

Asthma in Adults

Educational resources and key standards for General Practice and Primary Care Nurses

Background

‘Four people die from asthma every day, and many more continue to be at risk, with tens of thousands admitted to hospital for life- threatening asthma attacks each year’

[‘Asthma care is in crisis’ - charity sounds the siren as asthma death toll rises | Asthma + Lung UK \(asthmaandlung.org.uk\)](#)

Asthma is a heterogeneous disease, usually characterised by chronic airway inflammation. It is defined by a history of respiratory symptoms, such as wheeze, shortness of breath, chest tightness and cough, that vary over time and in intensity, together with variable expiratory airflow limitation.

The goals of great asthma care are:

- To prevent of asthma deaths.

To enable, empower and support adults living with Asthma to live a life unlimited by asthma

Adults with asthma, their families and their care-givers should have the knowledge and support to:

- Understand their condition and their triggers
- Manage their day-to-day treatment
- Know what to do if their symptoms are worsening and what to do in an emergency.

Great asthma care means:

- No symptoms, day or night
- No asthma attacks
- No limitations on activity including exercise
- No flare-ups or exacerbations
- No side effects from asthma medication.

Adapted from GINA [Global Strategy for Asthma Management and Prevention \(GINA \) 2024](#)

Adult Asthma

General Practice and Primary Care Nurses play a critical role in the diagnosis, management, education and review of adults with a diagnosis of asthma. [Overview | Asthma: diagnosis, monitoring and chronic asthma management \(BTS, NICE, SIGN\) | Guidance | NICE](#)

Nurses at every level in general practice work in partnership with patients and communities to optimise excellence in asthma control.

In practices where General Practice Nurses' potential is realized they are leading in:

- Undertaking diagnostic testing and interpretation of findings.
- Comprehensive care planning including initiation of treatment, asthma action plans, asthma education, and independent prescribing.
- Structured medication and inhaler reviews, complex symptom control and supported self-management as part of long term and multi-morbidity reviews.
- [Nurses' Role in the Control and Treatment of Asthma in Adults: A Systematic Literature Review - PMC \(nih.gov\)](#)
- ['Leading the Way': The role and value of nurses in general practice in England \(Phase Three\) - Sonnet Advisory & Impact \(sonnetimpact.co.uk\)](#)

Consultation Skills and Consultation Modes: Best Practice Guidance.

Asthma annual review should be ideally undertaken face to face, via a group or via video with an agreed virtual NHSE platform for virtual group clinic.

Telephone consultation should be used for follow up advice and to share information.

[Assessing how well your patient's asthma is controlled](#) is fundamental to the asthma review process. The [Asthma Control Test \(ACT\)](#) uses a series of questions for patients to assess their asthma control.

Some HCPs send the ACT electronically and use the results to prioritise which patients they will bring for a face-to-face appointment.

It is important to remember that the ACT is not a triage tool. It is a subjective test to be completed by patients and families. It does not replace the need for a comprehensive asthma review.

It is designed to support the asthma review consultation rather than as a risk-stratification tool to help you identify patients with uncontrolled asthma.

[Managing asthma in adults | Asthma + Lung UK](#)
(asthmaandlung.org.uk)

Scope of Practice

In 2021, Health Education England developed a framework articulating the core capabilities necessary for safe and effective primary care nursing. The capabilities (skills, knowledge, and behaviours) described in the framework are defined at 3 tiers. Each tier articulates the minimum and core capability to be expected as opposed to the maximum:

- **Tier 1:** Capabilities that require a general understanding and that support provision of primary care/general practice nursing.
- **Tier 2:** Capabilities that enable the provision of care more independently and a degree of critical analysis.
- **Tier 3:** Capabilities that require an ability to provide care autonomously and independently, an ability to lead practice, operating at the cutting edge of innovation.
- Further information can be found [here](#)

	Support Work Level Practice	Nursing Associate Level/Assistant Level Practice	Registered Nurse level	Registered Nurse: Enhanced Level Practice	Registered Nurse: Advanced Level Practice	Registered Nurse: Consultant Level Practice
Capability 1. Communication and consultation skills	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 2. Practising holistically to personalise care and promote public and person health	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 3. Working with colleagues and in teams	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 4. Maintaining an ethical approach and fitness to practice	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 5. Information gathering and interpretation	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 6. Clinical examination and procedural skills	Tier 1	Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 7. Making a diagnosis			Tier 2	Tier 2	Tier 3	Tier 3
Capability 8. Clinical management		Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 9. Managing medical and clinical complexity		Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 10. Independent prescribing and pharmacotherapy		Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 11. Leadership, management and organisation		Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 12. Education and development		Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 13. Research and evidence based practice		Tier 1	Tier 2	Tier 2	Tier 3	Tier 3
Capability 14. Strategic Management						Tier 3

Prevention of Worsening Asthma Symptoms:

Key Messages

Although some asthma attacks come on without warning, many build up slowly, over hours to days. This means that there is often a window of opportunity to treat them in primary care before symptoms escalate into an emergency.

