

Healthy London Partnership London Asthma Standards for Children and Young People

As per London Asthma Standards for Children and Young People, HLP, 2016

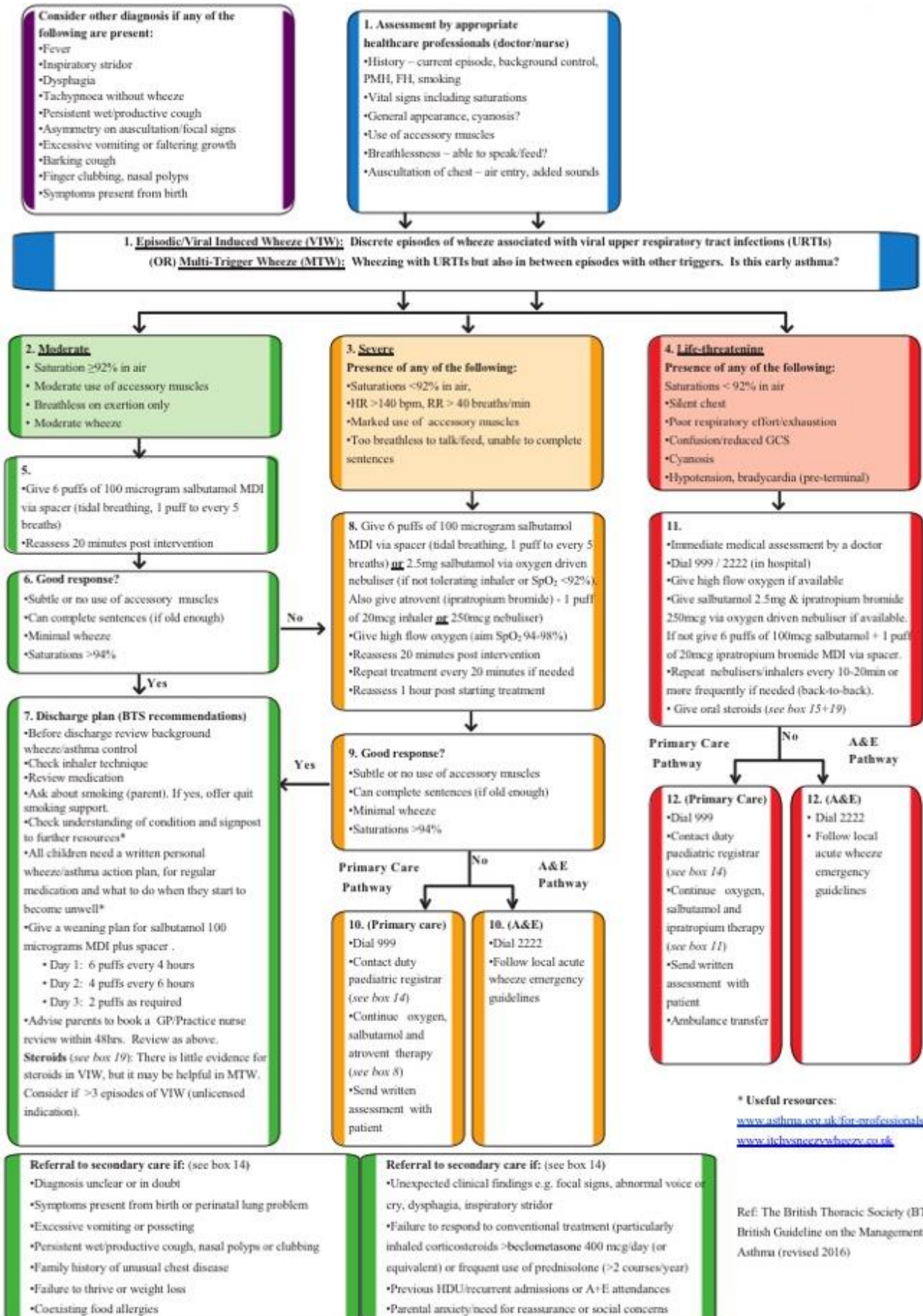


Standard	
1	All organisations/services must have a named lead responsible and accountable for asthma (which includes children and young people (CYP)).
2	There are formal partnerships established between providers of CYP services. There is demonstration of a commitment to work within a multidisciplinary** network of care across the pathway that focusses on children with asthma and links providers, commissioners, public health and local authorities with CYP and their families. The networks develop shared pathways, protocols and consider workforce planning. There is evidence of collaboration between all sectors including local children's safeguarding boards.
6	Every child has an assessment of the triggers for their wheeze and is educated about how to deal with this. Children with asthma should be screened for other atopic comorbidities, in particular allergic rhinitis and food allergy. There is access to a paediatric allergy service for assessment and appropriate management, including adrenaline auto injector device prescription and training if required.
7	Consultations routinely promote healthy lifestyles, including assessment of long term health needs, such as: <ul style="list-style-type: none"> Systematic approach to obesity (e.g. growth measurement, calculation of BMI). Assessment of CYP and family for living conditions and housing freed from damp and mould, alcohol, drugs and smoking. Every child and their family are assessed at health or social care encounters for their exposure to smoking either actively or passively (this includes e-cigarettes). They should be provided with brief advice and referred to smoking cessation clinics. There is access to smoking cessation clinics and other support services for families, Fraser competent CYP and carers that address issues of smoking and monitor outcomes.
12	CYP and their families have access to self-management support packages which may include peer support.
13	NICE Statement 4: People with asthma are given specific training and assessment in inhaler technique before starting any new inhaler treatment. (This should be age appropriate.)
14	NICE Statement 1: People with newly diagnosed asthma are diagnosed in accordance with BTS/SIGN13 and NICE34 guidance.
