ASTHMA

AUDIT

Purpose

There are several ways of auditing the pharmacist's impact on the care of asthmatic patients. Pharmacists can affect how patients use their medication both in terms of compliance and correct use of their inhaler devices.

These audits are divided into two sections:

those audits that a community pharmacist can carry out independently to assess the quality of his/her service

those audits that can be carried out with a local GP practice to identify patients whose treatment could be improved.

Length of audits

It is suggested that you continue most of the audits for 2-4 weeks. The exact length of time will depend on the number of asthmatic patients you see in that time.

When to re-audit

It is important to re-audit after you have made changes to your service. This will measure whether or not you have been successful in improving your service. It may also show you further ways of improving what you do. Attempt a re-audit about a month after making your changes.

Section One : Professional audit of asthma care

1.1 Structure

1.1.1. Devices

Criteria

Sufficient placebo devices are available to demonstrate the correct use of an inhaler device.

Standard

Placebo devices of all available inhaler devices are kept in stock.

All devices are correctly stored, cleaned after use as recommended by manufacturer and all disposable equipment is disposed of after use.

Measure

List all devices available
Check whether kept in stock
Check storage and cleaning procedures
Check availability of disposable equipment

1.1.2. Leaflets

Criteria

Leaflets are available which explain about asthma, the treatment of asthma and how to use inhaler devices.

Standard

Up to date patient information leaflets are always available covering the following:

What is asthma
How asthma is treated
How to use different inhaler devices (one for each device)

Measure

List available leaflets.
Check whether or not the information contained in them is up to date.
Check whether or not a leaflet is available for each device kept in stock.

1.1.3. Training

Criteria

Pharmacists (and other staff) will have received sufficient training to be able to counsel patients on the correct use of inhaler devices.

Standard

All staff counselling patients will have successfully completed a training course on counselling patients on inhaler technique.

Eg CPPE Asthma distance learning pack
CPPE Workshop
Other .... (please state)

Measure

Check training undertaken by each member of staff.

1.2. Process

1.2.1. Inhaler technique

Criteria

The main counselling points will be covered when instructing a patient how to use an inhaler

Standard

The following points will be covered each time a patient is instructed on the correct use of an inhaler.

Metered Dose Inhaler

Remove cap.
Shake inhaler.
Breathe out normally.
Hold inhaler upright, tilt head slightly back, place mouthpiece in mouth and close lips around it.
Actuate canister once just at the start of breathing in fully and slowly.
Hold breath for 10 seconds or as long as is comfortable.
Breathe out slowly.
Wait at least 30 seconds before taking a second puff, if required.
Replace cap.

Measure

		Points Covered								
Date	Patient	1	2	3	4	5	6	7	8	9

Pharmacy AUDIT

1.2.2. Who is Counselled?

Criteria

Patients receiving an inhaler for the first time or receiving a new device will be offered counselling on the correct use of that inhaler.

Standard

All patients receiving an inhaler for the first time or a new device will be offered counselling on its correct use. If the patient does not collect the prescription, an information leaflet on how to use the inhaler will be provided and counselling will be offered to the carer if appropriate.

Measure

Check PMR each time an inhaler is dispensed. If it is the first time an inhaler has been prescribed or a new device is prescribed offer counselling. Record whether counselling offered, whether accepted and reason refused.

Date	Patient	Reason for counselling	Advice offered	Patient information leaflet given	Comments

Codes for reasons for counselling:
- F = First time use
- D = New device
- P = Patient request
- O = Other

Codes for Advice Offered:
- N = Not offered
- A = Advice accepted
- R = Advice refused

"Comments" section : record reason for refusal (eg not patient) or reason for not offering (eg too busy).

1.2.3. Additional Counselling

Criteria

Patients receiving inhalers will be given additional counselling as appropriate.

