



Asthma Audit Tool User Guide

1. Purpose of the audit tool

The audit tool aims to assess and improve the quality of asthma care. Periodic assessment of the quality of care allows health workers to reflect on what is happening and plan changes to improve care. Repetition of the audit on an annual basis allows health workers to monitor changes in the quality of care and see if their plans are having the desired effects. Collation of audit results from multiple facilities will also create a picture of quality of care at a district or provincial level.

The tool assesses the quality of care of

- Adults
- Chronic asthma
- Primary care

In a particular district therefore the tool should be completed by the facilities (clinics, community health centres, district hospitals) where chronic care for adults with asthma is performed. If, for example, the district hospital only handles emergencies and acute cases then it may not be appropriate to use this audit tool in that facility.

The tool is based on the new 2007 South African Thoracic Society Guidelines for Chronic Asthma in Adolescents and Adults published in the June edition of the SA Family Practice Journal at <http://www.safpj.co.za>.

2. What is the audit tool?

The tool collects data on a small number of key criteria and should take one person no more than a day to complete. Data is collected by inspection of the clinic, interviewing a few staff and patients and looking in their medical records. Broadly speaking three types of quality criteria are measured:

- Structural criteria: These assess the availability of resources such as equipment and medication.
- Process criteria: These assess what happens when patients attend the facility
- Outcome criteria: These assess how successfully asthma patients are controlled

3. Who should complete the tool?

The audit tool can be completed by anyone in the facility with some medical background. Ideally this should be the person responsible for chronic disease management or asthma care.

4. How to start the audit process?

Before completing the audit it should be discussed with the staff at the health centre. This will ensure that people are aware of what is happening, have a chance to help plan the audit and are open to assist with it. If people have discussed the audit and the criteria to be assessed, at the beginning, they are also more likely to engage with the results and plan change at the end.

5. Tips for first time use of tool

- Read through the guide carefully
- If anything is not clear speak to someone who has experience in using the tool – see contact details on the cover page
- Complete a trial run on one or two patients and ask someone familiar with the tool to evaluate the quality of your information.

6. A step-by-step guide to completing the tool.

It is important to complete every point on the assessment form, even if it is to say that the particular information is not recorded at the facility. When items are left blank, it is not possible to tell whether the information is not available, whether it is misunderstood, or whether that section has just been overlooked.

There are 3 sections in the audit tool, each section covers a different aspect of asthma care and the information is collected in a different way.

Section 1.

Deals with the structural criteria such as equipment, medication and other resources.

Section 2.

Deals with the outcome criteria such as control of asthma symptoms and number of exacerbations and hospitalizations.

Section 3.

Deals with the process criteria such as number of visits and what happened during those visits.

Below you will find detailed comments on each section of the audit tool to guide you through the audit.

6.1 COVER PAGE

Record the name of the facility manager or person who is responsible for the quality of care at the facility. It is important to record the name of this person so that if the form is completed by someone else, the findings can be conveyed to the relevant person. Telephone and fax number are those of the facility where the audit is being conducted.

Record the name of the person who completed the audit and their contact details, in case there is a need to clarify some of the information that has been collected.

6.2 SECTION 1

Question 1 – Consulting and club rooms

The person completing the audit form should physically go to all the consulting rooms where asthma patients are managed as well as visit the asthma or chronic care club room. In order to answer the questions the person should look for the equipment/materials mentioned or speak to the health worker in that room.

Question 2 – Facility and emergency room

In order to answer the questions you may need to speak to the facility manager or the health workers responsible for managing asthma. You will also need to visit the emergency room or area and look for or ask about the items listed.

Question 3 - Pharmacy

The person should visit the pharmacy or drug store and ask the pharmacist or person responsible for the drugs the relevant questions in this section. Note: Although Salmeterol 50 MDI is not prescribed at primary level it can be dispensed on the basis of a specialist prescription and should be available. If you do not have this drug, please answer “no”.