15	NICE Statement 6: People with asthma who present with respiratory symptoms receive an assessment of asthma control.
16	NICE Statement 10: People who received treatment in hospital or through out-of-hours services for an acute exacerbation of asthma or wheezy episode are followed up by their own GP practice within two working days or less* of treatment. If required secondary care follow up is provided within one month for every child admitted with asthma and for patients who have attended the emergency department two or more times in the past 12 months.
17	Clear effective partnership arrangements are in place between health, education and local authorities for management of CYP with asthma within primary and secondary schools (Asthma friendly schools programmes). This includes the adoption of government policy on emergency inhalers and early years settings such as children's centres having access to education programmes for children with wheeze.
18	CYP have an individual healthcare /action plan in place. The school has in place: <ul style="list-style-type: none"> Register of all CYP with asthma. Management plan for each child. Named individual responsible for asthma in school. Policy for inhaler techniques and care of the CYP with asthma. Policy regarding emergency treatment. System for identifying children who are missing school because of their asthma or who are not partaking in sports / other activities due to poor control.
21	NICE Statement 7: People with asthma who present with an exacerbation of their symptoms receive an objective measurement of severity* at the time of presentation.
22	NICE Statement 8: People aged 5 years or older presenting to a healthcare professional with a severe or life-threatening acute exacerbation of asthma receive oral or intravenous steroids within one hour of presentation and seen by the respiratory team directly.
23	NICE Statement 9: People admitted to hospital with an acute exacerbation of asthma have a structured review by a member of a specialist respiratory team** before discharge. The structured review includes: <ul style="list-style-type: none"> Assessment of control (Children's Asthma Control Test (ACT)40 if aged over 4 years) and / or triggers for wheezing. Inhaler techniques. Self-management and how to manage acute exacerbations. Personal asthma action plan.

