalence and costs of severe asthma, the characteristics of children with

severe asthma and variations in the assessment of these children and prescribing practices for biologic therapies

- To enhance and coordinate research and regional education in this area
- To work with regional CCGs and ChiMat to monitor and assess clinical and financial outcome improvements

Referral

The referral pathway is summarised in Figure 2

ALL children who meet any of the following criteria should be assessed by the regional tertiary difficult/severe asthma service for an initial assessment and then at least annually if they continue to meet any of these criteria.

1. Children prescribed maintenance oral steroids (≥ 4 weeks over past 12 months)
2. Admission to PICU
3. On-going poor control despite optimised management and the prescription of high dose inhaled corticosteroids plus a long acting beta agonist

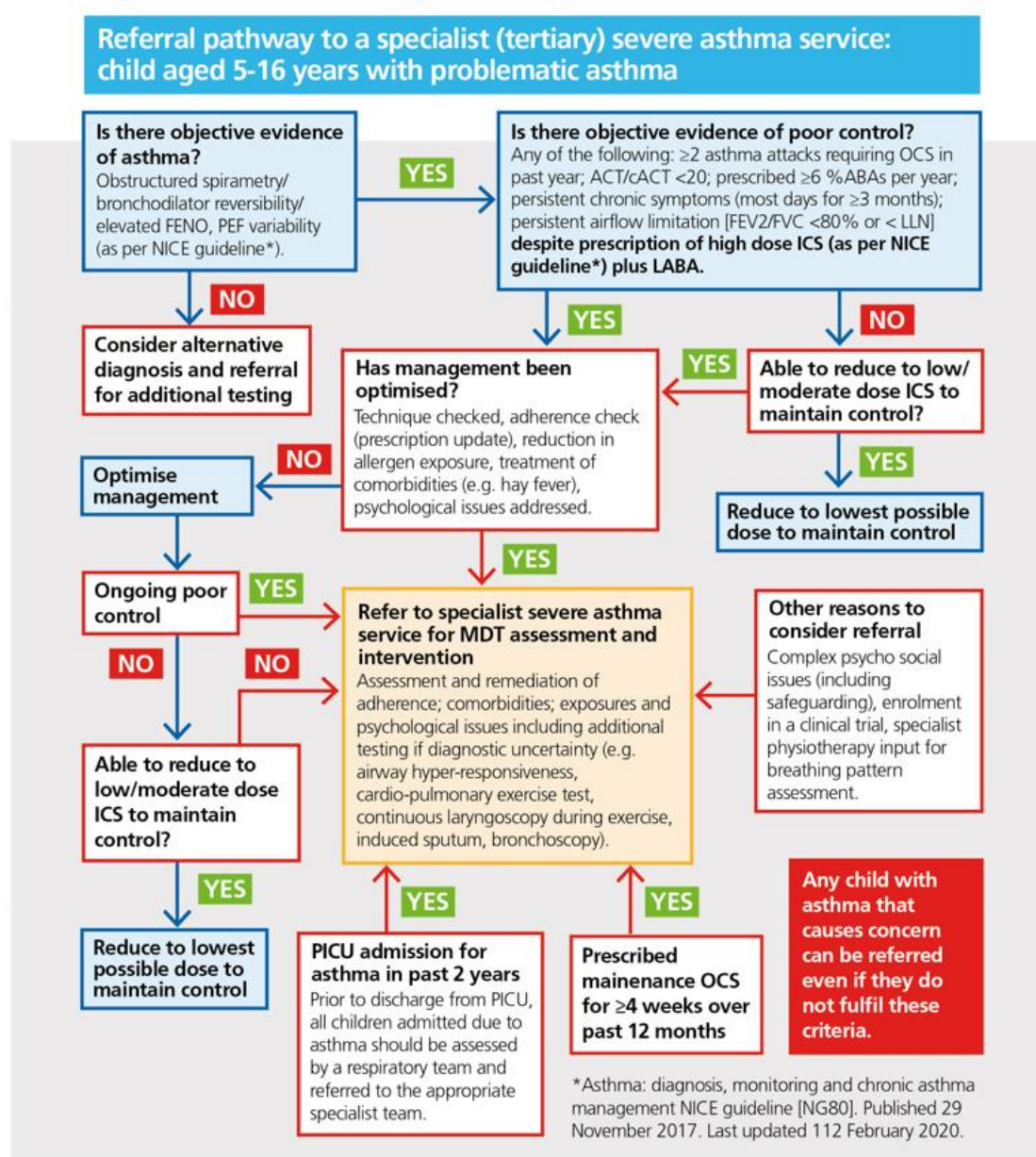
Poor asthma control is defined as (one or more of):

- Recurrent severe exacerbations in the past year (*≥ 2 per year requiring high dose OCS*)
- Persistent chronic symptoms (*most days for >3 months*) or an Asthma Control Test (ACT) or Childhood Asthma Control Test (C-ACT) score of <20
- Prescription of ≥ 6 salbutamol inhalers per year
- Persistent airflow obstruction (*$FEV_1 < 80\%$ post bronchodilator*)

Other children may be considered for referral if it is felt they would benefit from the services of a specialist difficult/severe asthma MDT. For example:

- Diagnostic uncertainty
- Complex psychosocial / safeguarding issues
- Dysfunctional breathing
- Enrolment in clinical studies

Figure 2: Referral Pathway



Service description

- Multi-disciplinary team comprising of a core team: lead Respiratory Paediatrician with an interest in severe asthma, Specialist Respiratory Children's nurse, specialist respiratory physiotherapist, psychologist, pharmacist; and supported by other professionals including dietician, speech and language therapist, ENT surgeon, paediatric allergist, paediatric endocrinologist and social worker / safeguarding nurse
- Comprehensive assessment of children with difficult/severe asthma including review in a Specialist Asthma clinic, nurse led home and hospital visit,

physiotherapy review and psychology review (not all children need to be seen by a psychologist, but all children should be discussed with the psychologist and offered an assessment within 4 weeks, if appropriate)

- A small number of children may require an inpatient stay of up to 2 weeks for further evaluation
- Some children will have most of their follow up with the specialist severe asthma service and others will have shared care with their local secondary care service. All children who continue to fulfil the criteria for PSA should have an annual assessment performed by the specialist team, even if the majority of their follow up is in secondary care.
- Regular, minute-ed team meetings to discuss patients and meetings with shared care partners

Assessments

The following assessments and investigations should be available in all specialist centres although not all assessments will be indicated for every child.

