Healthy London Partnership

NHS

London asthma standards for children and young people

Driving consistency in outcomes for children and young people across the capital

Revised August 2020

About this document

These standards bring together the aspirations for London, the NICE and British Thoracic Society guidelines, findings from the National Review of Asthma Deaths, the Global Initiative for Asthma, and a number of other key resources into one document. They were originally developed by the London Strategic Clinical Network for Children and Young People's Asthma Pathway Group, with a review by members of the Strategic Clinical Leadership Group and the Commissioning Advisory Group, National Paediatric Asthma Group, Royal College of Physicians, British Thoracic Society, Royal College of Anaesthetists, and Asthma UK.

This latest revision has been completed by the London Asthma Leadership and Implementation Group of Healthy London Partnership.

This document represents a revision of the 2014 London asthma standards for children and young people. It is a collaboration of expert knowledge and evidence-based medicine designed tailored to the needs of one of the largest and diverse cities in the world.

This revision was begun in the weeks before the COVID-19 pandemic. The months that followed impacted on service provision that could not have been envisaged at project commencement. Services have flexed to accommodate dramatic change overnight and are now further modifying into the "New Normal". We plan a further document revision by the end of 2021 after a period of stabilisation and assessment.

There are however several high-level understandings and agreements that underpin service delivery that have been initiated since the last Asthma Standards document that surprisingly remain unchanged by the COVID-19 pandemic, and hence the completion of this interim document. Furthermore, changes to the design and commissioning of primary care, with increased integration of services, needed to be included and will remain a constant for the immediate future.

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Introduction

Purpose

Healthy London Partnership's Children and Young People's (CYP) Programme was established to bring about transformational change in services for CYP. One of the key pieces of work it has undertaken has been to identify standards already in existence relating to the care of young patients and collate them into one document setting out the minimum standards which should be delivered in London. Such standards are in place for acute and high dependency care, and epilepsy.[12]

Asthma is the most common long-term medical condition in children. It is an inflammatory condition that affects the airways. The usual symptoms include wheeze, difficulty in breathing, chest tightness and coughing, particularly at night or in the early hours. Its severity varies from mild, moderate to severe and can cause physical and psychological distress affecting quality of life. It cannot be cured but, with appropriate management, quality of life can be improved.

Healthy London Partnership was asked by NHS England (London Region) to develop a set of standards for care of CYP with asthma and pre-school/viral induced wheeze to complement the existing London Quality Standards, Primary Care Commissioning Framework and Children and Young People Acute Care Standards[345]. Since these standards were published, Healthy London Partnership has also developed standards for out of hospital care for acutely ill CYP and an associated compendium of innovative and effective models of care[67].

There are many existing documents and guidance around asthma, including from the National Review of Asthma Deaths (NRAD)[8], Global Initiative on Asthma (GINA),[9] National Institute of Health and Care Excellence (NICE),[1011] British Thoracic Society (BTS) and Scottish Intercollegiate Guidelines Network (SIGN)[12]. Despite this, children in London are still dying of acute asthma attacks and basic standards are not being met.

This document is not another set of guidelines but aims to bring together some of the principles from all the other documents to aid their implementation and help drive up care for children with asthma or acute viral induced wheeze in London. It should improve

SUMMARY

Each organisation (primary and community care, acute care, pharmacy, schools, social care, prisons and young offenders units) will have a clear named lead who will be responsible and accountable for the dissemination and implementation of asthma standards and good asthma practice (which includes children) and the delivery of **London's Ambitions for Asthma**.

diagnosis, management, and continuity of care (particularly during transition to adult services), prescribing, monitoring and education across London. Understanding the experience of young people, beyond the medical problem itself and smoking, is key.

Development of the standards was informed through an extensive literature review and wide engagement that included primary, secondary, and tertiary care clinicians, managers, and commissioners from across London, views from professional bodies, and voluntary sector organisations. They were endorsed by the Royal College of Physicians.

Utilisation of these standards will start to reduce the enormous variation in outcomes that children and young people experience across the capital.

In this document, the term children or child should be taken as meaning children and young people under the age of eighteen years. There is a need to provide age-appropriate services and settings for all ages, including during transition. The updated *You're Welcome* standards, provide a useful guide[13]. Clear policies should be in place in hospitals where these young people are admitted (e.g. paediatric, adolescent or adult wards) to avoid disputes in an accident and emergency department as to whether such a person is 'paediatric' or 'adult' for their medical care.[14]

From this point forward we will use the term asthma, but these standards also apply to those children (over the age of one) with viral induced wheeze or any other acute wheezy episode

Audience

This document will be of use to commissioners and providers of asthma services for CYP. It sets out our aspirations for CYP asthma care in London alongside the NICE quality standards and updated guidance[15] to enable the effective commissioning of services which meet these required minimum standards.

Providers will be able to use these standards to undertake self-assessment of their ability to deliver the required quality of care for CYP with asthma. The standards can be used to validate, challenge and quality assure services.

Inclusions

The standards outlined represent the minimum quality of care that CYP with asthma in London should expect whether they are being cared for in the community, hospital or school setting.

All standards apply to all seven days of the week. All services must meet the Care Quality Commission's (CQC) 16 essential standards of quality and safety.[16]

Exclusions

All specialised services are additionally commissioned against the appropriate national specialised service specification. Severe asthma is provided as part of specialised paediatric respiratory services. These standards are an adjunct to the requirements of the service specifications and should be used in conjunction with them. Standards relating to general, community or hospital requirements are not included (ie. safeguarding, staff appraisal policies, medical devices standards, moving and handling competencies, service-specific competency frameworks and professional body guidance on professional standards).

Population based networks for children and young people

Some of the issues in delivering effective healthcare to children and young people have arisen because of the fragmentation of services and the lack of integration of providers. This applies to services in primary, community, secondary and tertiary care.