Standard	
24	There are systems in place in acute and community care for identifying patients at high risk, poorly controlled or severe asthma and monitoring/tracing and managing those CYP who have had in the last year: <ul style="list-style-type: none"> More than one admission. Admission to HDU, ICU, PICU. Two or more attendances to the emergency department or out of hours care in the last year. Two or more unscheduled visits to the GP (requiring short courses of oral steroids). Ten or more salbutamol inhalers. 80 per cent or less uptake of repeat preventer prescriptions.
25	There is access to paediatric physiotherapist with an interest in dysfunctional breathing (ideally ability to direct refer from primary care).
27	NICE Statement 3: People with asthma receive a written personalised action plan. (This should be age appropriate.)
28	NICE Statement 5: People with asthma receive a structured review*at least annually (preferably every three months, depending on severity and clinical need). This must include understanding of their condition and treatment, assessment of adherence, inhaler technique and children's ACT40 for those aged over four years.
29	NICE Statement 11: People with difficult asthma** are offered an assessment by a multidisciplinary difficult asthma service.
30	There is a system to communicate the name of the responsible lead / link person caring for child to patients and families.
32	Systems are in place to ensure safe discharge and transfer between providers. This includes the following: <ul style="list-style-type: none"> All admitted CYP have discharge planning and an estimated discharge date as part of their management plan as soon as possible. The primary care team / GP is informed of discharge within agreed timescale of each attendance and follow up is booked within two days (including health visitor and school nurse). Information is provided to GP and community teams electronically within 24 hours. Clear written information and advice is provided to families which includes what to do, when and where to access further care if necessary, clear instructions on follow up and arrangements in case of emergency at home. This includes telephone advice. Pharmacies ensure availability of medicines and utilisation of home delivery services. This is of greater relevance for weekend discharge.
37	There are systems in place to: <ul style="list-style-type: none"> Identify, monitor, and manage through an alert system to clinicians the numbers of prescriptions for prednisolone, inhaled steroids, 10 or more preventer inhalers in a year, children with asthma and flu jab uptake. Identify and manage CYP prescribed inhalers at doses higher than recommended in product licence. MURs and new medicine reviews for to promote medicines optimisation including inhaler technique assessment Note: Reviews with parents for younger children: PSNC guidance states the patient must be competent to give consent to receive the service and to share information as required by the consent arrangements in order to be eligible to receive the service. There is no minimum age, but pharmacists will know that the younger the child, the greater the likelihood is that they would not be competent. <ul style="list-style-type: none"> Use of CCG medicines management teams to develop local prescribing guidelines to support evidenced based care for CYP. Coordination between CCG medicine management pharmacists, secondary care pharmacists and community pharmacists to monitor adherence to national and local prescribing guidelines. Use of community pharmacists to monitor and promote medicines optimisations initiatives through the application of clinical audits
39	Children and young people have contact with healthcare professionals who have received appropriate training and ongoing education in paediatric asthma with appropriate updating at least every three years, including access to a specialist paediatric nurse with asthma diploma level training and CPD in paediatric asthma. This includes primary care and the wider MDT such as pharmacists, health visitors and schools. At least one practice nurse in every practice or someone in every school is trained in managing asthma (i.e. holds a recognised certificate of competence, such as an asthma diploma), and has experience in supporting children with long term conditions. Community pharmacists who wish to undertake an extended role in delivery of MURs are trained and competent to do so.
40	All healthcare professionals who work with CYP and their parents and carers should undertake the validated 20 minute online training from the National Centre for Smoking Cessation Training on Very Brief Advice or an equivalent evidence-based programme.
41	Networks develop a formal shared education programme and encourage rotation of staff and shared learning opportunities and standardisation to develop and maintain skills across the care pathway.

For a full list of standards, please see [London Asthma Standards for Children and Young People, HLP, 2016](#)

Appendix 1: Acute Wheezy Episode Management for Children 2-5 Years



Appendix 1:

Acute Wheezy Episode

Management for Children 2-5 Years

13. Community Children's Nursing (CCN) Teams

Barnet
Tel: 020 8216 5242
E: rf@r-childrenshomecareteam@nhs.net

Camden & South Barnet
Tel: 020 7830 2571
E: rf@communitychildrensnurses@nhs.net

Enfield
Tel: 020 8375 1992
E: rf@r-childrenshomecareteam@nhs.net

Haringey
Tel: 020 8887 3301
E: northmidchildrenscommunitynurses@nhs.net

Islington
Tel: 0203 316 1950
whs-tr.islingtonchildrensnursing@nhs.net

14. Secondary Care Referrals

For urgent referrals, contact paediatric registrar on call via hospital switchboard