Assessment/Investigation	Further Detail
Assessment of asthma control	<ul style="list-style-type: none"> • Asthma Control Test (ACT) – children >12 years • Childhood Asthma Control Test (C-ACT) – children 4-11 years
Assessment of quality of life and psychological state	<ul style="list-style-type: none"> • Paediatric Asthma Quality of Life Questionnaire (PAQLQ) • Paediatric Anxiety and Depression Scale (PI-ED) or the Hospital Anxiety and Depression Scale (HADS)
Inhaler check	<ul style="list-style-type: none"> • Grading of technique
Adherence check	<ul style="list-style-type: none"> • Electronic monitoring • Prescription check • Theophylline levels, prednisolone levels (if applicable) • FeNO Suppression test
Lung Function	<ul style="list-style-type: none"> • Spirometry • Bronchodilator reversibility
Inflammometry	<ul style="list-style-type: none"> • Exhaled Nitric Oxide (FeNO)

Skin prick tests to common
aeroallergens and foods

Blood tests

- Full blood count
- Total IgE and specific IgEs
- Vitamin D

Monitoring steroid side effects

- Synacthen test

Bronchoscopy

CT scan of the chest

pH study

Polysomnography

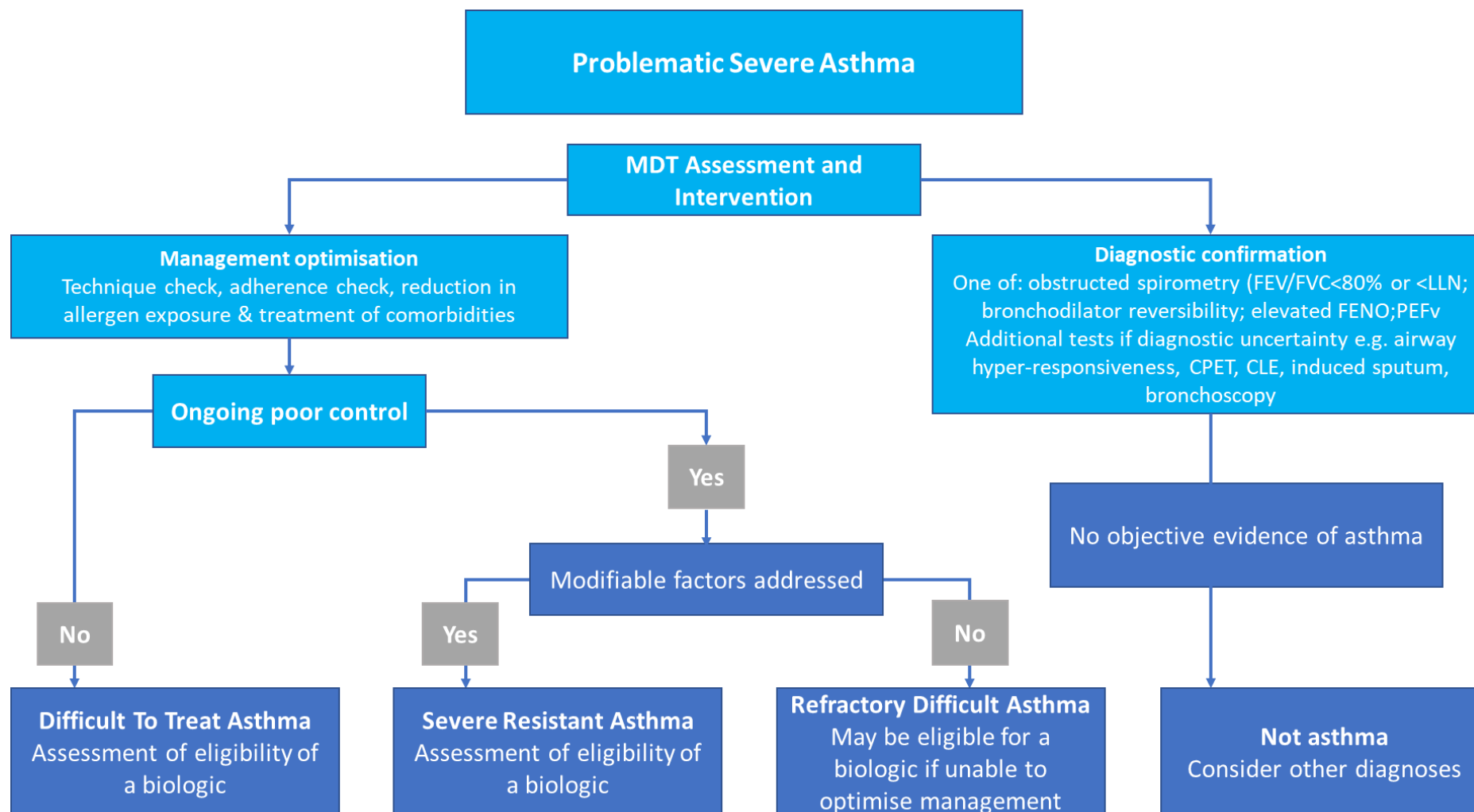
The following assessments and investigations may only be available in supra-specialist centres:

Assessment/Investigation	Further Detail
Lung function	<ul style="list-style-type: none">• Tests of airway hyper-responsiveness (methacholine, histamine or mannitol challenge)• Cardiopulmonary exercise test• Exercise induced asthma test / eucapnic voluntary hyperventilation test• Continuous laryngoscopy during exercise
Inflammometry	<ul style="list-style-type: none">• Induced sputum
Bronchoscopy	<ul style="list-style-type: none">• Endobronchial biopsy• Assessment of steroid response
Monitoring steroid side effects	<ul style="list-style-type: none">• DEXA scan

Outcomes

- De-escalation of treatment in those with difficult asthma
- Referral back to secondary care once assessed and stabilised
- Reduction in exacerbations, hospital admissions and unscheduled health care visits
- Initiation of targeted treatment including novel monoclonals in those with severe therapy resistant asthma
- Annual review for those who still fulfil the criteria for problematic severe asthma as per the initial referral criteria
- All children assessed by the tertiary PSA team entered on the National Difficult and Severe Asthma Registry (unless consent is withheld)

