Presentation with respiratory symptoms: wheeze, cough, breathlessness, chest tightness

High probability of asthma

Intermediate probability of asthma

Low probability of asthma

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 FEV₁

High probability of asthma

Intermediate probability of asthma

Low probability of asthma

Watchful waiting (if asymptomatic)

Commence treatment and assess response objectively

Assessment with respiratory symptoms: wheeze, cough, breathlessness, chest tightness

Test for airway obstruction
spirometry + bronchodilator reversibility

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

Good response

Asthma

Adjust maintenance dose
Provide self-management advice
Arrange on-going review

Poor response

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

Code as: suspected asthma

Initiation of treatment

Assess response objectively
(lung function/validated symptom score)

Good response

Other diagnosis unlikely

Other diagnosis confirmed

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

In those 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

PEF=peak expiratory flow; FEV₁=forced expiratory volume in one second; FeNO=fractional exhaled nitric oxide concentration; IgE=immunoglobulin E