Barnet Hospital
Dr. Sue Laurent
Sue.Laurent@nhs.net
Switchboard: 020 8216 4600

Royal Free Hospital
Dr. Rahul Chodhari
R.Chodhari@nhs.net
Switchboard: 020 7794 0500

North Middlesex Hospital
Dr. Arvind Shah and Dr. Dhruv Rastogi
Switchboard: 020 8887 2000

University College Hospital
Dr. Eddie Chung
Switchboard: 020 3456 7890

Whittington Hospital
Dr. John Moreiras
John.moreiras@nhs.net
Switchboard: 020 7272 3070

15. Asthma predictive Index (API)

- For a positive API there must be a history of ≥ 4 wheezing episodes, with at least one doctor diagnosed episode.
- In addition the child must meet either one major criteria or at least two minor criteria:

Major criteria

- Parental history of asthma
- Doctor diagnosed eczema (atopic dermatitis)
- Allergic sensitisation to at least 1 aeroallergen (e.g. trees, grasses, dust mites)

Minor Criteria

- Allergic sensitisation to milk, egg or peanuts
- Wheezing unrelated to colds
- Blood eosinophils $> 4\%$

16. Inhalers vs. nebulisers

For moderate asthma use an inhaler and spacer. If 5-years-old or older use the mouth piece, rather than mask (providing their technique is good)

Indications for nebulisers:

- Low saturations $< 92\%$
- Unable to use inhaler and spacer (not compliant)
- Severe and life-threatening respiratory distress
- Nebulisers are not generally recommended for home use.

17. Viral Induced wheeze (VIW)

- 1/3 of children have an episode of wheezing in the first 3 years of life, usually triggered by a viral infection. Only 20% of these children will go on to have asthma. The classification and treatment of wheeze in this age group continues to be debated.
- They should not routinely be labeled as having asthma as the pathophysiology of a VIW is different from that of asthma.
- Caveat: early onset asthma may be indistinguishable from VIW at first presentation.

- It is important to consider the temporal pattern of wheezing:
 - **Episodic (viral) wheeze:** child only wheezes with viral URTIs and is symptom free in between episodes.
 - **Multiple-trigger wheeze:** child wheezes with URTIs but also with other triggers such as exercise, smoke and allergen exposure.

19. Steroids

- There is growing evidence that oral and Inhaled steroids are ineffective in preschool children (< 5 yrs) presenting with VIW and therefore should not be prescribed routinely.
- Careful assessment of all children presenting with wheeze remains essential to ensure that the diagnosis of asthma is not missed.
- Consider oral corticosteroids in those who need HDU and/or have a positive API (box 15)
- Consider a trial of inhaled corticosteroids in children with MTW (i.e. beclomethasone 200-400mcg daily for 4 to 8 weeks). If there is no improvement, stop. If there is improvement, stop and see if symptoms recur on stopping. If inhaled corticosteroid needed, the dose can then be reduced to the minimum amount required.

Prednisolone by mouth:

