North Yorkshire CCG and Vale of York CCG Asthma Pathway (Adults)

NHS North Yorkshire Clinical Commissioning Group | NHS Vale of York Clinical Commissioning Group | NHS Harrogate and District NHS Foundation Trust | NHS York Teaching Hospital NHS Foundation Trust

Before moving up:
- Check adherence
- Assess inhaler technique
- Eliminate trigger factors if possible
- Reconsider diagnosis if response to treatment is unexpectedly poor
- Review every 6-8 weeks, either face to face or telephone

Key:
Eco-friendly:

Dry Powders
Easyhaler:
Turbohaler:
Nexthaler:

Aerosols
MDI:
SMI Respimat:

Moving down
- If patient stable, consider reducing dose of ICS by 25-50% every three months
- Review every 6 -8 weeks

Diagnosis and Assessment	**Evaluation:** • assess symptoms, measure lung function, **check inhaler technique and adherence** • adjust dose • update self-management plan

Asthma-suspected: Start ICS at dose appropriate to severity of disease as per regular preventer therapy. Assess response objectively as per evaluation

Asthma - diagnosed (Branded prescribing only for all inhalers)

Move up to improve control as needed, or move down to find and maintain lowest controlling therapy

Regular preventer

Commence Low dose ICS

Start at dose of ICS appropriate to severity of disease.

- **Budesonide Easyhaler** 200mcg (£5.31) 1 dose BD
- **Beclometasone Clenil® MDI** 200mcg (£4.85) 1 dose BD
- **Budesonide** (**Pulmicort®**) **Turbohaler** 200mcg (£8.55) 1 dose BD

Initial add-on therapy

Add inhaled LABA to *low dose* ICS

Prescribe low dose combination inhaler (fixed dose or MART)

- **Fobumix Easyhaler®** 160/4.5 (£10.75) 1 dose BD
- **Fostair Nexthaler®** 100/6 (£14.66) **Fostair® MDI** 100/6 (£14.66) 1 dose BD
- **Symbicort Turbohaler®** 200/6 (£14.00) 1 dose BD

Additional controller therapies

Increase ICS up to *medium dose*

- If no response to LABA consider stopping before increasing dose of ICS
- If benefit from LABA, continue and prescribe medium dose combination inhaler
- **Fobumix Easyhaler®** 160/4.5 (£21.50) 2 doses BD
- **Fostair Nexthaler®** 100/6 (£29.32) **Fostair® MDI** 100/6 (£29.32) 2 doses BD
- **Symbicort Turbohaler®** 200/6 (£28.00) 2 doses BD

Or:
Add LTRA – **Montelukast** 10mg ON for one month trial, stop if no benefit

Once daily option

Consider if adherence to twice daily dosing a concern following formal assessment. Twice daily dosing is preferred

- **Relvar Ellipta®** 92/22 (£22.00) 1 dose OD

Specialist therapies

The following interventions can be considered prior to referral:
- Increase ICS to high dose (>800mcg steroid card indicated). Most patients with asthma can be controlled on doses ≤1000mcg per day.
- Add **Montelukast** (if not already trialled)

Or:
- Add LAMA - **Spiriva Respimat®** 2.5mg 2 puffs OD (one month trial)

Theophylline should only be prescribed by a Respiratory Specialist

MART Dosing (Maintenance & reliever therapy)
For patients:
- Poorly controlled on medium dose ICS
- On ICS/LABA who have asthma attacks

When initiating do not reduce the total regular dose of daily ICS

- **Fobumix Easyhaler®** 160/4.5 1 dose BD + 1 dose PRN or 2 doses OD + 1 dose PRN (MAX 8-12 doses/day and no more than 6 doses on one occasion)
- **Fostair Nexthaler®** 100/6 **Fostair® MDI** 100/6 1 dose BD + 1 dose PRN, MAX 8 doses/day
- **Symbicort Turbohaler®** 200/6 1 dose BD + 1 dose PRN or 2 doses OD + 1 dose PRN (MAX 8-12 doses/day and no more than 6 doses on one occasion)

All prices above represent 30 days treatment

Reliever (unless using MART)

