4) What action needs to be taken?

- All patients with asthma should have a written action plan (www.asthma.org.uk/advice-child-action-plan)
- Review preventer therapy (step up, down, or maintain current treatment)
- Always check inhaler technique and concordance before stepping up treatment
- All children with asthma should be offered the flu vaccine if appropriate.
- All families should be sign-posted to relevant Asthma education resources (Asthma UK)
- Promote self-management (parent & child)
- Plan regular follow up

When to refer to secondary care:
- Diagnosis unclear or in doubt
- Symptoms present from birth
- Excessive vomiting or posseting
- Persistent wet or productive cough
- Family history of unusual chest disease
- Failure to thrive
- Nasal polyps
- Unexpected clinical findings: focal signs, abnormal voice/cry, dysphagia, stridor
- Failure to respond to conventional treatment or frequent use of steroid tablets
- Consider recurrent ED attendance
- High ICS dose (>800 micrograms)
- > 2 course of Prednisolone in a year

Summary of BTS Guidelines: Asthma Treatment of 5-12 year olds.

1. Salbutamol
2. Inhaled Steroids 200-400mcg per day
3. Long acting beta agonist If no response, trial LRA
4. Increase Inhaled Steroid up to 800mcg per day
5. Daily steroid tablet and/or REFER

Sources of Information
- http://www.asthma.org.uk
- http://www.nice.org.uk/guidance/QS25
- www.asthma.org
- http://www.itchysneezywheezy.co.uk/

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Paediatric
Annual Asthma Review

What to do in an annual asthma review for children aged 5 years and over in primary and secondary care
When is an Asthma review necessary?

a) Whenever a patient with asthma comes in with symptoms of a cough or shortness of breath
b) Within 2 working days after an acute presentation to ED with wheeze
c) Yearly Review

(1) Is this Asthma?
The diagnosis of asthma remains a clinical one. The British Thoracic Society guidelines suggest that the following features make asthma more likely:

- One or more of: wheeze, cough, difficulty breathing and chest tightness
- Frequent and recurrent symptoms - Worse at night and in the early morning
- Worse after exercise, exposure to pets, cold or damp air, with emotions or laughter
- Personal history of atopy
- Widespread wheeze on auscultation
- History of improvement in response to adequate therapy (suggesting reversibility)

If there are clinical features which do not fit the pattern, consider alternative diagnoses to rule out other serious conditions such as cystic fibrosis.

(2) Assessing asthma control?
Specific questions to ask:

- Number of repeat prescriptions for their inhalers (too few may be a compliance issue, too many may indicate poor control)
- How many courses of Prednisolone have they had in the past year?
- How many Emergency Department visits have they had in the past year?
- How many days of school have they missed?
- Exercise, frequency of reliever use, sleep, cough (included in ACT if you use it).

Asthma Control Test (ACT) score
We would recommend using the “Asthma Control Test” score which can be found on the Asthma UK Webpage.
(www.asthma.org.uk/asthma-control-test)

Peak Flow Diary
This can be useful to aid in the diagnosis of asthma as well as assessing control.

(3) What is impacting on control?
If control seems to be poor, it is important to identify the contributing factors so they can be modified.

- Concordance
- Education
- Technique and device
- Triggers

Are they taking their inhalers: Concordance or not understanding the difference between preventer and reliever remains one of the most common problems.

Inhaler technique: Inhalers must be used correctly in order for an adequate dose to reach the site of action. The patient should be observed using the inhaler, and the correct technique demonstrated to them. (Demonstration videos on Asthma UK, Itchy Sneezy, Wheezy website)

Inhaler device: The gold standard is a Metered Dose Inhaler and Spacer. In addition some children may benefit from having breath-activated device, which are smaller and more discrete for school. Explore with the patients /family which device is best for them.

Triggers to be assessed include:

- Smoking – Encourage family members to stop smoking (give information leaflets and or referral to quit smoking team). If they do not wish to stop smoking encourage them to smoke outside and inform them that smoke particles can stay on their person and have an effect on their child’s asthma. Do not assume that children do not smoke, ask all children in secondary school if they smoke.

- House dust mite – House dust mite allergy can impact asthma. Numbers can be significantly reduced with a few simple changes to the home (e.g. blinds instead of curtains, hard floors instead of carpets).

- Allergic rhinitis – Treat concurrent rhinitis

- Other – Emotion, stress, pollution, and exercise