Standard

All patients receiving an inhaler for the first time will be given the following additional counselling:

The difference between a “reliever” and a “preventer” (if appropriate).
Possible side effects and how to prevent them.
What to do when symptoms occur.
etc

Measure

You may wish to list the information that you intend to provide in a more detailed form eg side effects from Beta-2-agonists include a fine tremor, nervous tension, headache. You can the audit whether or not you include each bit of information. Alternatively you may wish to simply record that you have covered side effects.

When deciding what to tell the patient to do when symptoms occur, it will be useful to ensure that you are reinforcing the advice the GP has given. An agreed protocol for the management of asthmatic symptoms will be helpful.

Date	Patient	Information given a	b	c	d	e	Comments

Each box can be ticked if the information has been provided. The “comments” box will identify reasons that the information could not be given.

Outcome

It is obviously important to ensure that the right information and advice is provided to the patient. However it is much more important that the patient understands this advice and is able to act on it.
Outcome measurement is the most important audit we can carry out.

1.3.1. Inhaler technique

Criteria

Patients will be able to use their inhaler correctly after being counselled by the pharmacist.

Standard

90% of patients will be able to demonstrate how to use their inhaler correctly after being counselled by the pharmacist and the rest will be referred back to their GP.

Measure

This may be carried out directly after counselling or preferably at their next visit. Ask the patient to demonstrate how to use a placebo inhaler. Watch the patient carefully and note whether their technique was correct. There are 10 points to consider.

1 Shakes inhaler
2 Removes cap
3 Exhales
4 Aerosol to mouth
5 Breathes in slowly and deeply
6 Co-ordinates actuation with breathing
7 One actuation per inhalation
8 Holds breath
9 Breathes out slowly
10 Waits before second actuation

Date	Date of Counselling	Patient	1	2	3	4	5	6	7	8	9	10	Comments

The "comments" column is for you to record any action taken eg refer to GP, re-counsel, re-test in ..... months etc.

It is best to note the patient's name and date of counselling immediately after giving them a counselling session. This will serve as a reminder for you to check their technique the next time they visit. If your PMR system allows you to make notes you could place a note in your PMR to check their technique next time they visit.

1.3.2. Other Counselling

Criteria

Patients will remember and understand counselling given by the pharmacist.

Standard

95% of patients will be able to correctly distinguish between a "reliever" and a "preventer".

95% of patients will be able to relate what to do if symptoms occur.

95% of patients will be able to relate side effects that could occur from using their inhaler and how to prevent them.

Measure

This may be carried out directly after counselling or, preferably, at their next visit.

Ask the patient:

To tell you which inhaler is a "preventer" and which is a "reliever" and what the difference between a reliever and preventer is.
What they should do if symptoms occur.
What side effects could occur with each inhaler and how to prevent them.

Date	Date of Counselling	Patient	Reliever/ Preventer	Actions on symptoms	Side Effects	Comments

Tick the appropriate box for each correct answer. Use the comments box for noting any action taken.

It is possible to combine both of the above audits into one simple to use questionnaire. This questionnaire is conducted by the pharmacist and should take no more than 5 minutes.

Inhaler Assessment Questionnaire

I am looking at the quality of the service I provide to patients on inhalers. Would you mind if I asked you a few questions about your inhaler? It will take about 5 minutes.
Please tell me the names of all the inhalers you use at the moment and how often you use them.

____

____

____

What condition do you have that means you need to use inhalers?

- Asthma ☐
- Chronic bronchitis ☐
- Emphysema ☐
- Other (Specify) ☐ ______________________
- Uncertain ☐

How long have you been using your inhaler/s?

____

(Select the bronchodilator aerosol and ask:)
What does this inhaler do?

Appropriate answer : ______________________________

____

Inappropriate answer : ______________________________

____

Pharmacist's notes : ______________________________

____

How much benefit do you think you get from this inhaler?

- A lot ☐
- Some ☐
- Very little ☐
- None ☐

What side-effects could occur with this inhaler?

____

____

Pharmacy
AUDIT

(Select the steroid inhaler, if they use one, and ask:)
What does this inhaler do?