Figure 3: Summary of outcomes



To be used in conjunction with the National Bundle of Care for CYP with Asthma and associated ICS deliverables

Treatment Options

All children should be given a written Personal Asthma Action Plan at each visit

Pharmacological

Children with severe asthma or refractory difficult asthma should undergo detailed characterisation so that a targeted and appropriate management plan can be implemented. The following treatments should only be initiated by the specialist severe asthma service although continuation and ongoing monitoring of these treatments may take place in secondary care. All of these treatments should be given as an initial 16-week trial with careful assessment throughout the treatment period and subjective evidence of benefit. For those who continue on these treatments there should be a continual process of re-assessment

- Omalizumab
- Mepolizumab
- Oral steroids
- Novel biologicals currently licensed and NICE approved for asthma (or likely to be in the near future) including reslizumab (anti IL-5); benralizumab (anti IL-5) and dupilumab (anti IL-4 α). Guidance for use of these medications in children can be found in the NHSE policy for commissioning medicines for children within specialised services.
- All children who are ineligible for omalizumab or mepolizumab or who have had a failed trial should be offered the opportunity to be entered into a multi-centre clinical trial of novel biologicals if eligible
- Many of the treatments listed are not licensed in children or there is a limited evidence of efficacy and therefore they should be used judiciously with careful monitoring

Nonpharmacological

Nonpharmacological treatment should be considered in addition to conventional therapy for all children with difficult/severe asthma. The following should be available:

- Breathing control exercises implemented by a specialist respiratory physiotherapist
- Psychological support including anxiety management

Developmentally Appropriate Care

To be used in conjunction with the National Bundle of Care for CYP with Asthma and associated ICS deliverables

All paediatric difficult/severe asthma services must be aligned to, and work closely with a commissioned adult severe asthma service to ensure they are delivering developmentally appropriate care and that young people (YP) with severe asthma transition smoothly to adult services where this is clinically indicated. Not all YP will require transition to an adult severe asthma service, some will continue to be followed up in their local secondary care asthma clinic and some by their GP. The decision as to the most appropriate setting for on-going care should be made jointly with the YP, their families/carers and the adult and paediatric teams.

The process of transition should start some time before the actual transfer of care (from approximately 14 years onwards but this should be based on developmentally appropriate care and the needs and wishes of the YP and their families). During this time the paediatric team should support the YP in gaining greater autonomy and ensuring they have appropriate knowledge of their condition, treatment and self-management. This process should continue once the YP has transferred to adult care.

Resource Five – Paediatric Severe Asthma: A Network Approach

A NETWORK APPROACH TO ASTHMA CARE

The development of Sustainability and Transformation Partnerships (STPs) in 2016 provided an opportunity to develop improved pathways of care within an STP and to have an identified severe asthma centre for each STP. This has now evolved into Integrated Care Systems (ICSs) which map to the STP areas and will ensure closer collaboration between NHS organisations to deliver effective care. In many areas asthma networks have been established as part of the ICS within the Children and Young People's Transformation Programme.

The aim of these networks is to better define referral pathways, ensuring that the right children are referred in an appropriate and timely manner; standardise the assessment that is carried out following referral; improve shared care arrangements and determine supra-specialist services for severe asthma (for example bronchoscopy, continuous laryngoscopy during exercise and initiation of biologicals).

Adult severe asthma

The networked approach has been established for adults with severe asthma in England following consultation with a wide range of stakeholders. The development of these networks has been facilitated by a service specification for adult severe asthma (embedded).

The key features of the model are as follows:

- Designated regional severe asthma centres
- These centres undertake the MDT assessment of adults with severe asthma as set out in the service specification and act as gatekeepers for expensive drugs and interventions (for example initiation of treatments such as omalizumab and mepolizumab and interventions such as bronchial thermoplasty)
- Each secondary care centre has a clearly defined regional severe asthma service and clearly defined referral criteria and pathways
- Regional MDTs (usually "virtual" MDTs) are held between the networked centres

A relatively small number of Trusts (9) have been designated as adult severe asthma centres in England.

Resource Six - Training Capabilities Framework

The Tiered Asthma Capabilities

These capabilities are relevant to anyone who has any responsibility for a child who may have asthma.

The capabilities are divided into tiers appropriate to the role the individual will play in the care of the child with asthma. Each tier covers 10 capabilities covering all aspects of asthma management and understanding. There are several learning outcomes for each capability. An individual must be capable in all learning outcomes at the level of the tier appropriate to their role as well as all the learning outcomes at the level of all the tiers below.

The tiers are not profession specific, but rather describe the minimum required knowledge and skills any individual must possess in order to safely carry out certain roles in caring for a child with asthma. As an individual's role develops and responsibilities increase, an individual may be required to meet a higher tier of competencies in order to safely carry out the evolved role e.g. a practice nurse may be capable in their role with Tier 2 training, but over time develops a nurse-led asthma clinic requiring a tier 3 level of training.

The following are suggestions of professions that may fit into the different tiers, but these are just that; suggestions. An individual should look at their own role and choose the tier most appropriate to them.

Tier	Suggested Profession
1 - Signposting <i>Basic awareness of asthma and its impacts – to signpost and consider impacts</i>	Non-clinical professionals who may come in to contact with children with asthma but have no direct responsibility for their long-term care eg: <ul style="list-style-type: none">• Education Staff• Social care and housing support officers• Teaching staff• Leaders of children's clubs (cubs, sports, after school clubs, children's centre staff)
2 - Supporting use of prescribed care <i>Basic review, ensure correct use of devices, managing acute asthma attack</i>	Community pharmacist Ward/community nurses, Health Visitors School nurses Practice nurses, nursing associates Hospital play therapists Allied Health Professionals (ALH)
3 - Assessment and prescribing of asthma care <i>Diagnosing asthma, reviewing asthma, stepping treatment up and down</i>	GPs Paediatricians ED Doctors Ambulance staff

4 - Assessment and prescribing for more difficult to treat asthma

Dealing with cases where diagnosis is uncertain, managing hard to control cases

Specialist asthma and allergy clinicians
Paediatricians with special interest in asthma

5 – Managing the difficult and severe asthmas

Severe asthma service – managing children at high risk

Tertiary Paediatricians
Nurse consultants
AHP members of the asthma Multi-disciplinary team (MDT)

Individuals and organisations will be held accountable if staff are working in roles without having achieved the required set capabilities.