Analysis of serious incidents has shown that CYP are often subject to a failure of care when moving across care settings – for example, at discharge from an acute event to primary care. More effective linkage of providers and commissioners would help to reduce these issues. Population-based networks and primary care network are based on linkages between providers and commissioners across all settings will address these issues. This is strongly aligned with the Long Term Plan,[17] which acknowledges the traditional divide between different parts of the health system that act as a barrier to coordination and personalisation of care. Dissolving these boundaries will ensure more effective coordination of care. Healthy London Partnership is keen that care for CYP is central to primary care networks.

In conjunction with these developments, asthma care should be developed utilising a network model approach, either as a subgroup of a regional children's healthcare network or through more localised networks and as a minimum a network of peers for sharing best practice.

Overall care must be based on the United Nations Convention on the Rights of the Child[18] that says that every child has the right to:

- A childhood (including protection from harm)
- Be educated (including all girls and boys completing primary school)
- Be healthy (including having clean water, nutritious food and medical care)
- Be treated fairly (including changing laws and practices that are unfair on children)
- Be heard (including considering children's views)

London’s ambitions for asthma care

Each Integrated Care System (ICS) should have a paediatric asthma network with an identified lead in paediatric asthma who interfaces with place-based systems, primary care networks (PCNs) and secondary care, including emergency departments and urgent care, plus pharmacy, schools, community and severe asthma services, each of whom will have named representation on the network.

Each PCN and each organisation (primary and community care, acute care, schools) will have a clear named lead who will be responsible and accountable for the dissemination and implementation of asthma standards and good asthma practice (which includes children) as well as delivery of the following objectives.

Proactive care

Every child with asthma should:

- Have access to a named set of professionals trained in asthma care, working in a network that will ensure that they receive holistic integrated care, which must include their physical, mental and social health needs.
- Be supported to manage their own asthma with the help of their family, including access to advice and support so they are able to lead lives free from symptoms.
- Grow up in an environment that has clean air that is smoke free and be able to breathe safe air, both in and out of the home with access to clean air routes[19]
- Have access to an environment that is rich with opportunities to exercise.

Accessible care

Every child with asthma should:

- Have their diagnosis and severity of wheeze established in a timely fashion with access to age appropriate diagnostics services
- Have prompt access to their inhaler device, other medicines and asthma care advice from trained named professionals or asthma champions in school, plus an agreed documented school asthma management plan.
- Have access to immediate medical care, advice and medicines in an emergency.
- Have access to high quality, evidence-based care from primary, secondary and tertiary healthcare professionals within a timely manner, 24 hours a day, seven days a week.

Coordinated care

Every child with asthma should:

- Be enabled to manage their own asthma by having access to a personalised, interactive, evidence-based asthma management plan that they understand and that is linked to their medical record.
- Have a regular structured review by a healthcare professional trained in asthma care at least yearly or more frequently, depending on control.
- Have a structured review post exacerbation. in a timely (within 5 days at most) manner and appropriate to the severity of the attack, to ascertain whether the attack is over (and whether further treatment is needed) and to identify and optimise any modifiable risk factors.[20]
- Have access to a package of care that includes education, self-management tools and access to peer support[21].
- Be able to expect all professionals involved in their care to share clinical information in real time through a shared digital care record and ensure accurate recording of information by health professionals.
- Have access to a structured, formalised transition process from child to adult care to ensure children do not fall between the gaps.

A. ORGANISATION OF CARE			
	Standard	**Evidence**	**Ref**
1	Each STP CYP transformation board will have a named paediatric asthma lead with asthma expertise who is responsible and accountable for the dissemination and implementation of asthma services in their locality and auditing of defined outcomes.	▪ Governance structure identifying the asthma lead.	10, 11, 12, 22
2	All organisations/services* must have a named lead with asthma expertise who is responsible and accountable for the dissemination and implementation of asthma standards and good asthma practice which includes CYP. These leads should collaborate across their networks.	▪ Governance structure identifying the asthma lead.	4, 8, 10
3	Each ICS should have a paediatric asthma network with an identified lead in paediatric asthma who interfaces with place based systems and primary care networks (PCNs), secondary care including emergency departments and urgent care, pharmacy, schools, community and severe asthma services, each of whom will have named representation on the network. This network should integrate and transition with adult services.	▪ Governance structure identifying the asthma lead.	17, 23
4	Each ICS should develop and maintain a pathway of referral and ensure responsibilities between primary, secondary and tertiary care. This should include safeguarding at all levels of care**.	▪ Governance structure identifying the pathway.	11,17, 24, 25
5	There are formal partnerships established between providers of CYP services. There is demonstration of working within a multiprofessional*** network of care across the pathway that focusses on CYP with asthma and links providers, commissioners, public health, pharmacists and local authorities with CYP and their families. The networks develop shared pathways, protocols and consider workforce planning. Children should have access to diagnostic services to allow effective and practical testing, diagnosis and management of CYP with asthma and to enable identification of children with difficult to treat or severe asthma. There is evidence of collaboration between all sectors including local children's safeguarding boards.	▪ Network terms of reference, membership and accountability of the group. ▪ Progress reports to ICS/place-based boards and Trust Boards as required. ▪ Participation in network meetings. ▪ Shared network protocols and guidelines for diagnosis, treatment and care. ▪ Regular assessment of performance in place. ▪ Workforce planning. ▪ Examples of measures to improve service delivery across the network.	1, 3,14, 26, 27, 28