SABA PRN – consider moving up if using three doses a week or more—**red flag for poor control of asthma**

Any patient who has required more than 4 Salbutamol inhalers in 12 months should be invited for an urgent asthma review

Salamol® 100mcg 1-2 doses up to QDS PRN 200 dose inhaler £1.46 per inhaler **Salbutamol Easyhaler** 100mcg 1-2 doses up to QDS PRN 200 dose inhaler £3.31 per inhaler **Terbutaline** 500mcg (**Bricanyl®**) Turbohaler 1 dose up to QDS PRN 100 dose inhaler £8.30 per inhaler

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Diagnosis

Features that increase probability of asthma:

- Recurrent episodes of symptoms – wheeze, breathlessness, chest tightness and cough – particularly at night or early morning
- Symptom variability and triggers including exercise, allergen exposure, cold air, aspirin, NSAIDs, or β blockers
- Absence of symptoms of alternative diagnosis .
- Recorded observation of wheeze
- Personal history of atopy
- Historical record of variable PEF or FEV_1

Remember:

- A normal spirometry (or PEF) obtained when the patient is not symptomatic does not exclude the diagnosis of asthma, consider further tests such as exhaled nitric oxide levels, bronchial provocation test, blood eosinophils, allergy testing (IgE) if diagnosis unclear
- Accurate history, include rhinitis and reflux

General management of all asthma patients

Review inhaler technique.
Streamline inhaler devices (prescribe all dry powder or all aerosol devices to patients)

- Asthma control test (www.asthmacontroltest.com)
- Lung function test (spirometry in preference)
- Check concordance to asthma medication
- General medication review
- Monitor use of rescue medications and offer urgent review if >4 SABAs /year
- Monitor number of unscheduled visits and steroid courses per year, arrange follow up within 48 hours post exacerbation
- Provide patient with a steroid alert card if on high dose inhaled steroids (>800mcg daily)
- Discuss exercise or occupational induced symptoms and management
- Offer or refer patients for smoking cessation advice and support in quit attempts
- Influenza vaccination
- Trigger recognition and avoidance, including occupational aeroallergens
- Written self-management/ personal asthma action plan
- Relevant patient education including weigh loss advice and support
- Agree appropriate follow up face to face or by telephone

Aims of asthma management

- No daytime symptoms
- No night time awakenings due to asthma
- No need for rescue medication
- No limitations on activity including exercise
- No exacerbations
- Normal lung function (FEV_1 and/or PEF >80% of predicted or best)
- Individualised treatment plans and goals to be negotiated and agreed with patient

Acute asthma management

Assess severity of exacerbation and refer to hospital if patient presents with one feature of acute severe or life threatening asthma	Immediate treatment	Prior to leaving surgery
Acute Severe: • PEF 33-50% of best or predicted • Respiratory rate ≥ 25/minute, heart rate ≥ 110/minute • Inability to complete sentences in one breath **Life threatening:** • SpO_2 <92% • PEF <33% of best or predicted • Silent chest, cyanosis, or poor respiratory effort • Exhaustion, altered consciousness, arrhythmia, hypotension	• Salbutamol 100mcg 2-10 puffs via MDI and large volume spacer as needed • Check PEF prior and 15 minutes post bronchodilator and monitor response for at least 30 minutes • 40-50mg oral prednisolone daily for a minimum of 5 days or until recovery **(not enteric coated)**	• Check inhaler technique/ concordance to current asthma medications • Give short-term symptom-based management plan • Arrange follow-up within 48 hours with GP/PN if good response to initial treatment • Advise patient to call for urgent medical assistance if any further deterioration in asthma

When to refer for specialist opinion

- Diagnosis unclear
- Patient requiring specialist therapies
- Unexpected clinical findings (crackles, clubbing, cyanosis, cardiac disease)
- Persistent, non-variable breathlessness
- Unexplained restrictive spirometry
- Marked blood eosinophilia
- Chronic sputum production
- Monophonic or inspiratory wheeze (stridor)
- Suspected occupational asthma
- Prominent systemic features (myalgia, fever, weight loss)
- Poor response to asthma treatment
- Severe asthma exacerbation