Appropriate answer : ______________________________

____

Inappropriate answer : ______________________________

____

Pharmacist's notes : ______________________________

____

How much benefit do you think you get from this inhaler?
A lot ☐ Some ☐ Very little ☐ None ☐

What side-effects could occur with this inhaler?

____

____

(Show the patient a placebo inhaler)
This is a demonstration inhaler. You can use it in the same way as your normal inhaler but it does not have any effect on you. Using this demonstration inhaler, please show me how you normally use your own inhaler.

Shakes inhaler	☐	Co-ordinates actuation with breathing	☐
Removes cap	☐	One actuation per inhalation	☐
Exhales	☐	Holds breath	☐
Aerosol to mouth	☐	Breathes out slowly	☐
Breathes in deeply and slowly	☐	Waits before second actuation	☐

Do you know what you should do when symptoms occur?
Does your doctor's surgery have an asthma clinic?
Yes ☐ No ☐ Don't know ☐
If yes, *Have you ever been to this clinic?*
Yes ☐ No ☐
If yes, *When was the last time you went to the asthma clinic?*
Date ______________________________
Thank you for helping with this project.
Is there anything else you would like to ask about your inhaler?
Patient Name ______________________________
Date of Counselling ______________________________
Date of Assessment

Pharmacy AUDIT

2. Clinical Audit in conjunction with local GPs

Purpose

These audits look at the treatment of patients from several viewpoints. The aim is to ensure that best possible treatment is offered to all patients. Best practice has been defined by the British Thoracic Society and others in the BTS guidelines. These are reproduced in an abbreviated form in the BNF and were published in the Thorax 1997; 52 (suppl): s1 – s21. They have also been reproduced in the CPPE distance learning pack on Asthma.

The BTS guidelines give a stepwise approach to the treatment of chronic asthma in adults and in children. The majority of patients should follow the BTS guidelines. A few exceptional patients may be stabilised on treatment that does not follow the guidelines. These will be the exception rather than the rule.

All of these audits should be run in conjunction with local GPs. It will be necessary to gain their co-operation in carrying out the audit and acting on the results. It is important that it is emphasised that this is a way of improving patient care rather than identifying GP failings. GPs will benefit by having an independent assessment of whether the BTS guidelines are being followed and from the identification of poor compliers. Poor compliers are notoriously difficult to identify during routine visits.

2.1 Poor compliance

Poor Compliance

The CPPE distance learning pack “Patient Compliance - Keep taking the tablets” suggested that “around 40-50% of your patients fail to take their medicines to an extent at which their medicines are not fully effective.”

The aim of this audit is to identify poor compliers and to take appropriate action to improve compliance.

Criteria

Patients using inhalers suspected of being poor compliers will be asked about compliance problems and given counselling.

Standard

All patients using inhalers suspected of being poor compliers will be asked about compliance problems and given counselling.

Measure

There are several possible ways to identify possible poor compliers. These include talking to the patient/carer, patients with high risk factors (eg elderly patients taking several medicines), PMRs, talking to other healthcare professionals. We will concentrate on identifying poor compliers from the PMRs but other methods should not be ignored. (See CPPE distance learning pack “Patient Compliance - Keep taking the tablets” for further details).

There are three main ways of using a PMR to detect poor compliance.

The record may indicate patients on long term therapy who return with prescriptions later than the due date.

They may indicate patients who return too frequently.

PMRs will show patients whose medication for the same condition is changed frequently by the doctor.

Your PMR system may allow you to search the database according to either patient condition or drug dispensed. This may allow you to identify all asthmatic patients or all patients using inhalers. From this list you can either select a sample to check or work your way through the list taking a number, eg 10, of patients each day.

Measure contd

An alternative method is to check the PMR each time an inhaler is dispensed.
When looking at the PMR remember what you are looking for.

A patient returning for a repeat prescription later than the due date. This may indicate that the patient does not use their inhaler regularly. There may, however, by other explanations such as obtaining an inhaler from a different pharmacy.