6	There is a programme of audit and ongoing improvement within each service. This includes the National Asthma and COPD Audit and Severe Asthma Registry, which clinicians should complete for the patients they see as well as any national asthma registry, audits and child death reviews.	▪ Terms of reference, membership and accountability of the group. ▪ Progress reports to STPs/CCGs and Trust Boards as required. ▪ Electronic templates, severe asthma registry, primary and secondary care database, GP practice children's asthma register, school asthma register. ▪ Audits of the following in primary, secondary and tertiary care: ○ Number of CYP with asthma. ○ Number of CYP with asthma plans. ○ Number of prescriptions of inhaled steroids. ○ Number of CYP with more than one emergency admission / three A&E attendances. ○ Number of CYP admitted to PICU and HDU. ○ Number of annual reviews. ○ Number of follow-ups within a week post exacerbation ○ Yearly submission to NACAP ○ Mortality rates ○ Yearly emergency department audit (CEM). ○ Evidence of significant event analysis post admission or attack	1, 3,10, 27, 28, 29, 30, 31, 32, 33
7	The organisation has, or is moving towards, a strategy that ensures communication / interoperability between diverse IT systems in hospital, community, pharmacy and any CYP healthcare setting. It uses a unified clinical record throughout the patient's journey, commenced at the point of entry, which is accessible by all healthcare professionals and all specialties throughout the care pathway (community to tertiary) and allows for service audit. This includes the ability to flag / code any concerns (eg any child subject to plan).	Strategy available for: ▪ Information systems which facilitate seamless care across the pathway. ▪ Up-to-date unified record being used by all staff and electronic transfer of information for organisations such as schools and pharmacy.	1,12, 13,14, 33, 34

8	The organisation allows adequate clinic time for assessment and management of the child by an appropriately trained healthcare professional.* Best practice should allow at least: ▪ 20-30 minutes in primary / community care and acute/secondary care. ▪ 45 minutes first appointment. ▪ 25 minutes for follow up in tertiary care. ▪ 10 minutes for a pharmacy medication consultation. GP practice-based pharmacists conducting a Structured Medication Review (SMR) may require longer.	▪ Clinic slots and templates.	35, 36
9	Every child has an assessment of the triggers for their wheeze and is educated about how to deal with them. Children with asthma 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.	▪ Service specification or contracts and pathway. ▪ Audit of notes, referrals and numbers accessing services.	4, 8, 10, 37, 38, 39, 40
10	There is access to a paediatric severe asthma service with a 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. There is an ability to directly refer from primary care.	▪ Service specification or contract.	35, 41, 42
11	Consultations routinely promote healthy lifestyles, including assessment of long-term health needs, such as: ▪ Systematic approach to obesity (eg growth measurement, calculation of BMI and monitoring height). ▪ Assessment of CYP and family for living conditions and housing free from damp and mould, alcohol, drugs and smoking. ▪ Ensuring patient satisfaction with their treatment Every child and their family are assessed at health or social care encounters for their exposure to smoking either actively or passively (including 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	▪ Evidence that assessment has taken place and been documented. ▪ Service specification or contracts. ▪ Audits of referrals and numbers of CYP accessing services. ▪ Numerator – Number of people in the denominator (including Fraser competent CYP) who are assessed for carbon monoxide levels 4 weeks after the quit date. ▪ Denominator – Number of people who smoke who have set a quit date with an evidence-based smoking cessation service.	4, 8, 10, 12, 13, 35, 43, 44, 45, 46, 47, 48, 49

	for families, Fraser competent CYP and carers that address issues of smoking and monitor outcomes.		

* Organisations / services: Primary Care Networks, schools, hospitals, GP surgeries, pharmacy or community providers, prisons and young offender's programmes.
** See Standard 22
*** Multiprofessional team includes primary, secondary, tertiary care, schools, pharmacists, local authority, commissioners, providers, CYP & family/carers plus social worker as appropriate.

B. PATIENT AND FAMILY SUPPORT, INFORMATION PROVISION AND EXPERIENCE

This should not only include the experience of the patient and carer going through the service, but also demonstrate how they are involved in the assessment, running and development of any future service.

	Standard	Evidence	Ref
12	CYP and their families are actively involved in reviewing local service provision and giving input and feedback on services at all levels to improve patient experience and overall quality of the service.	▪ Minutes demonstrating patient presence and involvement in decisions about service development. ▪ Patient experience measures in place/feedback regularly audited and communicated. ▪ Evidence that complaints are used to improve services. ▪ Evidence of involvement in relevant consultations.	1, 13
13	The organisation participates in routine NHS surveys for CYP (e.g. CQC CYP Survey, Friends and Family Test and action plans reviewed by network). Organisations must also ensure they are compliant with Child Death Overview Panel requests.	▪ Reporting and action plans.	1, 3,13, 50
14	CYP and their families receive sufficient information, education and support to encourage and enable them to participate actively in all aspects of their care and decision-making. This means information is tailored to their needs in an accessible format (e.g. written information may use pictures, symbols, large print, Braille and different languages) throughout the care pathway, extending into schools and community settings.	▪ Portfolio of available information. ▪ Available support documentation - Asthma UK information pack, Rightbreathe	4, 30, 51, 52
15	CYP and their families have access to self-management support packages which may include peer support.	▪ Service specification or contracts for self-management programmes. ▪ Audits of referrals and numbers accessing services and outcomes.	4
16	BTS/SIGN guideline 8.1: Whenever inhalers are prescribed patients should have received training in the use of the device and have demonstrated satisfactory technique. They should be provided with a video link to an appropriate demonstration of their device e.g. RightBreathe, Asthma UK. Children and young people should be given specific training and	▪ Structure: Evidence of local arrangements to ensure people with asthma are given specific training and assessment in inhaler technique before starting any new inhaler treatment. ▪ Process: Proportion of people with asthma who are given specific training	35, 9, 11, 12

	assessment in inhaler technique before starting any new inhaler treatment and this should be age appropriate. Children should be taught to use a pMDI and spacer as the first line treatment. They should not be prescribed a pMDI without a spacer. If a change of device is necessary, a pharmacist or other professional with appropriate training should advise patients on its use. As soon as a child is able to use a spacer with a mouthpiece, they should do so. Masks are not appropriate for children over 5 years unless there is a disability. Repeat in prescribing section	and assessment in inhaler technique before starting any new inhaler treatment. ▪ *Numerator* – Number of people in the denominator who have training and assessment in inhaler technique. ▪ *Denominator* – Number of people with asthma starting a new inhaler treatment.	