Once capabilities in a specific tier have been achieved, an individual is able to mentor others up to and including their tier of capability.

Individuals with a lower tier of capability may work at the level of a higher capability if there is appropriate supervision by a mentor trained to the higher capability level.

Once achieved, competencies will require updating. The time required between updates will depend on the tier of competency achieved.

Different tiers will have different requirements for the training needed to achieve the capabilities. For example, tier 1 capabilities may be achieved through an online module or a single lecture, whereas tier 3 may require more in-depth face to face training; tier 5 will require a number of years of specialist training.

Training in spirometry is achieved through an accredited national training programme and is not part of these capabilities.

Asthma Capability Tiers

Tier 1: Signposting
Function
Basic awareness of asthma and its impacts – to signpost and consider impacts
Capabilities and Learning Outcomes
<p>Capability 1: Asthma awareness:</p> <p>LO1: Have a basic understanding of ‘What is asthma?’</p> <p>LO2: Have a basic understanding of why is it a problem?</p> <p>LO3: Understand how common it is and its potential impact/seriousness</p> <p>Capability 2: Diagnosing asthma:</p> <p>LO1: n/a</p> <p>Capability 3: Managing Chronic asthma:</p> <p>LO1: Is able to demonstrate basic knowledge of the aims of asthma treatment and the broad principles of achieving it</p> <p>LO2: Is able to demonstrate basic knowledge of why spacers and other devices are used across the ages and awareness of resources to support good technique</p> <p>Capability 4: Recognition of poor chronic asthma control:</p> <p>LO1: Is able to demonstrate understanding that it is everyone’s responsibility if a child’s asthma control is inadequate</p> <p>LO2: Is able to demonstrate the ability to recognise signs of poorly controlled asthma (cough, wheeze, overuse of reliever inhalers, school absence, sleep disturbance)</p> <p>and the dangers of over-reliance on SABAs</p> <p>LO3: Is able to demonstrate how and to whom to escalate if there are concerns</p> <p>Capability 5: Recognition of an acute attack:</p> <p>LO1: Is able to demonstrate knowledge of the signs of an asthma attack</p> <p>Capability 6: Management of an acute attack:</p> <p>LO1: Is able to demonstrate knowledge of who to call for help if a child is having an asthma attack in the community and the first steps of emergency management.</p> <p>Capability 7: Socioeconomic aspects of asthma:</p> <p>LO1: Is able to demonstrate knowledge of basic modifiable risk factors of poor adherence, smoking including second-hand smoke exposure and obesity and tools available to support addressing them</p> <p>Capability 8: Supporting families:</p> <p>LO1: Is able to demonstrate basic knowledge of how to support families when they have a child with asthma and how to support them to access additional resources</p> <p>LO2: Is able to demonstrate knowledge around the possibility of poor asthma control as warning sign for safeguarding. Ability to recognise, gather facts in a non-confrontational manner and react to safeguarding concerns</p> <p>Capability 9: The wider environment and asthma:</p> <p>LO1: Is able to demonstrate basic knowledge of the influence of seasonal, food and other allergens, and air pollution and internal air quality on respiratory morbidity and strategies to address them</p>

Skills
How to use an inhaler and spacer and how to care for it

Tier 2: Supporting use of prescribed care

Function

Basic review, ensure correct use of devices, managing acute asthma attack

Capabilities and Learning Outcomes

Capability 1:

- LO1: Have a basic understanding of 'What is asthma?'
- LO2: Have a basic understanding of why is it a problem?
- LO3: Understand how common it is and its potential impact/seriousness
- LO4: Is able to demonstrate knowledge of asthma as part of the spectrum of allergic disorders

Capability 2: Diagnosing asthma:

- LO1: Is able to demonstrate knowledge of the limitations in asthma diagnosis

Capability 3: Managing Chronic asthma:

- LO1: Is able to demonstrate basic knowledge of the aims of asthma treatment and the broad principles of achieving it
- LO2: Is able to demonstrate basic knowledge of why spacers and other devices are used across the ages and awareness of resources to support good technique
- LO3: Is able to demonstrate knowledge of the basic principles of chronic management of asthma
- LO4: Is able to demonstrate knowledge of which medicines are needed and why? (Preventers vs. relievers)
- LO5: Is able to demonstrate knowledge of the different available inhaler devices appropriate to children, including DPIs, and knowledge of the resources available to help understand how to use them
- LO6: Is able to explain an asthma action plan
- LO7: Is able to demonstrate the ability to use the age-appropriate ACT questionnaire and recognise that a low score is an indicator of poor control and requires action
- LO8: Is able to demonstrate awareness of the challenges of remote consulting

Capability 4: Recognition of poor chronic asthma control:

- LO1: Is able to demonstrate understanding that it is everyone's responsibility if a child's asthma control is inadequate
- LO2: Is able to demonstrate the ability to recognise signs of poorly controlled asthma (cough, wheeze, overuse of reliever inhalers, school absence, sleep disturbance) and the dangers of over-reliance on SABAs
- LO3: Is able to demonstrate how and to whom to escalate if there are concerns

Capability 5: Recognition of an acute attack:

- LO1: Is able to demonstrate knowledge of the signs of an asthma attack
- LO2: Is able to demonstrate the ability to recognise the signs of an asthma attack and initial management

Capability 6: Management of an acute attack:

- LO1: Is able to demonstrate knowledge of who to call for help if a child is having an asthma attack in the community and the first steps of emergency management.
- LO2: Is able to demonstrate knowledge of asthma management plans and how to follow them

Capability 7: Socioeconomic aspects of asthma:

- LO1: Is able to demonstrate knowledge of basic modifiable risk factors of poor adherence, smoking including second-hand smoke exposure and obesity and tools available to support addressing them
- LO2: Is able to demonstrate knowledge of and identify the socioeconomic issues that can contribute to sub-optimal asthma control

Capability 8: Supporting families:

LO1: Is able to demonstrate basic knowledge of how to support families when they have a child with asthma and how to support them to access additional resources

LO2: Is able to demonstrate knowledge around the possibility of poor asthma control as warning sign for safeguarding. Ability to recognise, gather facts in a non-confrontational manner and react to safeguarding concerns

LO3: Is able to identify and react to links between poor asthma control, poor medicine adherence and non-attendance

LO4: Is able to demonstrate knowledge of services available to support the management of the non-adherent family or the family disengaged from asthma services.