6.3 SECTION 2

Interview 20 asthma patients with the short 1-page questionnaire that is based on the Asthma Control Test (ACT). The ACT has been internationally validated as a way of measuring asthma control. This is provided in English, Afrikaans and Xhosa at the end of this audit tool. If necessary make 20 photocopies of the questionnaire so that you have one per patient. Select patients systematically (e.g. every third patient) or consecutively – the important thing is not to select patients in a biased way, such that only the well controlled or poorly controlled are chosen.

If you are able to interview more than 20 patients this will increase the accuracy of your results. If you interview fewer than 20 patients then your results have less and less accuracy in representing care at your facility.

In some patients the diagnosis of asthma may not have been clearly established and so for the purpose of this audit we will define asthma patients as those who are being managed or treated as asthmatic in the facility.

Make sure that you record the folder number accurately and clearly as these will be needed for the questions in Section 3 and may also be needed when the audit is repeated.

Summarise the results from each patient questionnaire in the Table for Section 2: *Summary of patient interviews using the ACT score questionnaire*. Each patient will take one row in the Table.

While you are interviewing the patients it may be useful to also look at the patient's folder and answer the questions in Section 3 or retain the patient's folders for later use.

Note: Question 6: Patients should understand that one is used as required to relieve symptoms and the other is used regularly everyday to control asthma. If the patient is not using a controller (inhaled steroid) one can still assess if they are aware of them and the differences between relievers and controllers.

6.4 SECTION 3

Review the folders or medical records for the 20 patients that you interviewed in Section 2. Look at the consultations for asthma over the year preceding the audit day and answer the 10 questions listed in Section 3. For each patients record the answers in the Table *Summary of information obtained from the medical record*. The answers for one patient are entered into one row of the Table.

Notes:

Question 3.2: Number of routine visits for asthma in the past year?

This excludes visits that were made for exacerbations or emergencies. Only the planned consultations for routine asthma care and / or appointments should be counted.

Question 3.3: Did the patient have a consistent diagnosis of asthma over the past year?

Often health workers mix diagnoses and may write "COPD" at one visit and "asthma" at the next or even "COPD/asthma". If the diagnosis is not consistent then you should write "No" in answer to this question.

Question 3.4: How many routine visits recorded an assessment of the level of asthma control?

This requires that the routine consultations specifically record an assessment of the degree of control such as "well controlled" or "partly controlled" or "uncontrolled". Only these consultations should be counted.

Question 3.8: Has the smoking status been recorded during the past year?

This refers to the smoking status of the patient and not passive smoking.

Question 3.9: How many controllers has the patient received in the past year?

This requires you to look at the prescription chart or in some cases the referral letter from the specialist. Count how many 100 or 200mcg controller (inhaled steroids) inhalers/refills have actually been dispensed during the last 12 months. Remember that sometimes medication is prescribed but not actually dispensed to the patient.

Question 3.10: How many relievers has the patient received in the past year?

This requires you to look at the prescription chart or in some cases the referral letter from the specialist. Count how many relievers (beta 2 agonists) inhalers/refills have actually been dispensed during the last 12 months. Remember that sometimes medication is prescribed but not actually dispensed to the patient.

7. How to calculate the results

Now that you have completed the audit tool, it is essential that you go back to the beginning and make sure that all the questions are answered. Is it complete? Are all the questions answered correctly?

Some of the structural criteria in Section 1 are simply “Yes” or “No” answers that require no calculation – for example, is there a height measure in the facility. Most of the other results are simple percentages based on the total number of rooms, total number of medications, total number of visits or total number of patients interviewed. The Table below *guides* you specifically on how to calculate each result.

If you have used a different number of patients (i.e. not 20) then you will need to adjust the denominator in the calculations below to the number of patients you actually used. Wherever you see the number 20 change it to the number you actually used.