C. DIAGNOSIS AND CHRONIC CARE			
	Standard	**Evidence**	**Ref**
17	Diagnosis can be difficult in CYP. CYP with suspected asthma should be diagnosed on the basis of personal and family history (such as atopy, eczema and allergy), objective measurements - reversible airflow obstruction (spirometry and peak flow diaries) FeNO (fractional concentration of exhaled nitric oxide) - and response to treatment. In younger children where objective measurements are not possible, response to initiation and stopping treatment should be used as a basis for diagnosis.	▪ Structure: Evidence of local arrangements to ensure people with newly diagnosed asthma are diagnosed in accordance with UK guidance, and that the process is documented in their patient notes. ▪ Process: Proportion of people with newly diagnosed asthma whose notes describe the process, rationale underlying the diagnosis ▪ *Numerator* – Number of people in the denominator whose notes describe the process, by which the diagnosis was made. ▪ *Denominator* – Number of people with newly diagnosed asthma.	3, 4, 9, 10, 11, 12, 53, 54
18	People with asthma who present with respiratory symptoms receive an assessment of their current asthma control (using Asthma Control Test). People with asthma who present with respiratory symptoms receive an assessment of their asthma risk. (see GINA box 2.2 and BTS table 10 and 14 for possible risk) Before any increase in treatment or after an acute attack or before	▪ Structure: Evidence of local arrangements to ensure people with asthma presenting with respiratory symptoms receive an assessment of their asthma control. ▪ Process: Proportion of people with asthma presenting with respiratory symptoms who receive an assessment of	8, 9, 10, 12, 33

	onward referral, evidence-based adherence and ability to use current treatments should be assessed. Anyone having 2 asthma attacks within a 12-month period should be referred to a secondary care asthma clinic. Each secondary care facility should have an appropriately trained asthma lead and dedicated time to be integrated into the STP paediatric asthma network. The asthma service should be led by a consultant with an interest in asthma along with an asthma specialist nurse who are responsible for ensuring adherence to standards of care across the hospital. Both should have appropriate training / diploma. The clinic should: ▪ Have capacity to see the number of children utilising the service with appropriate appointment times / lengths ▪ Should see referrals from GPs within 4-8 weeks ▪ Should see children after discharge from the ward within 4-6 weeks ▪ Identify children attending the ED with acute asthma / wheeze. Identify recurrent attenders of children at risk. Review in clinic rather than wait for crisis. ▪ Should perform spirometry / BDR / FeNO ▪ Should perform consistent inhaler training / asthma education – standardised within network ▪ Should issue asthma action plans for home and school (consistent within network) ▪ Have a referral path for allergy, psychology and physiotherapy ○ SPT / RAST in house (aeroallergens) – referral to allergy clinic ○ Referral to psychology – local or CAMHS ○ Referral to respiratory physiotherapy may be in house or require specialist referral. ▪ Have a referral path for smoking cessation. Should be in house tied into CCG services. ▪ Have a referral pathway for safeguarding. ▪ Have criteria for referral to tertiary care Severity of asthma is defined as the amount of treatment needed to maintain control and reduce risk. If someone is optimised on high dose medication and is poorly controlled or experiencing attacks, then difficult to treat or severe asthma is probable, and the patient should be referred to a specialised severe asthma MDT.	their asthma control. ▪ *Numerator* – Number of people in the denominator receiving an assessment of their asthma control. ▪ *Denominator* – Number of people with asthma who present with respiratory symptoms.	

19	People who received treatment in hospital or through out-of-hours services for an acute exacerbation of asthma or wheezy episode are followed up ideally within 48 hours of treatment by a suitably trained professional (the healthcare professional should only perform tasks appropriate for level of training and competence).* The review is to: ▪ Establish whether the attack is over and, if not, take appropriate action before the patient runs out of medication, ▪ Update repeat prescriptions and check supplies of other medication, ▪ Identify any modifiable risk factors, including adherence to preventers, and optimise care to remove these risks, ▪ Ensure the patient has an up to date personalised asthma action plan and that follow up plans are in place for those at risk of future attacks. Ideally the 48-hour check would take place in the patient's GP practice. Where this is not possible, systems should be in place to ensure that the points above are enabled and records updated through direct communication with the GP surgery. Follow up with an asthma clinical specialist 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. Emergency supply of SABAs provided in a community pharmacy to be communicated to the CYP's GP practice urgently and advised to see their GP or access emergency care urgently. Lifestyle advice – Stopping smoking, air pollution and exposure to smoke and exercise and diet (obesity).	Structure: ▪ Evidence of local arrangements and systems in place (e.g. patient information leaflet) to ensure people who receive treatment in hospital or through out-of-hours services for an acute exacerbation of asthma are followed up by their own GP practice within 2 working days of treatment. ▪ Evidence of local arrangements to ensure effective communication between secondary care centres (such as hospitals and out-of-hours services) and primary care (e.g. hospital booking appointment on behalf of patient) Process: ▪ Proportion of people who received treatment in hospital or through out-of-hours services for an acute exacerbation of asthma who are followed up by someone competent to do so their own GP practice within 2 working days of treatment. ▪ *Numerator:* Number of people in the denominator followed up by their own GP practice within two working days of treatment. ▪ *Denominator*: Number of people who received treatment in hospital or throughout-of-hours services for an acute exacerbation of asthma. ▪ Documentation relating to emergency supplies	8, 10, 12,

* It is vital that primary, secondary and tertiary care put systems in place to support this.