Patients must be educated to understand their triggers and how they can avoid or manage them.

Patients must know the signs of worsening asthma so they can get early help.

It must be clear in the patient's personalized asthma action plan what actions they should take when they notice they are getting worse, such as increasing both bronchodilators and inhaled corticosteroids.

Oral corticosteroids, if needed, must be prescribed appropriately, with safety netting advice and review to ensure the exacerbation has resolved.

More than 2 courses of oral steroids in 12 months necessitates a referral to secondary care.

Asthma attacks must be correctly identified and their severity interpreted to ensure prompt transfer to A&E if required.

Severe asthma must be identified and referral to secondary care made to facilitate timely assessment for biologic therapy. Please locate your centre below.

[Severe asthma centres - Health Innovation Oxford & Thames Valley](#)

Patient with asthma must be offered Flu and RSV vaccines when indicated.

Prevention of worsening Asthma symptoms: Scope of Practice

Role Level Descriptor	Tier and Scope of Practice Aligned to Primary Care Core Career and Capabilities Framework	Qualifications & Experience	Skills and Application of Knowledge and Scope of Practice
Health Care Support Worker	1	An awareness of the importance of good asthma care and prevention initiatives. Tier 1 level awareness training, including undertaking PEFR in practice.	<ul style="list-style-type: none"> • Able to explain what asthma is. • Able to perform and record best PEFR • Able to direct patients/carers families to trusted sources of support.
NA	1	Tier 1 awareness training including the fundamentals in communication and consultation skills and technical aspects of inhaler technique and asthma monitoring.	<ul style="list-style-type: none"> • Consultation skills and recording and performing PEFR, and administration of annual vaccines. • Able to calculate percentage of best PEFR, and add to records • Advice on pre- payment certificates for asthma • Advice on housing and how to access support and advice • Advice on smoking and vaping • Able to identify a range of asthma triggers and escalate to RN for assessment.
GPN Enhanced Level	2	Academic Level 5 and 6 training with an asthma/ respiratory specialist as a precursor to formal education. Completion of or working towards completion in Diploma module in asthma or above. Ongoing clinical supervision with a qualified mentor working at an advanced or expert level.	<ul style="list-style-type: none"> • Tier 1 and 2 Plus: • Able to recognise, treat an exacerbation and increase ICS therapy accordingly. • Able to review and adapt care plans and treatment, including review of inhaler devices. • Able to identify and treat acute asthma attack. • Able to identify severe Asthma and refer on for further investigation. • Independent Prescribing (optional).
ANP	3	Academic level 7 course or full MSc level in advanced assessment skills Relevant assessor course to enable teaching and mentoring of colleagues Leadership course and ongoing group or individual mentoring Quality improvement methodology and processes All skills, knowledge and training required for advanced level plus.	<ul style="list-style-type: none"> • Application of Tier 1 & 2 Plus: • Able to independently undertake full comprehensive assessment, including physical psycho-social and wellbeing review. • Differential preventative skills encompassing diagnostic, referral for Chest x-ray's scanning liaison and referral across respiratory pathways. • Independent Prescribing.

Commissioning of respiratory diagnostic services in primary care.

It is recognised that commissioning of respiratory diagnostic services varies across the 42 integrated care board (ICB) depending on population, local priorities governance and funding.

It may not be possible for some areas to easily access a suite of respiratory diagnostics in the primary care setting.

General Practice Nurses can refer directly to the system wide centres to support Adults with severe Asthma.

