Perform spirometry in children and young people with symptoms of asthma.
Consider BDR test if spirometry shows an obstruction.

If a child is unable to perform objective tests:
- treat based on observation and clinical judgement
- try doing the tests again every 6 to 12 months

If diagnostic uncertainty remains after spirometry and BDR, consider FeNO.
If diagnostic uncertainty remains after FeNO, monitor peak flow variability for 2 to 4 weeks.

Abbreviations:
FeNO, fractional exhaled nitric oxide
BDR, bronchodilator reversibility

Positive test thresholds
Obstructive spirometry: FEV1/FVC ratio less than 70% (or below the lower limit of normal if available)
FeNO: 35 ppb or more
BDR: improvement in FEV1 of 12% or more
Peak flow variability: variability over 20%

This algorithm is based on recommendations from NICE's guideline on asthma, diagnosis, monitoring and chronic asthma management (2017).