D. SCHOOLS			
	Standard	**Evidence**	**Ref**
20	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 programme*). Appropriately trained school nurses should play a key role. This includes the implementation of government policy on emergency inhalers and early years settings such as children's centres having access to education programmes for wheezers. This should include after school care/clubs that take place on school sites.	▪ Joint policy between STP/CCG and local authority for the improvement of asthma care in primary and secondary schools. ▪ Education programme for staff, students and parents. ▪ Directory of updated asthma leads shared between organisations. ▪ School nurses should have undertaken specific asthma training and have a recognised qualification in asthma care. They should be supported to manage CYP with asthma in their schools.	4, 14, 55, 56, 57, 58
21	All schools should work towards achieving AFS status and have in place: ▪ A register of all CYP with asthma. ▪ A management plan for each child to include contact with GP/specialist caring for the child. ▪ A named individual responsible for asthma in school – the Asthma Champion. ▪ A policy for inhaler techniques and care of CYP with asthma. ▪ A policy regarding emergency treatment. ▪ If emergency treatment is provided in school, a parent should be notified and if the child does not improve an ambulance should be called. ▪ A system for identifying and taking appropriate action in the case of children who have poor control, as indicated by use of their blue inhaler or missing school or who are not partaking in sports / other activities. Action should include discussion with the parents, notification of the child's GP via the school nurse and implementation of local policy to involve community asthma trained nurses. This should be communicated to after school care/clubs that take place on school sites.	▪ Up to date register of children in school with asthma. ▪ Individual management plans for CYP. ▪ Named individual's job plan / roles include responsibility in relation to asthma ▪ Policies for management of CYP with asthma, emergency procedures / treatment and inhalers in schools. ▪ Audit of absenteeism monitoring. ▪ Audit of asthma care and prevalence across schools. ▪ Whole school approach to training (including after school care/clubs) ▪ Directory of local asthma leads and contact details.	4, 12, 22, 55, 57, 59

E. ACUTE CARE			
	Standard	**Evidence**	**Ref**
22	The organisation complies with existing standards, such as the London Acute Care Standards for CYP (which incorporate the London Quality Standards), Out of Hospital Care Standards, High Dependency and PAU standards and safeguarding policies.* *All efforts should be made to support parents and children to engage with appointments utilising community services, school nursing etc. These efforts should be escalated where appropriate to safeguarding referrals if there is continued non-engagement. This escalation process should be written into each organisation's Was Not Brought policy, with compliance audited regularly.	▪ Demonstrated in published plans, reports and in management structure to support the service. ▪ Audit and compliance against standards. ▪ Self-assessment against London Acute care standards for CYP and action plan. ▪ Compliance with regulatory policies in particular safeguarding around failed to attend/was not brought policies.	1, 3, 60
23	All CYP who present in an emergency are managed according to local policies and protocols and BTS/Sign or GINA guidance which incorporate acute management, education, ongoing treatment and discharge arrangements, including ensuring communication with community care electronically within 24 hours.	▪ Local policies and protocols in primary and community care, emergency departments and urgent care centres. ▪ Systems in place to communicate electronically, preferably by a single patient record.	4, 9, 10, 12, 14, 28
24	People with asthma who present with an exacerbation of their symptoms receive objective measurements of severity, as detailed in the BTS/SIGN and GINA guidelines (ref table 12 or 17 BTS/SIGN) at the time of presentation. Organisations should ensure that there is objective evidence of improvement before discharge. Treatment of asthma attacks should follow evidence-based guidelines.	Structure: ▪ Evidence of local arrangements to ensure people with asthma presenting with an exacerbation of their respiratory symptoms receive an objective measurement of severity at the time of presentation. Process: ▪ Proportion of people with asthma presenting with an exacerbation of their respiratory symptoms who receive an objective measurement of severity at the time of presentation. ▪ *Numerator*: Number of people in the denominator receiving an objective measurement of severity at the time of	4, 12

		presentation. ▪ *Denominator*: Number of people with asthma presenting with an exacerbation of their respiratory symptoms.	
25	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 are seen by the respiratory team directly.	Structure: ▪ Evidence of local arrangements to ensure 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. Process: ▪ Proportion of people aged 5 years or older presenting to a healthcare professional with a severe or life-threatening acute exacerbation of asthma who receive oral or intravenous steroids within 1 hour of presentation. ▪ *Numerator*: Number of people in the denominator receiving oral or intravenous steroids within one hour of presentation. ▪ *Denominator*: Number of people aged 5 years or older presenting to a healthcare professional with a severe or life-threatening acute exacerbation of asthma.	12
26	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: ▪ Assessment of current symptom control (using GINA table 2-2, Children's ACT if aged 4 – 11, or ACT for 12+) and / or triggers for wheezing. ▪ Inhaler techniques. ▪ Self-management and how to manage acute exacerbations. ▪ Personalised asthma action plan. ▪ Identification and optimisation of modifiable risk factors (GINA Table 2-2, SIGN/BTS) ▪ If ≥2 acute attacks in previous year – refer to severe/difficult to treat asthma service or asthma clinical specialist	Structure: ▪ Evidence of local arrangements to ensure people admitted to hospital with an acute exacerbation of asthma have a structured review by a member of a specialist respiratory team before discharge. Process: ▪ Proportion of people admitted to hospital with an acute exacerbation of asthma who receive a structured review by a member of a specialist respiratory team before discharge. ▪ *Numerator:* Number of people in the	4, 12, 61, 62, 63

		denominator receiving a structured review by a member of a specialist respiratory team. ▪ *Denominator:* Number of people discharged from hospital after admission for an acute exacerbation of asthma.	
27	There are systems in place in acute and community care for identifying patients at high risk, with poorly controlled or severe asthma and for monitoring/tracing and managing those CYP who have had more than one admission in the last year OR any of the following: ▪ ≥ two asthma attacks in the previous 12 months (NRAD) ▪ Any admission to HDU, ICU or PICU ever. This is a lifetime risk. ▪ 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). ▪ Six or more salbutamol inhalers within a year. This should prompt an asthma review to establish clinical status and context of the prescription history. ▪ 80 per cent or less uptake of repeat preventer prescriptions to establish clinical status and context of prescribing history.	▪ System in place to identify and manage high risk patients and ongoing audit to demonstrate effectiveness. ▪ High risk register. ▪ Evidence of inhaler technique medication reviews. ▪ Audit data demonstrating numbers of: ○ Referrals onto secondary/ tertiary care. ○ CYP admitted with asthma and frequency. ○ CYP on high risk register. ○ Patients admitted to HDU / PICU / ICU in last year. ○ Repeat attenders to A&E / GP practice. ○ Children with 6 or more salbutamol inhalers (note: patients/parents should be asked how often they use salbutamol inhalers). ○ Repeat preventer prescription.	4, 8, 9 (table 2.2), 12 (table 11),14, 64
28	There is access to paediatric physiotherapist with an interest in dysfunctional breathing identified within that asthma network (ideally possible to direct refer from primary care).	▪ Service specification or contract.	35, 41
29	There are agreed effective, integrated pathways to ensure the smooth transition between healthcare settings (ie primary care to secondary or tertiary care). These include shared care, referral and discharge protocols between community and specialist and access to prompt specialist advice and help.	▪ Shared care, referral and discharge pathways and policies.	4,14, 28