[Severe asthma centres - Health Innovation Oxford & Thames Valley](#)

Scope of Practice- Diagnostics Fractional Exhaled Nitric Oxide (FENO)

Role Level Descriptor	Tier and Scope of Practice Aligned to Primary Care Core Career and Capabilities Framework	Qualifications, learning & Experience	Skills and Application of Knowledge and Scope of Practice
Health Care Support Worker	1	FeNO in Asthma - elearning for healthcare (e-lfh.org.uk) Module 1 "understanding FeNO and interpreting the test" + trained in how to use their specific brand of machine Completed competency and proficiency assessment of a minimum of 5 observed by a supervisor competent in FENO testing	<ul style="list-style-type: none"> Familiar with the specific model or product of FENO machine Awareness of inclusion and exclusion criteria for those undertaking FENO Ability to support patients to undertake a valid FENO test Able to record the result in the notes.
NA	1	FeNO in Asthma - elearning for healthcare (e-lfh.org.uk) Module 1 understanding FeNO and interpreting the test" + trained in how to use their specific brand of machine Completed competency and proficiency assessment of a minimum of 5 observed by a supervisor competent in FENO testing	<ul style="list-style-type: none"> Familiar with the specific model of FENO machine Awareness of inclusion and exclusion criteria for those undertaking FENO Ability to support patients to undertake a valid FENO test Able to record the result in the notes, although not interpreting, Provides education on how FENO aids the diagnosis of asthma Understanding of what FENO testing is for and how this relates to asthma, under supervision of RN, and escalate concerns.
GPN Enhanced Level	2	FeNO in Asthma - elearning for healthcare (e-lfh.org.uk) Module 1 understanding FeNO and interpreting the test" + trained in how to use their specific brand of machine Completed competency and proficiency assessment of a minimum of 5 observed by a supervisor competent in FENO testing .	<ul style="list-style-type: none"> Tier 1 and: Understanding of the rationale of inclusion and exclusion criteria for those undertaking FENO Deep understanding of the pathophysiology behind FENO levels and how this relates to asthma. Tier 1 and 2 Plus: Able to troubleshoot issues with the FENO device. Provide detailed explanations to patients about the implications of their FENO results and what that might mean for their care Understanding of national and international clinical guidelines and the pathways that relate to FENO testing, Comprehensive care planning information and recommendations.

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ANP	3	<p>FeNO in Asthma - elearning for healthcare (e-lfh.org.uk)</p> <p>Module 1 understanding FeNO and interpreting the test”</p> <p>Movule 2 Interpreting the test</p> <p>Proficiency and diagnostic skills aligned to Advancing nurse practice pillars of care. Supervisor, trainer or lead clinician in Asthma Diagnostics.</p>	<ul style="list-style-type: none"> • Tier 1 and 2 Plus: • Deep understanding of the pathophysiology behind FENO levels diagnostics. • Provide detailed explanations to patients about the implications of their FENO results and able to adapt care accordingly. • Understanding of national and international clinical guidelines and the pathways that relate to FENO testing, • Able to interpret results with advanced proficiency. Undertake comprehensive clinical examination and history taking, including considerations that may impact the results. • Make recommendations for further tests/ referrals.

Scope of Practice- Spirometry (diagnostics)

Role Level Descriptor	Tier and Scope of Practice Aligned to Primary Care Core Career and Capabilities Framework	Qualifications	Skills and Application of Knowledge and Scope of Practice
Health Care Support Worker	1	<p>Foundation (performing) ARTP spirometry certification or equivalent + trained in how to use their specific brand of machine</p> <p>Maintains competency and proficiency with at least 25 tests over a year Recommended for update every 3 years</p>	<ul style="list-style-type: none"> Familiar with the specific model or product of Spirometer, awareness of the equipment requirements and standards. Awareness of inclusion and exclusion criteria for those undertaking Spirometry Ability to support patients to undertake a valid, safe and reliable spirometry and reversibility testing Ability to identify poor quality testing Able to record the result in the notes. Following IPC guidance.
NA	1	<p>Foundation (performing) ARTP spirometry certification or equivalent + trained in how to use their specific brand of machine</p> <p>Period of supervised practice from GPN/ANP until deemed competent and proficient.</p> <p>Maintains competency and proficiency with at least 25 tests over a year Recommended for update every 3 years</p>	<ul style="list-style-type: none"> Tier 1 + Ability to identify poor quality testing, and possible cause. Able to record the result in the notes. Although not interpreting, should understand what constitutes normal vs abnormal result, and when to escalate. defer to RNs or specialist clinicians for interpretation and clinical decisions related to spirometry.
GPN Enhanced Level	2	<p>Foundation to Full (performing and/or interpretation) ARTP spirometry certification or equivalent + trained in how to use their specific brand of machine</p> <p>Period of supervised practice until deemed competent and proficient.</p> <p>Maintains competency and proficiency with at least 25 tests over a year Recommended for update every 3 years</p>	<ul style="list-style-type: none"> In-depth knowledge of respiratory care, assessment, and interpretation of spirometry results. Interprets in context of history where appropriate.. Shared decision making and care planning in partnership with people. Clinical decision making on when to defer testing. Implement further testing or refer when required Understanding of national and international clinical guidelines and the pathways that relate to spirometry testing.

