NHS
Greater Glasgow and Clyde

CLINICAL GUIDELINE

Asthma Guidelines, Primary Care

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Asthma Primary Care Clinical Guideline for Adults

NHS Greater Glasgow and Clyde

Diagnosis

There is no definitive test for asthma. Diagnosis is by clinical assessment.

- More than one of: episodic breathlessness; wheeze; cough; chest tightness.
- Nocturnal, exercise and / or allergy induced.
- Wheeze heard on auscultation.
- If asthma thought likely, then use trial of treatment (e.g. six weeks ICS) to confirm.
- Spirometry or peak flow measurements can aid diagnosis, but may need repeated for variation. Normal results do not exclude asthma.
- If diagnosis uncertain, then refer (see Box F).

Assessing control

People with asthma under-report symptoms. Use a validated questionnaire, e.g.:

RCP 3 Questions

- Have you had difficulty sleeping because of your asthma symptoms - including cough?
- Have you had your usual asthma symptoms during the day - cough, wheeze, chest tightness or breathlessness?
- Has your asthma interfered with your usual activities - housework, work, school etc?

Stepwise Management

Review medication change after 4 weeks

Refer to NHSGG&C Inhaler Device Guide for preferred choices

KEY

SABA	short acting beta-2 agonist
ICS	inhaled corticosteroid
LABA	long acting beta-2 agonist
MDI	metered dose inhaler
DPI	dry powder inhaler
LAMA	long acting muscarinic antagonist

BEFORE stepping up:

Check:
- Trigger e.g. smoking, occupation.
- Compliance / Prescription Review
- Inhaler technique.

With the exception of Salbutamol MDI, all inhalers should be prescribed by brand.

Infrequent, reversible wheeze

Regular Preventer

Low dose ICS*

Initial add-on therapies

Add inhaled LABA to low dose ICS*. Use an ICS/LABA combination inhaler licensed for asthma.

Selected patients who are poorly controlled with ICS and LABA, or medium dose ICS* alone, may benefit from single inhaler maintenance and reliever therapy. Use a licensed ICS/LABA combination inhaler .

Additional add-on therapies

- No response to LABA; stop LABA, increase dose of ICS*.
- Partial benefit from LABA; continue LABA and increase dose of ICS* to medium.
- Partial benefit from LABA and increased dose of ICS*; consider addition of montelukast, theophylline or LAMA (see GGC formulary).

High Dose Therapies

- Consider trial of: increasing ICS* to high dose (with or without LABA as appropriate) or addition of fourth drug.
- Refer to secondary care.

Frequent or continuous oral steroids

Refer to Secondary Care, including if requiring frequent courses of oral steroids despite optimal treatment.

BEFORE stepping down:

See 'Assessing control' left – people with asthma often under-report symptoms.

Aim for minimum dose that provides good control as assessed by validated questionnaire.

Short acting beta-2 agonists as required. **IMPORTANT NOTE**: low threshold for initiating ICS and consider moving up from any step if: three doses of SABA a week or more, exacerbation in last two years, waking one night per week.

*For categorisation of ICS by dose, refer to box C.

A. Compliance

Under-use of preventive therapy is common - review prescriptions ordered, address patient concerns regarding steroids.

Check Inhaler technique to make sure patient can use their inhaler / change as required.

Use Personal Asthma Action Plan as a tool.

B. Self-management – Personal Asthma Action Plan

Click for NHSGGC Asthma self-management plan

- Grade A evidence; offer to all, but particularly those who are poorly controlled.
- Written and personalised, focusing on patient's needs and preferences. Brief, simple education linked to patient goals likely to be most effective - "If we could make one thing better with your asthma, what would it be?"
- May be based on symptom or PEFR - latter not essential. A process not an event.

C. Categorisation of ICS by dose (abbreviated from SIGN 153)

Preferred choices highlighted, refer to NHSGGC Inhaler Device Guide.

ICS	Dose		
	Low dose	**Medium dose**	**High dose**
Clenil modulite	100 mcg two puffs twice a day	200 mcg two puffs twice a day	250 mcg 2 (or 4) puffs twice a day
Beclometasone easyhaler	200 mcg one puff twice a day	200 mcg two puffs twice a day	*Not licensed*
Fostair (pMDI and Nexthaler)	100/6 one puff twice a day	100/6 two puffs twice a day	200/6 two puffs twice a day
Relvar Ellipta	92/22 one puff once a day		184/22 one puff once a day
Qvar	50mcg two puffs twice a day (Easi-breathe)	100 mcg two puffs twice a day	100 mcg four puffs twice a day
Duoresp Spiromax	160/4.5 one puff twice a day	160/4.5 two puffs twice a day	320/9 two puffs twice a day
Symbicort	100/6 two puffs twice a day	200/6 two puffs twice a day	400/12 two puffs twice a day
Turbohaler	200/6 one puff twice a day	400/12 one puff twice a day	
Flutiform	50/5 two puffs twice a day	125/5 two puffs twice a day	250/10 two puffs twice a day
Seretide accuhaler	100/50 one puff twice a day	250/50 one puff twice a day	500/50 one puff twice a day
Seretide Evohaler	50/25 two puffs twice a day	125/25 two puffs twice a day	250/25 two puffs twice a day

D. Annual review

- Assess control of symptoms using agreed tool – RCP 3 questions.
- Review therapy including inhaler technique.
- Frequency of exacerbations / oral steroids / A&E, OOH contacts and acute admissions.
- Peak flow (percentage of best).
- Personal Asthma Action Plan – See Box B above
- Smoking cessation
- Consider steroid side effects in patients on high dose inhaled steroid (see C above).
- Consider DEXA referral for osteoporosis if on high dose inhaled steroid for 10 years or oral steroid for >3 months in the last year, and 10 year risk of major fracture >10%. Use Qfracture risk calculator or FRAX.

E. Complicating problems in asthma

- Rhinitis - control may improve asthma control.
- GORD - worth treating if present.
- Infection - confirm with sputum culture if recurrent infection suspected - most asthma exacerbations do NOT require antibiotics.
- Obesity - may contribute to poor control.
- Smoking - associated with usual issues plus reduced effect of inhaled steroid.
- Dysfunctional breathing.

F Hospital Referral

- **Diagnostic uncertainty:**
  - Symptoms without variation in PEFR or spirometry.
  - Poor response to treatment, following adequate trial of treatment.
  - Possible causative agent, especially occupational.
- **Poor control**
  - Frequent exacerbations.
  - Persisting symptoms / frequent exacerbations despite additional add-on therapies.

G. Checking Inhaler Technique

See NHSGGC Patient Information Leaflets

MDI / Breath actuated MDI:

Preparation (shake inhaler, breathe out)
Co-ordinate activation (unless breath activated MDI)
Slow, steady inhalation
Breath-hold for 10 seconds
Wait 30 seconds before repeating.

Spacer:

Breathe in immediately after activation
Single puff of inhaler
Breathe in slowly
Either breath-hold for 10 seconds or tidal breathe in and out of mouthpiece 5 times
Wait 30 seconds before repeating, even if multi-dosing.

Dry Powder: Fast, deep inhalation.

H. Resources

SIGN 153 Asthma Guideline Primary Care Respiratory Society Asthma UK

NHSGGC Respiratory MCN Website

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