

Asthma in adults

Diagnosis

Made on symptoms and signs

Objective measurement:

- FEV1 improvement possible > 15%
- [& 200ml increase after short acting β_2 agonist (400 μ g MDI and spacer)]

Aims of Management:

Control symptoms and prevent exacerbations
Achieve best possible peak flow
Minimise adverse effects

Stepwise Approach

1. Start treatment at step most appropriate to initial severity
2. Achieve early control
3. Maintain stepping up or stepping down therapy

CLASSIFICATION OF SEVERITY

Management of Chronic Asthma in Adults

Classify Severity at Presentation

	Intermittent	Persistent		
	Mild	Mild	Moderate	Severe
Category	I	II	III	IV
Daytime symptoms	< 2/week	2-4/week	> 4/week	Continuous
Night-time symptoms	< 1/month	2-4/month	> 4/week	Frequent
PEF (Predicted)	> 80%	> 80%	60-80%	< 60%

START TREATMENT AT MOST APPROPRIATE STEP

Step 1: Mild Intermittent Asthma

Inhaled short acting β_2 agonist as required

Step 2: Mild Persistent Asthma

1. Reliever: β_2 agonist as required;
2. Preventer: Add inhaled corticosteroid 400-800 μ g/day
3. (Equivalent to beclomethasone MDI & spacer)

Step 3: Moderate Persistent Asthma

1. Short-acting β_2 agonist as required.
2. Increase dose of inhaled corticosteroid to 1200 μ g/day (beclomethasone or equivalent) if not controlled
3. Add inhaled long-acting β_2 agonist (LABA) to 1200 μ g/day inhaled corticosteroid (beclomethasone or equivalent)
4. Reassess control:
 - If adequate: continue LABA
 - If no response: stop LABA; consider LABA or SR theophylline

Step 4: Severe Persistent Asthma

1. Short-acting β_2 agonist as required.
2. Increase inhaled steroid to 2000 μ g/day (beclomethasone or equivalent); plus LABA or SR theophylline

Step 5: Very Severe Persistent Asthma

1. Therapy as in Step 4
2. Review for oral steroid

Chronic disease list algorithms

The new Medical Schemes Act requires that chronic diseases be diagnosed and managed according to the prescribed therapeutic algorithms for the condition, published by the Minister of Health.

Algorithms for the 25 conditions on the chronic disease list are available at <http://www.medicalschemes.com>.

This algorithm is reproduced with the kind permission of the Council for Medical Schemes.

Glossary

- FEV1 – Forced expiratory volume in 1 second
- β_2 – Beta 2 receptor
- MDI – Metered dosage inhaler
- PEF – Peak expiratory flow
- LABA – Long acting beta-2 receptor agonist
- SR – Slow release

Applicable ICD 10 Coding:

J45 Asthma

- J45.0 Predominantly allergic asthma
- J45.1 Nonallergic asthma
- J45.8 Mixed asthma
- J45.9 Asthma, unspecified

J46 Status asthmaticus

Notes:

1. Medical management reasonably necessary for the delivery of treatment described in this algorithm is included within this benefit, subject to the application of managed health care interventions by the relevant medical scheme.
2. To the extent that a medical scheme applies managed health care interventions in respect of this benefit, for example clinical protocols for diagnostic procedures or medical management, such interventions must:
 - not be inconsistent with this algorithm;
 - be developed on the basis of evidence-based medicine, taking into account considerations of cost-effectiveness and affordability; and
 - comply with all other applicable regulations made in terms of the Medical Schemes Act, 131 of 1998.
3. This algorithm may not necessarily always be clinically appropriate for the treatment of children. If this is the case, alternative paediatric clinical management is included within this benefit if it is supported by evidence-base medicine, taking into account considerations of cost-effectiveness and affordability.