Scope of Practice- Spirometry (diagnostics)

Role Level Descriptor	Tier and Scope of Practice Aligned to Primary Care Core Career and Capabilities Framework	Qualifications	Skills and Application of Knowledge and Scope of Practice
ANP	3	<p>Full or interpretation only ARTP spirometry certification + trained in how to use their specific brand of machine</p> <p>Proficient in clinical diagnostics, that aligns with advancing practice standards. Experienced clinician mentor, educator or trainer.</p> <p>Maintains competency with at least 25 tests over a year Recommended for update every 3 years</p>	<ul style="list-style-type: none"> • Tier 1 & 2 Plus: • Able to interpret the results of spirometry investigations and any other relevant investigation in forming a diagnosis. • Recognises the limitations of the practice scope or field and able to refer for specialist opinion as appropriate. • In -depth knowledge and experience of respiratory care, assessment, and interpretation of spirometry results. • Interprets in context of history and differential diagnostics where applicable. • Comprehensive Understanding of national and international clinical guidelines and referral pathways that relate to spirometry testing

Additional respiratory testing

Although spirometry testing and FENO testing are commonly used tests to support a diagnosis of asthma, it is acknowledged that additional tests may be used, this includes tests that seek evidence of inflammation, such as Eosinophil blood markers.

Peak flow testing is used for the diagnosis, monitoring, self-management and assessment of severity of asthma attacks. For diagnosis, it can be used with the following methods:

To calculate:

Reversibility: peak flow measurements are taken before and after administering a bronchodilator (such as salbutamol). An increase of more than 12% is suggestive of asthma.

Variability: peak flow measurements are recorded by the patient morning and early evening for a minimum of 2 weeks. Variability of 10-20% is suggestive of asthma.

Resources in diagnostics

[A+LUK - Diagnosing asthma](#)

[Association for Respiratory Technology & Physiology \(artp.org.uk\)](#)

[A+LUK - Objective diagnostic testing for asthma](#)

[A+LUK - Peak flow variability calculator](#)

[FeNO in Asthma - elearning for healthcare \(e-lfh.org.uk\)](#)

[Layout 1 \(pcrs-uk.org\) FENO testing consensus document](#)

[Measuring fractional exhaled nitric oxide concentration in asthma - NIOX MINO, NIOX VERO and NObreath: diagnostics consultation |](#)

[Measuring fractional exhaled nitric oxide concentration in asthma: NIOX MINO, NIOX VERO and NObreath | Guidance | NICE](#)

[Spirometry Commissioning Guide \(including training standards\)](#)

[spirometry_e-guide_2013.pdf \(brit-thoracic.org.uk\)](#)

Treatment, patient education and supported- self management

Key Messages

Asthma control is achieved use of inhaled corticosteroids, which all patients with asthma must be prescribed from the point of diagnosis.

Good inhaler technique is essential to make sure that the medication gets to the airways where it's needed. Spacers must be used with pressurized meter dose inhaler devices.

Triggers are anything that causes asthma symptoms and vary from person to person. They must be identified and treated appropriately before stepping up inhaled therapies.

Nasal and gastric symptoms must also be identified and treated.

Smoking, vaping and passive smoking behaviors must be identified and addressed

Every patient with asthma must have a supported self management plan which details their daily care, and actions to take when symptoms are worsening and what to do in an emergency.

Every patient must receive an asthma review by an appropriately trained HCP at least yearly, or within 48 hours of an exacerbation, asthma attack or admission to hospital.

Scope of Practice- Spirometry (diagnostics)

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NA	1	Tier 1 awareness training including the fundamentals in communication and consultation skills and technical aspects of inhaler technique and asthma monitoring.	<ul style="list-style-type: none"> • Consultation skills and recording and performing PEFR • Able to calculate percentage of best PEFR, and add to records • Advice on pre- payment certificates for asthma • Advice on housing and how to access support and advice • Advice on smoking and vaping • Able to identify a range of asthma triggers and escalate to RN for assessment.
GPN Enhanced Level	2	Academic Level 5 and 6 training with an asthma/ respiratory specialist as a precursor to formal education. Completion of or working towards completion in Diploma module in asthma or above. Ongoing clinical supervision with a qualified mentor working at an advanced or expert level.	<ul style="list-style-type: none"> • Tier 1 and 2 Plus: • Good understanding of respiratory anatomy and function, common respiratory pathophysiology • Knowledge and understanding of commonly used respiratory medications including indications, safety and optimal dosing. • Able to identify triggers, including atopy, allergy assessment of lung health. • Coaching and health literacy skills. • Knowledge and understanding of the holistic approach to the management of long-term conditions and their impact on physical and mental well-being. MDT liaison. • Independent Prescribing qualification. • Familiar with local, national and, where relevant, international guidelines for management of asthma.