The controller / reliever ratio is not a percentage, but a simple division involving the total number of controllers dispensed over the last year divided by the total number of relievers. The dosage of the controller (100mcg or 200mcg per dose) is not vital in calculating the ratio. Research has shown that a ratio of more than 0.5 is linked to a good quality of care. A ratio of less than 0.5 implies that patients are not receiving enough controller medication (inhaled steroids).

Once the results have been calculated they can be entered into the 1-page summary of results that is provided in the tool. This 1-page summary should be photocopied and used to give feedback to the health workers in your facility.

A copy of the whole tool (including the data collection and calculation parts) should be made and sent to your district management team.

Structural criteria	Calculation
% of rooms with a functional PEFR meter	See section 1, question 1
% of rooms with a reference chart for the PEFR	
% of rooms with a published asthma guideline	
% of rooms with a spacer for demonstration and education	
% of rooms with placebo inhalers for demonstration and education	
% of rooms with printed patient educational material	
Clear protocol on who to refer to specialist care	See section 1, question 2
Member of staff with ongoing specific responsibility for asthma	
Provision of group health education on asthma	
Availability of patient education materials in all languages	
Height measure	
Spacer in the emergency room	
Nebuliser in the emergency room	
Oxygen in the emergency room	
% of medication in stock on day of audit	See section 1, question 3
% of medication in stock over previous month	
Process criteria	
% of patients with a consistent diagnosis of asthma	Total Q3.3 ÷ 20 x 100
% of routine visits with an assessment of asthma control	Total Q3.4 ÷ Total Q3.2 x 100
% of patients with written self-management plan	Total Q3.5 ÷ 20 x 100
% of routine visits where the PEFR was recorded	Total Q3.6 ÷ Total Q3.2 x 100
% of patients with an assessment of inhaler/spacer technique	Total Q3.7 ÷ 20 x 100
% of patients with record of smoking status	Total Q3.8 ÷ 20 x 100
Controller / Reliever ratio	Total Q3.9 ÷ Q3.10
Outcome criteria	
% of patients who are totally/well controlled	Total Q2.3 ÷ 20 x 100
% of patients who can explain the difference between reliever and controller medication	Total Q2.4 ÷ 20 x 100
% of all visits for asthma emergencies / exacerbations	Total Q2.6 ÷ (Total Q3.2 + Total Q2.6) x 100
% of patients who have been hospitalised	Total Q2.5 ÷ 20 x 100

8. Reflection and learning in your facility

The 1-page summary of the audit results should be used as information to stimulate discussion and reflection on the quality of care at your facility. The results should be presented to the key people involved in asthma care and responsible for the quality of care at your facility. A meeting should be held where these results can be discussed and debated and plans made where necessary to improve the quality of asthma care.

The 1-page summary also includes a column called “performance level expected”. This column shows the ideal level of performance desired for criteria. Where your facility met the performance level expected you can congratulate yourselves and ask yourself questions such as “What is responsible for our success in this area?” and “In what ways can we engage with these successful strategies more often and in other areas?” Where your facility did not meet the performance level expected you could ask yourselves questions such as “What can we learn from this result?” and “What can we do to improve our performance in this area?”

You may also want to discuss whether the performance levels set were appropriate for your facility and if you want to set yourself different performance levels for the next audit. Performance levels should be set to encourage improvement, but also be realistic and achievable in the short term.

9. Planning and action

Finally make a summary of the plans for action and change that you have made in your discussion and who will be responsible for carrying them out. Try to also set a timeframe for these activities and changes.

Plan a date for a further meeting to monitor progress with these plans after a suitable number of weeks or months.

10. Conclusion

The audit process is a cyclical one of observation, reflection, planning and action. Usually the audit is repeated once a year and is seen as a continuous process of quality improvement.

We value any feedback or comments on any aspects of the audit tool. Please send your comments to Ms Hilary Rhode hrhode@sun.ac.za or Prof Bob Mash rm@sun.ac.za or by fax to 021-9389153.

THANK YOU