Capability 9: The wider environment and asthma:

LO1: Is able to demonstrate basic knowledge of the influence of seasonal, food and other allergens, and air pollution and internal air quality on respiratory morbidity and strategies to address them

LO2: Is able to demonstrate knowledge of the impact of air pollution, both indoor and outdoor, on asthma control and the ability to advise patients on their impact

LO3: Is able to demonstrate knowledge of the impact of allergies and allergens on asthma control and severity and the ability to discuss and advise patients on the impact

LO4: Is able to demonstrate knowledge of the interplay between asthma, allergy and anaphylaxis and the ability to explain this to patients

Skills

- How to use an inhaler and spacer and how to care for it
- How to use and teach the use of a peak flow meter
- How to use and teach the use of a spacer and inhaler to treat an acute asthma attack and knowledge to signpost to reputable digital platforms to reinforce the teaching
- Ability to create, review and communicate an asthma action plan
- Ability to create and communicate a post-attack discharge plan and undertake a post attack 48-hour review
- Ability to carry out and communicate an annual review

Tier 3: Assessment and prescribing of asthma care

Function

Diagnosing asthma, reviewing asthma, stepping treatment up and down, managing acute asthma attack and post attack review

Capabilities and Learning Outcomes

Capability 1: Asthma awareness:

- LO1: Have a basic understanding of 'What is asthma?'
- LO2: Have a basic understanding of why is it a problem?
- LO3: Understand how common it is and its potential impact/seriousness
- LO4: Is able to demonstrate knowledge of asthma as part of the spectrum of allergic disorders
- LO5: Is able to demonstrate knowledge of the physiological basis of asthma
- LO6: Is able to demonstrate knowledge of the different National and Local guidelines
- LO7: Is able to demonstrate knowledge of the difference between allergic and non-allergic asthma and the various types of recurrent wheezing in preschool children

Capability 2: Diagnosing asthma:

- LO1: Is able to demonstrate knowledge of the limitations in asthma diagnosis
- LO2: Is able to recognise the symptoms and signs of asthma and to demonstrate the ability to take a detailed history to make a diagnosis
- LO3: Is able to demonstrate knowledge of the differential diagnosis of asthma
- LO4: Is able to demonstrate knowledge of the red flag symptoms suggestive of an alternative diagnosis to asthma and if appropriate investigate further.
- LO5: Is able to demonstrate knowledge of physiological tests and the ability to interpret them to support an asthma diagnosis and referral pathways if the diagnosis is unclear

Capability 3: Managing Chronic asthma:

- LO1: Is able to demonstrate basic knowledge of the aims of asthma treatment and the broad principles of achieving it
- LO2: Is able to demonstrate basic knowledge of why spacers and other devices are used across the ages and awareness of resources to support good technique
- LO3: Is able to demonstrate knowledge of the basic principles of chronic management of asthma
- LO4: Is able to demonstrate knowledge of which medicines are needed and why? (Preventers vs. relievers)
- LO5: Is able to demonstrate knowledge of the different available inhaler devices appropriate to children, including DPIs, and knowledge of the resources available to help understand how to use them
- LO6: Is able to explain an asthma action plan
- LO7: Is able to demonstrate awareness of the challenges of remote consulting
- LO8: Is able to demonstrate detailed knowledge of the different available inhaler devices and their different potencies appropriate to children and knowledge of the resources available to help understand how to use them and can demonstrate the ability to teach a child or parent how to use them.
- LO9: Is able to demonstrate the ability to carry out a detailed asthma review including how to use the age-appropriate ACT questionnaire and interpret, explain and record the score and step treatment up or down appropriately
- LO10: Is able to demonstrate an awareness of the markers that may signal poor control and the knowledge of how to escalate
- LO11: Is able to demonstrate knowledge of transition pathways to adult services

Capability 4: Recognition of poor chronic asthma control:

LO1: Is able to demonstrate understanding that that it is everyone's responsibility if a child's asthma control is inadequate

LO2: Is able to demonstrate the ability to recognise signs of poorly controlled asthma (cough, wheeze, overuse of reliever inhalers, school absence, sleep disturbance)

and the dangers of over-reliance on SABAs

LO3: Is able to demonstrate how and to whom to escalate if there are concerns

LO4: Is able to recognise the contribution of co-morbidities to asthma control and demonstrate knowledge of strategies to manage them including food and inhalant allergies, rhinitis, obesity and mental health.

LO5: Is able to demonstrate knowledge of medicine adherence and its impact on good asthma control

LO6: Is able to recognise when to refer to more specialist care

Capability 5: Recognition of an acute attack:

LO1: Is able to demonstrate knowledge of the signs of an asthma attack

LO2: Is able to demonstrate the ability to recognise the signs of an asthma attack and initial management

Capability 6: Management of an acute attack:

LO1: Is able to demonstrate knowledge of who to call for help if a child is having an asthma attack in the community and the first steps of emergency management.

LO2: Is able to demonstrate knowledge of asthma management plans and how to complete and follow them

LO3: Is able to demonstrate the ability to carry out the advanced management of an acute asthma attack

LO4: Is able to demonstrate knowledge of the importance of, and ability to carry out a post-attack review

LO5: Is able to demonstrate the ability to recognise a near fatal asthma attack and subsequent need for referral to specialist services.

LO6: Is able to demonstrate knowledge the presentation of anaphylaxis and how this can mimic an asthma attack

Capability 7: Socioeconomic aspects of asthma:

LO1: Is able to demonstrate knowledge of basic modifiable risk factors of poor adherence, smoking including second-hand smoke exposure and obesity and tools available to support addressing them

LO2: Is able to demonstrate knowledge of and identify the socioeconomic issues that can contribute to sub-optimal asthma control

Capability 8: Supporting families:

LO1: Is able to demonstrate basic knowledge of how to support families when they have a child with asthma and how to support them to access additional resources

LO2: Is able to demonstrate knowledge around the possibility of poor asthma control as warning sign for safeguarding. Ability to recognise, gather facts in a non-confrontational manner and react to safeguarding concerns

LO3: Is able to identify and react to links between poor asthma control, poor medicine adherence and non-attendance

LO4: Is able to demonstrate knowledge of services available to support the management of the non-adherent family or the family disengaged from asthma services.