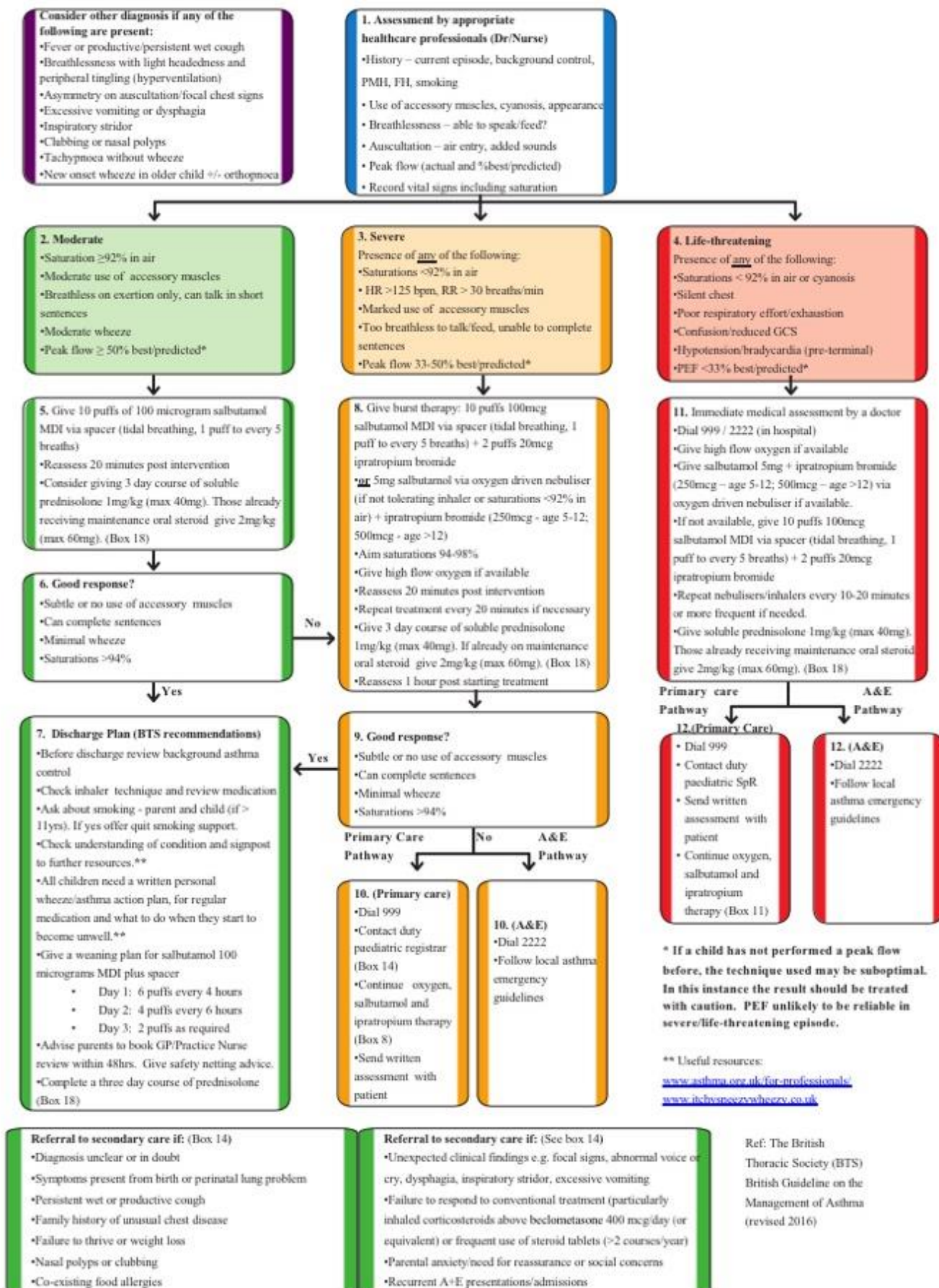
- < 12 years 1 mg/kg (max. 40 mg) daily for up to 3 days (children's BNF)
- If weight not available, use a dose of 20mg for children 2-5 years (BTS guidelines 2012)

This guidance is written in the following context: This pathway was arrived at after careful consideration of the evidence available including but not exclusively using the BTS guidelines. The guidance does not, however, override the individual responsibility of healthcare professionals to make decisions appropriate to the circumstances of the individual patient, in consultation with the patient and/or guardian or carer. If you have any queries with regards to the information contained with this document please contact Dr John Moreiras (john.moreiras@nhs.net)

Review date: December 2020

Appendix 2: Acute Asthma Attack

Management of Known Asthmatic Children 5-18 Years



Appendix 2: Acute Asthma Attack

Management of Known Asthmatic Children 5-18 Years

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Tel: 0203 316 1950
whb-tr.islingtonchildrensnursing@nhs.net