Scope of Practice- Spirometry (diagnostics)

Role Level Descriptor	Tier and Scope of Practice Aligned to Primary Care Core Career and Capabilities Framework	Qualifications & Experience	Skills and Application of Knowledge and Scope of Practice
ANP	3	<p>Academic level 7 course or full MSc level in advanced assessment skills</p> <p>Relevant assessor course to enable teaching and mentoring of colleagues</p> <p>Leadership course and ongoing group or individual mentoring</p> <p>Quality improvement methodology and processes</p> <p>All skills, knowledge and training required for advanced level plus.</p>	<ul style="list-style-type: none"> • Tier1,& 2 Plus: • Comprehensive development and evaluation of shared care and care planning. • Advanced clinical assessment skills, recognition of differential diagnosis, referral for complex asthma across respiratory pathways.

Educational resources for Tier 1

- **Examples of formal training courses – “Asthma awareness”**
- [Asthma and COPD for HCA's — Respiratory Matters](#)
- [ASTHMA AWARENESS E-LEARNING COURSE - Asthma and Allergy Foundation](#)
- Asthma Lung UK – [Inhaler Technique videos](#)
- Asthma + Lung UK - [Healthcare Professional hub](#)
- Primary Care Respiratory Society – [Asthma Resources](#)
- eLearning for Healthcare – [FeNO in Asthma](#)
- eLearning for Healthcare – [Asthma in Adults](#)
- Rotherham Respiratory – [Asthma Foundation Course](#)
- Education for Health – [Essentials of Asthma](#)



Educational resources for Tier 2

The resources from Tier 1 will be useful for tier 2 staff, in addition to this nurses working at tier 2 should have completed an asthma short course as an initial training to undertake non-complex annual review. Some examples include:

Asthma (Adults) - eLearning for healthcare (e-lfh.org.uk)

Asthma and allergic airways disease | Administration and support services | Imperial College London

Management of Asthma & COPD, Short Course – UCLan

Nurses at Tier 2 should be working towards or completed diploma level to postgraduate. Examples include:

Foundations of Managing Asthma Short Course - Education For Health

COPD and Asthma UCPD course | Teesside University

Asthma Diploma — Respiratory Matters

Asthma Care and Management - Professional/Short course - UWE Bristol: Courses

Asthma and Chronic Obstructive Pulmonary Disease (Level 6) • City, University of London

Care and Management of Asthma and COPD (staffs.ac.uk)

PGDip Respiratory Medicine - University of South Wales

Asthma Foundation Course (online) – Rotherham Respiratory LTD

Asthma and chronic obstructive pulmonary disease - management in primary care (degree level) (HEAD385) - University of Plymouth

Enhancing Asthma Care in Professional Practice Short Course - Education For Health

[Asthma + Lung UK - Healthcare Professional hub](#)

[Primary Care Respiratory Society – Asthma Resources](#)

[eLearning for Healthcare – FeNO in Asthma](#)

[eLearning for Healthcare – Asthma in Adults](#)

[University of Western England – L6 module Asthma Care and Management](#)

For further information...

- Many ICSs offer free training to primary care staff. Every practice and PCN will have access to Training Hub resources and guidance. There are 42 at Integrated Care System (ICS) level, with several locality hubs that help support links between practices and PCNs.

Click [here](#) to find your local Training Hub.

- The NHS [knowledge and library hub](#) connects healthcare staff and trainees to a significant range of high-quality knowledge and evidence resources, services, tools, and databases. Accessed using NHS [OpenAthens](#) or through a local NHS Health library, it's a good resource for GPs and practice staff.

Useful Links and Resources

- [Diabetes & Primary Care – DiabetesontheNet](#)
- [Diabetes UK - Know diabetes. Fight diabetes. | Diabetes UK](#)
- Eden [EDEN \(edendiabetes.com\)](#)
- Diabetes Specialist Nurse Forum UK [DSN Forum \(diabetesspecialistnurseforumuk.co.uk\)](#)
- Leicester Diabetes Centre [Leicester Diabetes Centre](#)

Steering Group Faculty & Peer Review

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