Capability 9: The wider environment and asthma:

LO1: Is able to demonstrate basic knowledge of the influence of seasonal, food and other allergens, and air pollution and internal air quality on respiratory morbidity and strategies to address them

LO2: Is able to demonstrate knowledge of the impact of air pollution, both indoor and outdoor, on asthma control and the ability to advise patients on their impact

LO3: Is able to demonstrate knowledge of the impact of allergies and allergens on asthma control and severity and the ability to discuss and advise patients on the impact

LO4: Is able to demonstrate knowledge of the interplay between asthma, allergy and anaphylaxis and the ability to explain this to patients

Capability 10: Leadership and education

LO1: Is able to demonstrate the ability to work as part of a wider multi-disciplinary team to support CYP and families with broader factors that can influence outcomes

LO2: Awareness of the issues surrounding accurate asthma coding

Skills

- How to use an inhaler and spacer and how to care for it
- How to use and teach the use of a peak flow meter
- How to use and teach the use of a spacer and inhaler to treat an acute asthma attack and knowledge to signpost to reputable digital platforms to reinforce the teaching
- Appropriate focused clinical examination to determine diagnosis and assess for severity of acute exacerbation including pulse, chest examination, PEFR and oxygen saturations
- Ability to interpret diagnostic investigations of PEFR, spirometry and FENO and apply these to further management
- Ability to create, review and communicate an asthma action plan
- Ability to create and communicate a post-attack discharge plan and undertake a post attack 48-hour review
- Ability to carry out and communicate an annual review
- Ability to use audit tools to identify the most 'at risk' patients

Tier 4: Assessment and prescribing for more difficult to treat asthma

Function

Dealing with cases where diagnosis is uncertain, managing hard to control cases

Capabilities and Learning Outcomes

Capability 1: Asthma awareness:

- LO1: Have a basic understanding of 'What is asthma?'
- LO2: Have a basic understanding of why is it a problem?
- LO3: Understand how common it is and its potential impact/seriousness
- LO4: Is able to demonstrate knowledge of asthma as part of the spectrum of allergic disorders
- LO5: Is able to demonstrate knowledge of the physiological basis of asthma
- LO6: Is able to demonstrate knowledge of the different National and Local guidelines
- LO7: Is able to demonstrate knowledge of the difference between allergic and non-allergic asthma and the various types of recurrent wheezing in preschool children
- LO8: Is able to demonstrate knowledge of the pathophysiology of asthma, chronic airway inflammation, airway hyperresponsiveness and airway remodelling.
- LO9: Is able to demonstrate knowledge of the changing patterns of recurrent wheeze and asthma across children of different ages.
- LO10: Is able to demonstrate knowledge of and understanding of the concept of 'the asthmas' and the different approaches required to manage them

Capability 2: Diagnosing asthma:

- LO1: Is able to demonstrate knowledge of the limitations in asthma diagnosis
- LO2: Is able to recognise the symptoms and signs of asthma and to demonstrate the ability to take a detailed history to make a diagnosis
- LO3: Is able to demonstrate knowledge of the differential diagnosis of asthma
- LO4: Is able to demonstrate knowledge of the red flag symptoms suggestive of an alternative diagnosis to asthma and if appropriate investigate further.
- LO5: Is able to demonstrate knowledge of physiological tests and the ability to interpret them to support an asthma diagnosis and referral pathways if the diagnosis is unclear
- LO6: Is able to demonstrate in-depth knowledge of the individual conditions in the differential diagnosis of asthma, including their potential co-existence with asthma and the interplay between them, including infection, Bronchopulmonary dysplasia, Inducible Laryngeal Obstruction and mental health.

Capability 3: Managing chronic asthma:

- LO1: Is able to demonstrate basic knowledge of the aims of asthma treatment and the broad principles of achieving it?
- LO2: Is able to demonstrate basic knowledge of why spacers and other devices are used across the ages and awareness of resources to support good technique
- LO3: Is able to demonstrate knowledge of the basic principles of chronic management of asthma
- LO4: Is able to demonstrate knowledge of which medicines are needed and why? (Preventers vs. relievers)
- LO5: Is able to demonstrate knowledge of the different available inhaler devices appropriate to children, including DPIs, and knowledge of the resources available to help understand how to use them
- LO6: Is able to explain an asthma action plan
- LO7: Is able to demonstrate awareness of the challenges of remote consulting
- LO8: Is able to demonstrate detailed knowledge of the different available inhaler devices and their different potencies appropriate to children and knowledge of the

resources available to help understand how to use them and can demonstrate the ability to teach a child or parent how to use them.

LO9: Is able to demonstrate the ability to carry out a detailed asthma review including how to use the age-appropriate ACT questionnaire and interpret, explain and record the score and step treatment up or down appropriately

LO10: Is able to demonstrate the ability to identify 'high risk' cases and how to escalate

LO11: Is able to demonstrate knowledge of transition pathways to adult services

LO12: Is able to demonstrate knowledge of the pharmacology of both common and unusual asthma medication.

LO13: Is able to demonstrate knowledge of links to transition pathways to adult services and the ability to support care through them

Capability 4: Recognition of poor chronic asthma control:

LO1: Is able to demonstrate understanding that that it is everyone's responsibility if a child's asthma control is inadequate

LO2: Is able to demonstrate the ability to recognise signs of poorly controlled asthma (cough, wheeze, overuse of reliever inhalers, school absence, sleep disturbance)

and the dangers of over-reliance on SABAs

LO3: Is able to demonstrate how and to whom to escalate if there are concerns

LO4: Is able to recognise the contribution of co-morbidities to asthma control and demonstrate knowledge of strategies to manage them including food and inhalant allergies, rhinitis, obesity and mental health.

LO5: Is able to demonstrate knowledge of medicine adherence and its impact on good asthma control

LO6: Is able to recognise when to refer to more specialist care

Capability 5: Recognition of an acute attack:

LO1: Is able to demonstrate knowledge of the signs of an asthma attack

LO2: Is able to demonstrate the ability to recognise the signs of an asthma attack and initial management

Capability 6: Management of an acute attack:

LO1: Is able to demonstrate knowledge of who to call for help if a child is having an asthma attack in the community and the first steps of emergency management.