Patients who return too frequently. These patients may be over-using their inhalers. Remember though, it could be that

they have lost an inhaler or want to keep a spare one available. Many patients keep a spare inhaler in the car or in each handbag etc in case of emergency.

Patients whose medication changes frequently may be poor compliers. Again this is not an absolute rule because it may be that the patient has a lot of problems and is difficult to control.

Your suspicion needs to be confirmed by talking to the patient and in a subtle and non-confrontational manner. Try to find out any problems the patient may be having with the medication eg difficulty remembering when to use the inhaler, side effects, inability to use the inhaler correctly, lack of faith in the effectiveness of the inhaler (particularly "preventers") etc. Once you understand their problems you will be in a better position to help them.

Pharmacy AUDIT

Liaison with the GP

GP Liaison

You may have agreed with your local GPs that you will take immediate action to remedy any problems you detect and that you will also let the GP know the result; or you may have agreed to refer all poor compliers to the GPs asthma clinic; or a combination of the two. It is helpful to agree the action to be taken at the start of the project so that everyone is clear on what their responsibilities are.

Date	Patient	PMR result	Underlying problem	Action taken

Codes for PMR result:

U = Under medicating
O = Over medicating
C = Frequent change of regime

You can write the underlying problem out in full or invent codes to describe the main problems you detect.

Codes for Action taken:

C = Counselling
N = No action required
D = Refer to doctor
A = Refer to asthma clinic
CA = Compliance aid given
R = Reminder chart

2.2 Audit of Step 1 of BTS Guidelines (Adult)

Purpose

This audit attempts to identify patients whose treatment is currently outside of step 1 of the BTS guideline and may need increasing to step 2.

Step 1 : Inhaled short-acting beta 2 stimulant as required (up to once daily).

Step 2 : Inhaled short-acting beta 2 stimulant as required
plus
Regular standard dose inhaled corticosteroid (100-400mcg beclomethasone or budesonide twice daily).
Or
Regular cromoglycate or nedocromil.

Criteria

Asthmatic patients will be prescribed therapy according to agreed best practice.

Standard

99% of asthmatic patients will be prescribed therapy according to the BTS guidelines. Those patients whose symptoms require more than once daily beta 2 stimulant will be moved from Step 1 to Step 2 of the BTS guidelines.

Measure

Identify patients receiving beta 2 stimulant inhalers alone. This may be from the PMR or as prescriptions arrive.

Ask patients how often they use the inhaler and whether they are receiving any other therapy for their condition.

If they are using the inhaler more frequently than once a day and are not using inhaled corticosteroid, cromoglycate or nedocromil - refer to the GP with a suggestion of adding standard dose inhaled corticosteroid.

Patient	Frequency of Beta-2 Stimulant use	Other medication	Action taken	Result

Under "action taken", note whether referred and whether by phone, letter or referral note with patient. Under "result" note down the action taken by the doctor.

2.3. Audit of use of large volume spacer devices (Adult)

Purpose

The BTS guidelines states that all high dose inhaled corticosteroids (800mcg - 2000mcg daily) should be given via a large-volume spacer.

Criteria

Patients receiving high dose inhaled corticosteroids will be prescribed a large volume spacer device.

Standard

Patients receiving high dose inhaled corticosteroids will be prescribed a large volume spacer device.

Measure

Identify all patients receiving high dose inhaled corticosteroids from the PMR or no prescriptions arrive.

Ask patients whether they use a large volume spacer device (or check on PMR).

Refer all patients who have not had a large volume spacer device to the GP or contact GP yourself with the suggestion.

Date	Patient	Dose	Large-volume spacer	Action taken	Result

Under "large-volume spacer" use a simple tick or cross to indicate whether the patient uses a large volume spacer. "Action taken" indicates whether you referred the patient, contacted the doctor etc.

The "Result" column is for you to record the action taken by the doctor.

Pharmacy AUDIT