30	NICE Statement 2: People aged 5 years and over with asthma discuss and agree a written personalised action plan provided by someone appropriately trained and competent to do so. (This should be age appropriate.)	Structure: ▪ Evidence of local arrangements to ensure people with asthma receive a written personalised action plan. Process: ▪ Proportion of people with asthma who receive a written personalised action plan. ▪ Proportion of people treated in hospital for an acute exacerbation of asthma who receive a written personalised action plan before discharge. ▪ *Numerator*: Number of people in the denominator receiving a written personalised action plan before discharge. ▪ *Denominator*: Number of people treated in hospital for an acute exacerbation of asthma.	4,10, 12, 65, 66

*Specialist is defined as paediatric consultant with respiratory interest or an asthma clinical nurse specialist with specific training in viral induced wheeze, asthma management and discharge planning.

F. HIGH RISKS

Services for CYP and their families should be provided by a range of health and social care professionals and agencies working collaboratively, to ensure the highest standard of care for children and young people at all times.

	Standard	Evidence	Ref
31	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: ▪ 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.	▪ System in place to identify and manage high risk patients and ongoing audit to demonstrate effectiveness. ▪ High risk register. ▪ Evidence of inhaler technique medication reviews. ▪ Audit data demonstrating numbers of: Referrals onto secondary/ tertiary care. CYP admitted with asthma and frequency. ○ CYP on high risk register. ○ Patients admitted to HDU / PICU / ICU in	2, 6, 7

		last year. ○ Repeat attenders to A&E / GP practice. ○ Children with 10 or more salbutamol inhalers. ○ Repeat preventer prescription.	
32	There is access to paediatric physiotherapist with an interest in dysfunctional breathing (ideally ability to direct refer from primary care). „ Service specification or contract.	There is access to paediatric physiotherapist with an interest in dysfunctional breathing (ideally ability to direct refer from primary care). Service specification or contract.	15, 27

G. INTEGRATION AND CARE COORDINATION

Services for CYP and their families should be provided by a range of health and social care professionals and agencies working collaboratively, to ensure the highest standard of care for children and young people at all times.

	Standard	Evidence	Ref
33	People with asthma receive a structured review* by someone appropriately trained at least annually, with provision for more frequent review in patients who are poorly controlled and after every attack. This must include understanding of their condition and treatment, assessment of adherence, inhaler technique and children's ACT for those aged over four years, and identification of modifiable risk factors. The review process should consider safeguarding and Was Not Brought policies.** The review is an opportunity to encourage flu vaccination and smoking cessation.	Structure: ▪ Evidence of local arrangements to ensure people with asthma receive a proactive structured review at least annually. Process: ▪ Proportion of people with asthma who receive a structured review at least annually. ▪ *Numerator:* Number of people in the denominator who had a structured review within 12 months of the last review or diagnosis. ▪ *Denominator*: Number of people with an asthma diagnosis. ▪ Monitoring QOF exception rates.	4, 8, 9, 10,12, 14, 24, 60, 61, 63
34	NICE Statement 5 : People with suspected severe asthma*** are referred to a specialist multidisciplinary severe asthma service.	Structure: ▪ Evidence of local arrangements to ensure people with difficult asthma are offered an assessment by a tertiary led multiprofessional difficult asthma service.	35

		Process: ▪ Proportion of people with difficult asthma who receive an assessment by a multiprofessional difficult asthma service. ▪ *Numerator*: Number of people in the denominator receiving an assessment by a multiprofessional difficult asthma service. ▪ *Denominator*: Number of people with difficult asthma.	
35	There is a system to communicate the name of the responsible lead/link person caring for the young patient to them and their family.	▪ Monitored on a case by case basis. ▪ Audit of CYP to see if they know who their link person is.	1, 3, 28,63
36	Support services, both in the hospital and in primary, community and mental health settings are available seven days a week to ensure that the next steps in the patient's care pathway, as determined by the daily healthcare professional led review, can be taken.	▪ Description of services, audit of notes, rotas.	1, 28, 67

* A structured review should include, height, weight, immunisations, health education (diet, exercise, and smoking status).
** See Standard 22
*** Children on step 4 / 5 of the BTS/SIGN guidelines with on-going poor control (ACT / cACT ≤19 and / or ≥ 2 admissions in past year and / or ≥ 3 courses of high dose oral corticosteroids (OCS) in past 2 years and/or persistent airflow limitation [FEV1 < 80% post bronchodilator]) and all children prescribed maintenance OCS or under consideration for omalizumab or other novel biological drug whatever the level of control

H. DISCHARGE AND CARE PLANNING

Discharge and care planning should commence on admission in order to provide a smooth transfer of care back to primary care or further care as appropriate.