LO2: Is able to demonstrate knowledge of asthma management plans and how to complete and follow them

LO3: Is able to demonstrate the ability to carry out the advanced management of an acute asthma attack

LO4: Is able to demonstrate knowledge of the importance of, and ability to carry out a post-attack review

LO5: Is able to demonstrate the ability to recognise a near fatal asthma attack and subsequent need for referral to specialist services.

LO6: Is able to demonstrate knowledge the presentation of anaphylaxis and how this can mimic an asthma attack

Capability 7: Socioeconomic aspects of asthma:

LO1: Is able to demonstrate knowledge of basic modifiable risk factors of poor adherence, smoking including second-hand smoke exposure and obesity and tools available to support addressing them

LO2: Is able to demonstrate knowledge of and identify the socioeconomic issues that can contribute to sub-optimal asthma control

Capability 8: Supporting families:

LO1: Is able to demonstrate basic knowledge of how to support families when they have a child with asthma and how to support them to access additional resources

LO2: Is able to demonstrate knowledge around the possibility of poor asthma control as warning sign for safeguarding. Ability to recognise, gather facts in a non-confrontational manner and react to safeguarding concerns

LO3: Is able to identify and react to links between poor asthma control, poor medicine adherence and non-attendance

LO4: Is able to demonstrate knowledge of services available to support the management of the non-adherent family or the family disengaged from asthma services.

LO5: Is able to demonstrate in depth knowledge of the role of the wider teams to support adherence and demonstrate the ability to work with these teams

Capability 9: The wider environment and asthma:

LO1: Is able to demonstrate basic knowledge of the influence of seasonal, food and other allergens, and air pollution and internal air quality on respiratory morbidity and strategies to address them

LO2: Is able to demonstrate knowledge of the impact of air pollution, both indoor and outdoor, on asthma control and the ability to advise patients on their impact

LO3: Is able to demonstrate knowledge of the impact of allergies and allergens on asthma control and severity and the ability to discuss and advise patients on the impact

LO4: Is able to demonstrate knowledge of the interplay between asthma, allergy and anaphylaxis and the ability to explain this to patients

LO5: Is able to demonstrate knowledge of gene-environment interactions, including the role of viral infections and their effect on the airways.

LO6: Is able to demonstrate knowledge of controversies on allergen avoidance measures.

Capability 10: Leadership and education:

LO1: Is able to demonstrate the ability to work as part of a wider multi-disciplinary team to support CYP and families with broader factors that can influence outcomes

LO2: Awareness of the issues surrounding accurate asthma coding

LO3: Is able to demonstrate the ability to perform an educational role at a local/regional level

Skills

- How to use an inhaler and spacer and how to care for it
- How to use and teach the use of a peak flow meter
- How to use and teach the use of a spacer and inhaler to treat an acute asthma attack and knowledge to signpost to reputable digital platforms to reinforce the teaching
- Appropriate focused clinical examination to determine diagnosis and assess for severity of acute exacerbation including pulse, chest examination, PEFR and oxygen saturations
- Ability to interpret diagnostic investigations of PEFR, spirometry and FENO and apply these to further management
- Ability to create, review and communicate an asthma action plan
- Ability to create and communicate a post-attack discharge plan and undertake a post attack 48-hour review
- Ability to carry out and communicate an annual review
- Ability to use audit tools to identify the most 'at risk' patients
- Ability to lead the management of infants and older children with acute and chronic wheezing disorders within an MDT
- To know the evidence basis for asthma treatments at different age

- Participate in local asthma networks

Tier 5: Managing the difficult and severe asthmas

Function

Severe asthma service – managing children at high risk

Capabilities and Learning Outcomes

Capability 1: Asthma awareness:

- LO1: Have a basic understanding of 'What is asthma?'
- LO2: Have a basic understanding of why is it a problem?
- LO3: Understand how common it is and its potential impact/seriousness
- LO4: Is able to demonstrate knowledge of asthma as part of the spectrum of allergic disorders
- LO5: Is able to demonstrate knowledge of the physiological basis of asthma
- LO6: Is able to demonstrate knowledge of the different National and Local guidelines
- LO7: Is able to demonstrate knowledge of the difference between allergic and non-allergic asthma and the various types of recurrent wheezing in preschool children
- LO8: Is able to demonstrate knowledge of the pathophysiology of asthma, chronic airway inflammation, airway hyperresponsiveness and airway remodelling.
- LO9: Is able to demonstrate knowledge of the changing patterns of recurrent wheeze and asthma across children of different ages.
- LO10: Is able to demonstrate knowledge of and understanding of the concept of 'the asthmas' and the different approaches required to manage them

Capability 2: Diagnosing asthma:

- LO1: Is able to demonstrate knowledge of the limitations in asthma diagnosis
- LO2: Is able to recognise the symptoms and signs of asthma and to demonstrate the ability to take a detailed history to make a diagnosis
- LO3: Is able to demonstrate knowledge of the differential diagnosis of asthma
- LO4: Is able to demonstrate knowledge of the red flag symptoms suggestive of an alternative diagnosis to asthma and if appropriate investigate further.
- LO5: Is able to demonstrate knowledge of physiological tests and the ability to interpret them to support an asthma diagnosis and referral pathways if the diagnosis is unclear
- LO6: Is able to demonstrate in-depth knowledge of the individual conditions in the differential diagnosis of asthma, including their potential co-existence with asthma and the interplay between them, including infection, Bronchopulmonary dysplasia, Inducible Laryngeal Obstruction and mental health.

Capability 3: Managing Chronic asthma:

- LO1: Is able to demonstrate basic knowledge of the aims of asthma treatment and the broad principles of achieving it?
- LO2: Is able to demonstrate basic knowledge of why spacers and other devices are used across the ages and awareness of resources to support good technique
- LO3: Is able to demonstrate knowledge of the basic principles of chronic management of asthma
- LO4: Is able to demonstrate knowledge of which medicines are needed and why? (Preventers vs. relievers)
- LO5: Is able to demonstrate knowledge of the different available inhaler devices appropriate to children, including DPIs, and knowledge of the resources available to help understand how to use them
- LO6: Is able to explain an asthma action plan
- LO7: Is able to demonstrate awareness of the challenges of remote consulting

LO8: Is able to demonstrate detailed knowledge of the different available inhaler devices and their different potencies appropriate to children and knowledge of the resources available to help understand how to use them and can demonstrate the ability to teach a child or parent how to use them.

