Diagnostic algorithm

Presentation with respiratory symptoms: wheeze, cough, breathlessness, chest tightness[1]

Structured clinical assessment (from history and examination of previous medical records)
Look for:

- recurrent episodes of symptoms
- symptom variability
- absence of symptoms of alternative diagnosis
- recorded observation of wheeze
- personal history of atopy
- historical record of variable PEF or FEV_1

High probability of asthma

Intermediate probability of asthma

Low probability of asthma

Code as: suspected asthma

Test for airway obstruction
spirometry + bronchodilator reversibility

Initiation of treatment

Poor response

Other diagnosis unlikely

Assess response objectively
(lung function/ validated symptom score)

Options for investigations are:

Test for variability:
- reversibility
- PEF charting
- challenge tests

Test for eosinophilic inflammation or atopy:
- FeNO
- blood eosinophils,
- skin-prick test, IgE

Investigate/treat for other more likely diagnosis

Good response

Asthma

Adjust maintenance dose

Provide self-management advice

Arrange on-going review

Good response

Suspected asthma:
Watchful waiting
(if asymptomatic)
or
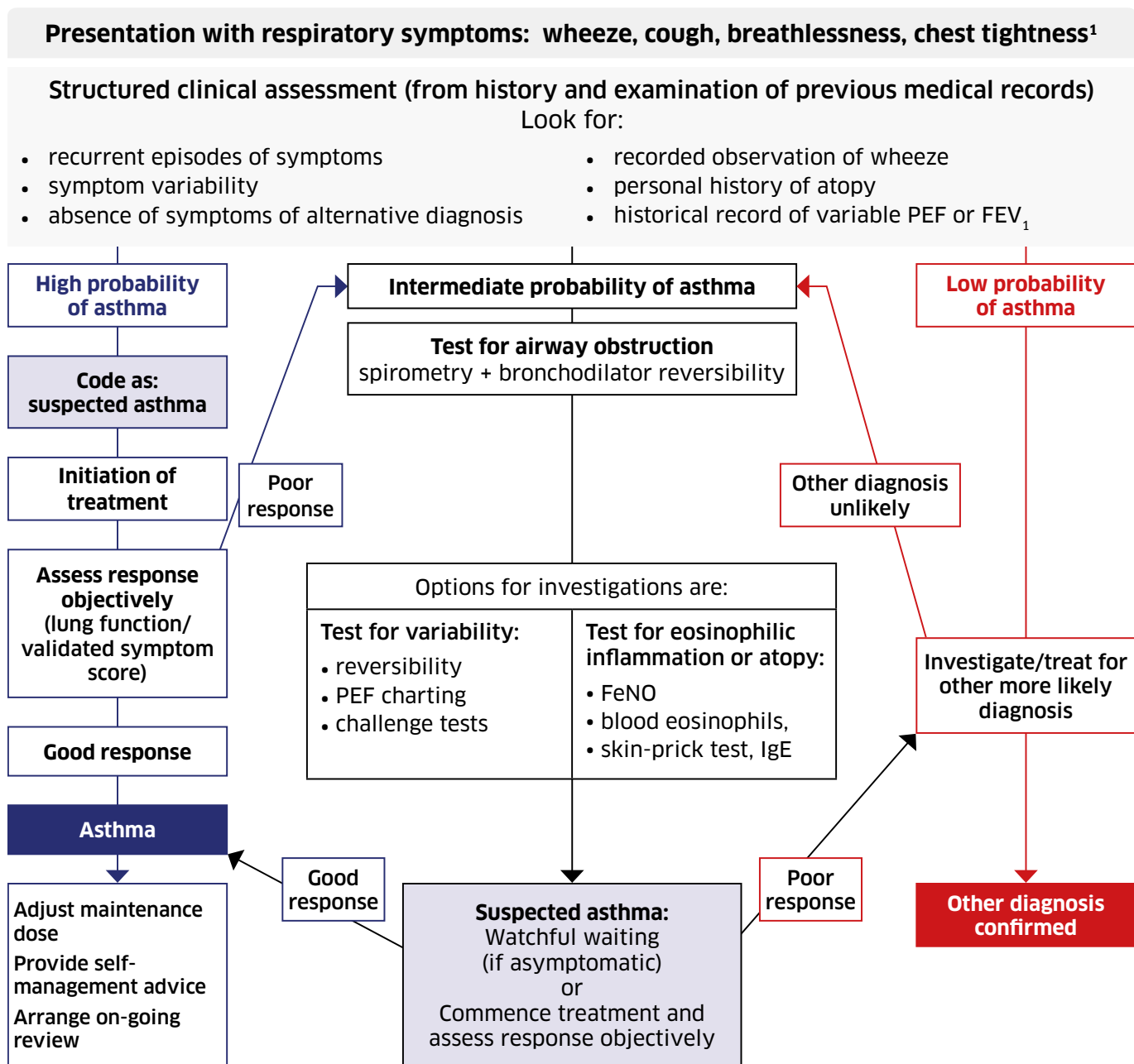Commence treatment and assess response objectively

Poor response

Other diagnosis confirmed

[1] In children under 5 years and others unable to undertake spirometry in whom there is a high or intermediate probability of asthma, the options are monitored initiation of treatment or watchful waiting according to the assessed probability of asthma.