	Standard	Evidence	Ref
37	Systems are in place to ensure safe discharge and transfer between providers. This includes the following: ▪ All admitted CYP have discharge planning and an estimated discharge date as part of their management plan as soon after admission as possible. ▪ The primary care team / GP is informed of discharge within agreed timescale of each attendance and follow up is booked ideally within two days but at most within 5 days (including health visitor and school nurse) and where appropriate before the oral corticosteroid runs out. ▪ Information is provided to GP and community teams within 24 hours. Sufficient medication must be provided to ensure adequate	▪ Telephone advice offered / feedback from patients / supporters / description of telephone follow up service and GP links. ▪ Audit of notes (discharge planning and timelines). ▪ Discharge information provided within 24 hours. ▪ System in place for follow up within two days. ▪ Standard written discharge information is available. ▪ Pharmacy systems in place to ensure	3, 28, 26, 67

	treatment until expected GP review. ▪ 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. Secondary and tertiary care healthcare professionals should provide patients with a copy of changes in medication or initiation of a new inhaled medication or device to be handed to primary care pharmacists.	medicines available in a timely fashion. NOTE: Weaning protocols should be used with caution because it is off-licence prescribing. There is a risk that high doses of salbutamol remove the warning signal for parents that the attack is not over.	

I. TRANSITIONAL CARE

Transition to adult services should be as seamless as possible for the young person. It may commence from age 12 onwards and last until 25 depending on the child and / or condition. It requires careful planning and collaborative working between the child / young person, adolescent services and adult services. The process of transition is expected to take longer where a child has multiple, complex needs, but the key feature of transition is that care should remain flexible at all times.

	Standard	Evidence	Ref
38	There is a clear lead clinician responsible for transition leading work on policies and pathway of care to prepare young people for the transition to adult services. Planning for transition should start early in the teenage years. Transition should be carefully planned from the age of 14 onwards for any child being seen in secondary or tertiary care for asthma. Any child who has been treated in intensive care for acute asthma, a HDU or paediatric HDU is at life-long risk and should be flagged as such on GP records.	▪ Operational policy for paediatric service. ▪ Identified lead (role identified in job plan and appraised). ▪ Transition policy and pathway of care available.	12, 68
39	Transition is properly planned, and a named key worker may be appointed for each child in their approach to transition to oversee the process and collaborate with other professionals before, during and after transition. An annual review should form part of this process. The young person is involved in the planning and delivery of their own care.	▪ Operational policy for paediatric service ▪ Clear referral process in place. ▪ Audit of effectiveness. ▪ Named key worker. ▪ Child / parent being involved in care plan. ▪ Written handover and meeting between the young person and a practitioner from each adult service they are transitioning to.	4, 13, 14, 68, 69

40	There is a shared pathway between children's and adult services, which is a shared and active arrangement and is properly implemented. Follow up is then the responsibility of adult services if a young person does not attend their first adult appointment.	▪ Operational policy for paediatric service. ▪ Shared protocol available. ▪ Patient involvement in plans on audit. ▪ Written handover.	4, 14, 30, 33, 68, 69

J. EFFECTIVE AND CONSISTENT PRESCRIBING

	Standard	Evidence	Ref
41	There are systems in place to minimise prescription and drug administration errors. This includes: ▪ Utilising current systems to monitor adherence to national and local prescribing guidelines. ▪ Development or identifying appropriate education and training resources to support adherence to prescribing guidelines. ▪ Utilising current systems to monitor near misses and medication errors in primary, secondary and tertiary care settings.	▪ Operational policy for paediatric asthma service. ▪ British National Formulary for children available. ▪ Processes in place to minimise errors, reporting and review of errors and near misses and to spread learning. ▪ Adherence to CQC standards in medicines management.	1, 3, 70, 71
42	There are systems in place: ▪ To identify, monitor and manage through an alert system to clinicians' numbers of prescriptions for prednisolone, inhaled steroids, six or more salbutamol inhalers in a year*, child with asthma and flu jab uptake. ▪ To identify and manage and refer to an asthma clinical specialist CYP prescribed inhaler at doses higher than recommended in product licence. ▪ To ensure asthma in CYP is included in the medicine's optimisation specification as part of the PCN commissioned contracted directed enhanced services for community pharmacists ▪ To promote medicines optimisation including inhaler technique assessment for CYP, appropriately trained individuals (community pharmacists, hospital pharmacist, technicians, asthma nurses, practice pharmacists, nurse, GP) should ensure medication is up to date in accordance with the asthma plan. ▪ To ensure PCN and STP medicines management teams develop local prescribing guidelines to support evidence-based care for CYP. ▪ To ensure correct inhaler technique provide patients and families	▪ Policy in place for medicines optimisation. ▪ Audits demonstrating numbers of patients in practice with: ○ Two or more prescriptions for prednisolone in a year. ○ Number of inhaled steroids (prescription uptake greater than 80%) ○ Number of salbutamol inhalers is greater than 6 ○ Flu vaccination uptake. ▪ Local prescribing guidelines. ▪ Participation in health promotion campaigns and audits. **Note: Long acting beta-agonists must not be prescribed without corticosteroids** **Note: Reviews with parents for younger children. Pharmaceutical Services Negotiating Committee guidance states the**	14, 64, 70, 71, 72, 73, 74, 75, 76, 77

	with a link to a good quality video e.g. Asthma UK, HLP, RightBreathe ▪ To ensure coordination between CCG medicine management pharmacists, secondary care pharmacists and community pharmacists to monitor adherence to national and local prescribing guidelines. ▪ To develop communication links between PCN, GP practice based, secondary, tertiary and community pharmacists on changes in medication and follow up of new medicines using digital platforms. ▪ To ensure use of community pharmacists and technicians to monitor and promote medicines optimisation initiatives through the application of clinical audits and health promotion campaigns within the community pharmacy contractual framework or PCN contracted directed enhanced services. ▪ To ensure hospital pharmacists and technicians check and provide advice on inhaler technique at any opportunity.	**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 that they will not be competent.** **Note: Decisions about the initiation and continuation of biologics should only be made by a specialised severe asthma MDT.**	

* ≥ 3 a year are associated with unscheduled care, severe attacks and deaths (SABINA study, 64)