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Switchboard: 020 3456 7890

Whittington Hospital
Dr. John Moreiras
John.moreiras@nhs.net
Switchboard: 020 7272 3070

15. Normal Paediatric Values

Respiratory Rate at Rest:
2-5yrs 25-30 breaths/min
5-12yrs 20-25 breaths/min
>12yrs 15-20 breaths/min

Heart Rate:
2-5yrs 95-140 bpm
5-12yrs 80-120 bpm
>12yrs 60-100 bpm

Systolic Blood Pressure:
2-5yrs 80-100 mmHg
5-12yrs 90-110 mmHg
>12yrs 100-120 mmHg

16. Inhalers vs nebulisers

For moderate asthma, use an inhaler and spacer.
If >5 years old use the mouth piece, rather than mask (providing their technique is good)

Indications for nebulisers:

- Low saturations <92%
- Unable to use inhaler and spacer (not compliant)
- Severe and life threatening respiratory distress
- Nebulisers are not generally recommended for home use.

17. Nebulised drug doses

Salbutamol

2-5 yrs	2.5 mg
> 5 yrs	5 mg

Ipratropium bromide

< 12 yrs	250 mcg
12-18 yrs	500 mcg

18. Prednisolone

- <12 yrs – 1mg/kg (max 40mg) daily
- 12-18 yrs – 40mg daily
- Those already receiving maintenance steroid, give 2 mg/kg (max 60 mg)
- Repeat the dose in children who vomit and/or consider IV steroids
- 3 days is usually sufficient, but can be increased/tailored to the number of days necessary to bring about recovery.
- Weaning is unnecessary unless the course of steroids exceeds 14 days.

19. Predicted peak flows

For use with PEF meters EU/EN13826

Height (m)	Height (ft)	Predicted EU PEF (L/min)	Height (m)	Height (ft)	Predicted EU PEF (L/min)
0.85	2'9"	87	1.30	4'3"	212
0.90	2'11"	95	1.35	4'5"	233
0.95	3'1"	104	1.40	4'7"	254
1.00	3'3"	115	1.45	4'9"	276
1.05	3'5"	127	1.50	4'11"	299
1.10	3'7"	141	1.55	5'1"	323
1.15	3'9"	157	1.60	5'3"	346
1.20	3'11"	174	1.65	5'5"	370
1.25	4'1"	192	1.70	5'7"	393

20. Poor asthma control

- Frequent use of reliever
- Limiting daily activities
- Poor sleep, nocturnal cough
- Frequent exercise induced symptoms
- Frequent hospital admissions or GP/A+E attendances.
- Frequent courses of prednisolone

•Difficult Asthma: Difficult asthma is defined as persistent symptoms and/or frequent exacerbations despite treatment at step 4 or 5

•Asthma Control Test:
www.asthma.com/resources/asthma-control-test.html

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Review date: December 2020

Appendix 3:

Top 5 Tips for Asthma Management in Pharmacy

TOP 5

Tips for better asthma management

Dear pharmacists,

Your help is kindly requested...

The problem:

Asthma remains a common problem which affects 10% of children. The recent National Review of Asthma Deaths (NRAD) has shown that many children are at risk of life-threatening asthma as they are not receiving the appropriate care. Gold-standard asthma care requires a joined-up approach with all health care professionals taking up the challenge.

How you can help:

1 Check Inhaler technique when dispensing new inhalers

There is no point stepping up medication if it is not being delivered effectively.

