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.

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, 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 a week or more, exacerbation in last two years, waking one night per week.

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
Qvar	50 mcg two puffs twice a day (Easi-breathe)	100 mcg two puffs twice a day	100 mcg four puffs twice a day
Beclometasone easyhaler	200 mcg one puff twice a day	200 mcg two puffs twice a day	
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
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 Turbohaler	100/6 two puffs twice a day	200/6 two puffs twice a day	400/12 two puffs twice a day
	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
Relvar Ellipta		92/22 one puff once a day	184/22 one puff once 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 steroid for 10 years and 10 year risk of major fracture >10%. Use Qfracture risk calculator.

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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