K. WORKFORCE EDUCATION AND TRAINING			
	Standard	**Evidence**	**Ref**
43	There is access to a multiprofessional team for advice, diagnostics and management support which includes specialist paediatric asthma nurse, physiotherapist, paediatric dietician, paediatric pharmacist, psychologist and pulmonary technician (within tertiary clinic). Sharing specialist staff across an area represents an effective use of resources.	▪ Service specification, job roles and rotas demonstrating available support.	10
44	Children and young people have contact with healthcare professionals who have received assessed competency-based 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 primary care network is appropriately trained (ie holds a recognised certificate of competence, such as an asthma diploma) and has experience in supporting children with long term conditions. Every school has an asthma champion with appropriate training in identifying and acting on risk due to asthma, supported by the	▪ Rotas and training and needs assessment undertaken and action plan for training of current and future MDT workforce. ▪ Continuing professional development and competency.	4, 8, 10, 14, 75

	school nurse. Appropriately trained primary care pharmacists and technicians who wish to undertake an extended role in delivery of SMRs or PCN contracted DES are trained and competent to do so. Hospital pharmacists and technicians providing advice on inhaler technique or doing asthma reviews are trained appropriately.		
45	All healthcare professionals who work with CYP and their parents/carers should undertake the validated 20 minute online training from the National Centre for Smoking Cessation Training or an equivalent evidence-based programme.	▪ Training provision and number of staff who have undertaken the training.	47
46	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.	▪ Staff rotation and education programmes across geographical networks.	1, 76
47	Unregistered staff* have completed a course of training specific to the setting and tasks, and in the care of infants and CYP. They have undergone a period of competence assessment before carrying out care and delegated tasks.	▪ Training records for unregistered staff.	1, 78, 79, 80

* Unregistered staff may include receptionists, healthcare assistants and technicians.

Glossary

ACT	Asthma Control Test
A&E	Accident and emergency
BMI	Body mass index
BTS	British Thoracic Society
CCG	Clinical commissioning group
CEM	Centre for Evaluation and Monitoring
CYP	Children and young people
CPD	Continuing professional development
CQC	Care Quality Commission
FEV1	Forced expiratory volume
GINA	Global Initiative on Asthma
GP	General practitioner
HDU	High dependency unit
NMS	New medicine service (Pharmaceutical Advanced Service)
NICE	National Institute for Health and Care Excellence
NHS	National Health Service
NRAD	National Review of Asthma Deaths
OPD	Outpatient department
PICU	Paediatric intensive care unit
PSNC	Pharmaceutical Services Negotiating Committee
QOF	Quality and outcomes framework
RCN	Royal College of Nursing
RCPCH	Royal College of Paediatrics and Child Health
SI	Serious incident
SIGN	Scottish Intercollegiate Guidelines Network
STP	Sustainability and Transformation Partnership

Useful links

Association of Respiratory Nurse Specialists

The Association of Respiratory Nurse Specialists (ARNS) was established in 1997 as a nursing forum for respiratory nurse specialists https://arns.co.uk/

Asthma UK

Includes pages on keeping children with asthma safe at school, featuring resources for schools, support for parents and healthcare professionals. www.asthma.org.uk/advice/child/life/school/

Free asthma and severe asthma online training tools

Health Education England: Supporting Children's Health: Asthma

- Working in conjunction with the *George Coller Memorial Fund*, Education for Health has developed this free online educational resource '*Supporting Children's Health*'. The online resource provides basic information on how to support children and young people with asthma. www.supportingchildrenshealth.org/asthma-module

- Chronic Urticaria Online Module: This free eLearning programme is designed for UK healthcare professionals who need to enhance their chronic urticaria knowledge. It will take you approximately 60-75 minutes to complete. At the end you can complete the short assessment and print off a certificate of completion. www.educationforhealth.org/allresources/free-elearning/#chronic

- E- Leaning for Health e-Asthma Programme interactive e-learning resource for healthcare professionals which aims to improve the diagnosis and management of asthma as a long term condition for children and adults. www.e-lfh.org.uk/programmes/asthma/

- Severe Asthma in Children Online Module: For training in severe asthma, this free eLearning programme is designed for practitioners in primary care who have some understanding of asthma management. It will take you approximately 45 minutes to complete. https://severeasthma.educationforhealth.org/home

Healthy London Partnership Asthma Toolkit

Healthcare professionals, school staff, parents, carers, children, and young people are encouraged to use our toolkit to ensure young people and children with asthma have the best care and experiences in London. It can help organisations implement London's asthma ambitions as well as these standards. www.healthylondon.org/resource/london-asthma-toolkit/

PRIMIS

The Asthma Care audit tool has been designed to help practices to audit their clinical data helping them to optimise the management and care of patients with active asthma and reduce their risk of exacerbation and hospital admissions www.nottingham.ac.uk/primis/

NHS PrescQIPP

An NHS funded not-for-profit organisation that supports quality, optimised prescribing for patients. Respiratory web kit, asthma focus bulletin and inhaler technique review tools for those who prescribe, covers

- Bulletin and briefing (including implementation versions) with recommendations on NRAD.
- Pathway documents for adults, children, and younger children.
- Audit tools, including auto system searches for SystmOne and EMIS.
- Patient materials.
- Inhaler technique assessment tools for nine different kinds of inhalers.

www.prescqipp.info

Practice plus: professional network developed to connect PCN and practice pharmacists and pharmacy technicians https://practiceplus.prescqipp.info/

Primary Care Respiratory Society UK

PCRS-UK resources have been written by authors with appropriate expertise of primary care and respiratory medicine. Resources include guidelines and guidance, opinion sheets and nurse materials. www.pcrs-uk.org

RightBreathe

Inhaler prescribing information. www.rightbreathe.com/

UK Inhaler Group

Promote the correct use of inhaled therapies to improve the outcomes of patients with respiratory conditions www.ukinhalergroup.co.uk/

UKIG Standards for Inhaler Technique

UKIG has developed a set of standards and competencies for healthcare practitioners to enable them to work with patients to optimise technique and maximise the benefit of the medication www.educationforhealth.org/allresources/free-elearning/#ukig

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