LO9: Is able to demonstrate the ability to carry out a detailed asthma review including how to use the age-appropriate ACT questionnaire and interpret, explain and record the score and step treatment up or down appropriately

LO10: Is able to demonstrate the ability to identify 'high risk' cases and how to escalate

LO11: Is able to demonstrate knowledge of transition pathways to adult services

LO12: Is able to demonstrate knowledge of the pharmacology of both common and unusual asthma medication.

LO13: Is able to demonstrate knowledge of links to transition pathways to adult services and the ability to support care through them

LO14: Is able to demonstrate knowledge of the different biologic medications available in asthma care and ability to prescribe and monitor them and assess their effectiveness.

Capability 4: Recognition of poor chronic asthma control:

LO1: Is able to demonstrate understanding that that it is everyone's responsibility if a child's asthma control is inadequate

LO2: Is able to demonstrate the ability to recognise signs of poorly controlled asthma (cough, wheeze, overuse of reliever inhalers, school absence, sleep disturbance)

and the dangers of over-reliance on SABAs

LO3: Is able to demonstrate how and who to escalate to if there are concerns

LO4: Is able to recognise the contribution of co-morbidities to asthma control and demonstrate knowledge of strategies to manage them including food and inhalant allergies, rhinitis, obesity and mental health.

LO5: Is able to demonstrate knowledge of medicine adherence and its impact on good asthma control

LO6: Is able to recognise when to refer to more specialist care

Capability 5: Recognition of an acute attack:

LO1: Is able to demonstrate knowledge of the signs of an asthma attack

LO2: Is able to demonstrate the ability to recognise the signs of an asthma attack and initial management

Capability 6: Management of an acute attack:

LO1: Is able to demonstrate knowledge of who to call for help if a child is having an asthma attack in the community and the first steps of emergency management.

LO2: Is able to demonstrate knowledge of asthma management plans and how to complete and follow them

LO4: Is able to demonstrate the ability to carry out the advanced management of an acute asthma attack

LO5: Is able to demonstrate knowledge of the importance of, and ability to carry out a post-attack review

LO6: Is able to demonstrate the ability to recognise a near fatal asthma attack and subsequent need for referral to specialist services.

LO7: Is able to demonstrate knowledge the presentation of anaphylaxis and how this can mimic an asthma attack

Capability 7: Socioeconomic aspects of asthma:

LO1: Is able to demonstrate knowledge of basic modifiable risk factors of poor adherence, smoking including second-hand smoke exposure and obesity and tools available to support addressing them

LO2: Is able to demonstrate knowledge of and identify the socioeconomic issues that can contribute to sub-optimal asthma control

Capability 8: Supporting families:

- LO1: Is able to demonstrate basic knowledge of how to support families when they have a child with asthma and how to support them to access additional resources
- LO2: Is able to demonstrate knowledge around the possibility of poor asthma control as warning sign for safeguarding. Ability to recognise, gather facts in a non-confrontational manner and react to safeguarding concerns
- LO3: Is able to identify and react to links between poor asthma control, poor medicine adherence and non-attendance
- LO4: Is able to demonstrate knowledge of services available to support the management of the non-adherent family or the family disengaged from asthma services.
- LO5: Is able to demonstrate in depth knowledge of the role of the wider teams to support adherence and demonstrate the ability to work with these teams
- LO6: Is able to demonstrate knowledge of pathways for engaging with social care teams in cases where adherence or family issues are thought to be contributory to poor control

Capability 9: The wider environment and asthma:

- LO1: Is able to demonstrate basic knowledge of the influence of seasonal, food and other allergens, and air pollution and internal air quality on respiratory morbidity and strategies to address them
- LO2: Is able to demonstrate knowledge of the impact of air pollution, both indoor and outdoor, on asthma control and the ability to advise patients on their impact
- LO3: Is able to demonstrate knowledge of the impact of allergies and allergens on asthma control and severity and the ability to discuss and advise patients on the impact
- LO4: Is able to demonstrate knowledge of the interplay between asthma, allergy and anaphylaxis and the ability to explain this to patients
- LO5: Is able to demonstrate knowledge of gene-environment interactions, including the role of viral infections and their effect on the airways.
- LO6: Is able to demonstrate knowledge of controversies on allergen avoidance measures.

Capability 10: Leadership and Education:

- LO1: Is able to demonstrate the ability to work as part of a wider multi-disciplinary team to support CYP and families with broader factors that can influence outcomes
- LO2: Awareness of the issues surrounding accurate asthma coding
- LO3: Is able to demonstrate the ability to perform an educational role at a local/regional level
- LO4: Is able to demonstrate the ability to work within and lead an MDT in the assessment and management of the complex asthmatic
- LO5: Is able to demonstrate the ability to work in a shared care setting and form links with primary and secondary care
- LO6: Is able to demonstrate the ability to have a leadership role in local asthma networks

Skills

- How to use an inhaler and spacer and how to care for it
- How to use and teach the use of a peak flow meter

- How to use and teach the use of a spacer and inhaler to treat an acute asthma attack and knowledge to signpost to reputable digital platforms to reinforce the teaching
- Appropriate focused clinical examination to determine diagnosis and assess for severity of acute exacerbation including pulse, chest examination, PEFR and oxygen saturations
- Ability to interpret diagnostic investigations of PEFR, spirometry and FENO and apply these to further management
- Ability to create, review and communicate an asthma action plan
- Ability to create and communicate a post-attack discharge plan and undertake a post attack 48-hour review
- Ability to carry out and communicate an annual review
- Ability to use audit tools to identify the most 'at risk' patients
- Ability to lead the management of infants and older children with acute and chronic wheezing disorders within an MDT
- To know the evidence basis for asthma treatments at different age
- Participate in local asthma networks
- Ability to evaluate difficult asthma, arrange investigations and understand potential further treatments appropriate to the individual's profession.
- Ability to use QI and other methods to continually improve population asthma care