All children, regardless of their age, should be using an MDI with a spacer. For teenagers in secondary school it may be appropriate for them to have a breath activated device for their reliever in addition to their MDI and spacer

2 Ask About Asthma Control

- Ratio of reliever to preventer medication
- Number of repeat reliever prescriptions (>6 per year should prompt a review by the GP)

Parents can fill out a patient assessment form called the Asthma Control Test (ACT), available on the Asthma UK or Healthy London Partnership website.

www.healthyharingey.org/wp-content/uploads/2017/10/Asthma-control-test.pdf

3 Ask if the child has an Asthma Plan

All children should have a personal asthma plan completed by their doctor. If they do not have one they should book an asthma review with their GP. Sample personal asthma plans are available on the Asthma UK website.

www.asthma.org.uk/globalassets/health-advice/resources/children/child-asthma-action-plan.pdf

4 Ask about Smoking

Children are more likely to have respiratory problems and worse asthma control if parents smoke (even if outside). Offer "quit smoking - very brief advice" to parents. 15% of teenagers will smoke; do not forget to ask them and offer the same help.

www.smokefreeislington.nhs.uk/resource/paediatrics-stop-smoking-referral

5 Ask about Flu vaccine

All children with asthma should receive the flu vaccine every year.



Appendix 4: Asthma Control Test (ACT)



Patient's Name: _____

Today's Date: _____

Childhood Asthma Control Test for children 4 to 11 years

Know your score.

Parent or Guardian: The Childhood Asthma Control Test* is a way to help your child's healthcare provider determine if your child's asthma symptoms are well controlled. Take this test with your child (ages 4 to 11). Share the results with your child's healthcare provider.

- Step 1:** Have your child answer the first four questions (1 to 4). If your child needs help, you may help, but let your child choose the answer.
- Step 2:** Answer the last three questions (5 to 7) on your own. Don't let your child's answers influence yours. There are no right or wrong answers.
- Step 3:** Write the number of each answer in the score box to the right.
- Step 4:** Add up each score box for the total.
- Step 5:** Take the COMPLETED test to your child's healthcare provider to talk about your child's total score.

19
or less

IF YOUR CHILD'S SCORE IS 19 OR LESS, Your child's asthma symptoms may not be as well controlled as they could be. No matter what the score, bring this test to your child's healthcare provider to talk about your child's results.

NOTE: If your child's score is 12 or less, his or her asthma may be very poorly controlled. Please contact your child's healthcare provider right away.

Have your child complete these questions.

1. How is your asthma today?

 0 Very bad	 1 Bad	 2 Good	 3 Very good
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2. How much of a problem is your asthma when you run, exercise or play sports?

 0 It's a big problem, I can't do what I want to do.	 1 It's a problem and I don't like it.	 2 It's a little problem but it's okay.	 3 It's not a problem.
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3. Do you cough because of your asthma?

 0 Yes, all of the time.	 1 Yes, most of the time.	 2 Yes, some of the time.	 3 No, none of the time.
---------------------------------------	--	--	---------------------------------------

4. Do you wake up during the night because of your asthma?

 0 Yes, all of the time.	 1 Yes, most of the time.	 2 Yes, some of the time.	 3 No, none of the time.
---------------------------------------	--	--	---------------------------------------

Please complete the following questions on your own.

5. During the last 4 weeks, how many days did your child have any daytime asthma symptoms?

5 Not at all	4 1-3 days	3 4-10 days	2 11-18 days	1 19-24 days	0 Everyday
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6. During the last 4 weeks, how many days did your child wheeze during the day because of asthma?

5 Not at all	4 1-3 days	3 4-10 days	2 11-18 days	1 19-24 days	0 Everyday
------------------------	----------------------	-----------------------	------------------------	------------------------	----------------------

7. During the last 4 weeks, how many days did your child wake up during the night because of the asthma?

5 Not at all	4 1-3 days	3 4-10 days	2 11-18 days	1 19-24 days	0 Everyday
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*The Childhood Asthma Control Test was developed by GSK.

This material was developed by GSK.



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SCORE
[]
[]
[]
[]
[]
[]
TOTAL
[]

Appendix 5: Difficult Asthma Service Referral Criteria

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REFERRAL TO RBH DIFFICULT ASTHMA SERVICE

Name _____ Consultant _____

Referring Hospital _____ Asthma nurse _____

DOB

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 Date of referral

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Referral Guidelines:

Please note these should serve as a guide and we are happy to accept referrals for patients who do not fulfill these criteria. However, for those that do, referral must be considered.

