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

**North Yorkshire** 

Clinical Commissioning Group Clinical Commissioning Group

Vale of York Harrogate and District York Teaching Hospital

#### 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:** 



Easyhaler:

Turbohaler:

Nexthaler:

Relvar ellipta:

<u>Aerosols</u>

MDI

(+spacer):

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

Regular preventer

Commence low dose ICS

Start at dose of ICS

appropriate to severity of

disease.

**Budesonide Easyhaler** 

**Beclometasone Clenil®** 

**Budesonide** (Pulmicort®)

Turbohaler 200mcg (£8.55)

**MDI** 200mcg (£4.85)

200mcg (£5.31)

1 dose BD

1 dose BD

1 dose BD

**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 (Brand prescribing only for all inhalers)

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

### Initial add-on therapy

# Add inhaled LABA to low dose

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)ì 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 combination option

Consider if confirmed poor adherence to twice daily dosing following formal assessment. Twice daily dosing is preferred

> Relvar Ellipta® 92/22 (£22.00) dose OD

### **Specialist therapies**

The following interventions can be considered prior to referral for specialist care:

- 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

inhaler £3.31 per inhaler @ Terbutaline 500mcg (Bricanyl®) Turbohaler 1 dose up to QDS PRN 100 dose inhaler £8.30 per inhaler

## **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<sub>1</sub>

#### 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
- Influenza vaccination

- 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
- 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





Vale of York Harrogate and District York Teaching Hospital

## 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 (FEV₁ 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

#### **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<sub>2</sub> <92%
- •PEF <33% of best or predicted
- •Silent chest, cyanosis, or poor respiratory effort
- Exhaustion, altered consciousness, arrhythmia, hypotension

### Immediate treatment

- 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)

## Prior to leaving surgery

- 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 (as overleaf)
- 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 (>3 corticosteroid courses in 12 months)
- Severe asthma exacerbation