All children who meet the following criteria should be referred:

- Admitted to PICU because of an asthma attack
- Prescribed maintenance daily or alternate day prednisolone.
- Under consideration for other biological agent such as omalizumab

Consider referral for children who have poor control despite high intensity treatment:

High intensity treatment:

- Moderate dose ICS (BTS/SIGN guidelines): ≥ 800 mcg/day budesonide/beclomethasone or ≥ 500 mcg/day fluticasone plus long acting beta agonist

Poor control (please send copies of discharge summaries from the past year if available)

- Persistent chronic symptoms (most days for 3 months) or
- ACT or cACT < 20 or
- Severe exacerbations (≥ 2 / year requiring hospital admission or OCS) or
- Persistent airflow limitation ($FEV_1 < 80\%$ post bronchodilator) or
- Prescription of ≥ 6 salbutamol inhalers in the past year

Other considerations

- Diagnostic uncertainty
- Complex psychosocial issues (including safe guarding)
- Dysfunctional breathing / exercise induced breathlessness
- Enrolment in a clinical study

Prior to referral the following should be assessed (if possible):

Please provide further details overleaf or include in referral letter:

1. Basis of asthma diagnosis
 - o Documented wheeze by healthcare professional
 - o Evidence of airflow obstruction ($FEV_1/FVC < 70\%$ or LLN).....
 - o Elevated exhaled nitric oxide (≥ 35 ppb).....
 - o Documented bronchodilator reversibility ($\geq 12\%$).....
 - o Airway hyper-responsiveness (confirmed by direct or indirect challenge).....
 - o Spontaneous variation in FEV_1 ($\geq 12\%$) or peak flow ($\geq 20\%$) in the past year.....
 - o Diagnosis not confirmed
2. Inhaler technique checked.....
3. Allergy testing and identification of triggers
4. Prescription uptake checked.....

RBH Referral form

Nov 2017_Fleming

Appendix 5:

Difficult Asthma Service Referral Criteria

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Further details if available (please complete the following or include in referral letter)

Current medications

Name	Dose

Exacerbations

- Number of hospital admissions in past year
- Number requiring oxygen
- Number requiring iv treatment
- Number of courses of OCS in past year

Assessments

Allergy testing (SPTs, sIgEs):

Triggers:

Advice given:

Prescription check

ICS % uptake in past 12 months

Number of SABA inhalers collected in past 12 months:

Other relevant details

RBH Referral form

May 2016_Fleming

References & Links:



Hyperlinks

Pharmacy

Healthy London Partnership Asthma Toolkit: Pharmacy, Medication Use Reviews

www.healthylondon.org/hlp-archive/sites/default/files/u102092/019988%20-%20Asthma%20Toolkit%20Pharmacy%201.1-RB.pdf

Schools

Healthy London Partnership: Asthma Friendly Schools

www.healthylondon.org/resource/london-asthma-toolkit/schools/asthma-friendly-schools/

Personal Asthma Action Plans

Monkey Wellbeing Asthma Plan

www.monkeywellbeing.com/wp-content/uploads/2014/09/asthma-plan-v3.pdf

Asthma UK: Your Child's Action Plan

www.asthma.org.uk/advice/child/manage/action-plan/

Asthma Diagnosis

BTS / SIGN Guideline on the Management of Asthma, 2016

www.brit-thoracic.org.uk/document-library/clinical-information/asthma/btssign-asthma-guideline-2016/

Smoking Advice

National Centre for Smoking Cessation and Training: Very brief advice

www.ncsct.co.uk/publication_very-brief-advice.php

References

- Asthma Quality Standard, Feb 2013, Updated Nov 2017, NICE
- BTS / SIGN Guideline on the Management of Asthma, 2016
- Combined Care Pathway for Asthma and/or Rhinitis, RCPCH, 2011
- London Asthma Standards for Children and Young People, Healthy London Partnership, 2016
- National Review of Asthma Deaths (NRAD), 2014