



# ASTHMA GUIDELINES IMPLEMENTATION PROJECT

## AUDIT TOOL FOR PRIMARY CARE 2007

Date: ..... / ..... / ..... District: .....

Health facility name: .....

Telephone: .....

Fax: .....

Name and title of facility manager: .....

Telephone: .....

Cell. No.: .....

E-mail: .....

Name of designated person filling out the audit tool: .....

Telephone: .....

Cell. No.: .....

E-mail: .....



**WESTERN CAPE  
DEPARTMENT OF HEALTH**

## Section 1

1. Please visit each room where adult asthma patients are managed. Ask the following questions and/or look for the materials/equipment. Rooms include consulting and club rooms.

Questions	No.	%
1.1 How many rooms in total are used to clinically manage adult asthma patients? (use this as the denominator to calculate the % in questions 1.2 to 1.7)		
<b>Peak Expiratory Flow Meters (PEFM)</b>		
1.2 How many rooms have <i>functional</i> PEF meters?		
1.3 How many rooms have PEF reference charts?		
<b>Guidelines</b>		
1.4 How many rooms have a published guideline on the management of chronic adult asthma? i.e. South African Thoracic Society 2000, PALS Plus 2006 , 2007 Department of Health or EDL		
<b>Educational materials</b>		
1.5 How many rooms have a spacer for demonstration and education?		
1.6 How many rooms have placebo inhalers for demonstration and education?		
1.7 How many rooms have printed patient education material on asthma?		

2. Please answer the following questions regarding the facility.

Questions	Yes	No
2.1 Does the facility have a clear protocol on which asthma patients to refer for specialist care?		
2.2 Do you have a member of staff with ongoing specific responsibility for asthma care?		
2.3 Does this facility provide group health education on asthma?		
2.4 Does this facility have patient education materials for asthma in ALL the local languages?		
2.5 Does this facility have a functional height measure?		
2.6 Is there a spacer in the emergency room?		
2.7 Is there a nebuliser in the emergency room?		
2.8 Is there oxygen available in the emergency room?		
2.9 Is there a peak expiratory flow meter in the Emergency room?		

3. Visit the pharmacy or drug store room. The table lists medications that are on general code as well as ones that may be dispensed in primary care with a specialist's prescription. Ask the pharmacist or nurse-in-charge of drugs the following questions:

Drug	Currently in stock?	In stock in the last month?	State the reasons for drug running out
	<i>Yes/No</i>	<i>Yes/No</i>	
1. Budesonide 100 MDI			
2. Budesonide 200 MDI			
3. Salbutamol MDI			
4. Ipratropium Bromide MDI			
5. Theophyllin LA 200mg tabs			
6. Theophyllin LA 300mg tabs			
7. Prednisolone 5mg tabs			
8. Salmeterol 50 MDI			
9. Adult Spacers			
<i>Emergency treatment</i>			
10. Salbutamol nebuliser solution 5mg/ml			
11. Ipratropium Bromide nebuliser solution 0,25mg/ml			
12. Hydrocortisone 100mg IV			
13. Normal saline 10mls. amp			
<b>Total</b>			
<b>% of all medication (Total number items in stock ÷ 13 x100)</b>			

## Section 2

Interview briefly 20 asthma patients with the Asthma Control Test (ACT) questionnaire. This is provided in English, Afrikaans and Xhosa at the end of this audit tool. If necessary make photocopies of the questionnaire so that you have one per patient. Select patients systematically (e.g. every third patient) or consecutively. Make sure that you record the folder number accurately and clearly as these may be needed when the audit is repeated. Summarise the results from each patient questionnaire in the Table below. At the same time look at or retain the patient's folders for the questions in Section 3.

## Section 3

Review the folders of the same 20 patients interviewed in Section 2. Look back at the record of asthma visits over the last year and answer the questions in the Table below. Record the information for each patient in one row of the Table.

**Section 2: Summary of patient interviews using the ACT score questionnaire**

<b>Number</b>	<b>2.1 Folder number</b>	<b>2.2 ACT Score</b>  <i>Actual score</i>	<b>2.3 Well controlled (Score 20-25)</b>  <i>Yes/No</i>	<b>2.4 Knows the difference between (their) reliever and controller?</b>  <i>Yes/No</i>	<b>2.5 Have you been hospitalized for asthma during the last year?</b>  <i>Yes/No</i>	<b>2.6 Number of emergency visits for asthma in the last year?</b>  <i>Number</i>
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
<b>Total</b>						
<b>%</b>	<b>% = total ÷ 20 x 100</b>					

**Section 3: Summary of information obtained from the medical record**

	<b>3.1 Folder number</b>	<b>3.2 Number of routine visits for asthma in the past year?</b>	<b>3.3 Did the patient. have a consistent diagnosis of asthma over the past year?</b>	<b>3.4 How many routine visits recorded an assessment of the level of asthma control?</b>	<b>3.5 Has the patient been issued with a written self - management plan in the past year?</b>	<b>3.6 How many routine visits recorded the PEFR?</b>	<b>3.7 Has the inhaler / spacer technique been recorded during the past year?</b>	<b>3.8 Has the tobacco smoking status been recorded during the past year?</b>	<b>3.9 How many controllers has the patient. received in the past year?</b>	<b>3.10 How many relievers has the patient. received in the past year?</b>
			<i>Yes/No</i>		<i>Yes/No</i>		<i>Yes/No</i>	<i>Yes/No</i>		
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										
<b>Total</b>										

## How to calculate the results

<b>Structural criteria</b>	<b>Calculation</b>
% of rooms with a functional PEF 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	
Peak expiratory flow meters in the emergency room	
% of medication in stock on day of audit	
% of medication in stock over previous month	
<b>Process criteria</b>	
% 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 PEF 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 (tobacco)	Total Q3.8 ÷ 20 x 100
Controller / Reliever ratio	Total Q3.9 ÷ Q3.10
<b>Outcome criteria</b>	
% 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

## Summary of results (to present to your facility)

<b>Structural criteria</b>	<b>Performance level expected</b>	<b>Actual performance level measured</b>
% of rooms with a functional PEF meter	100%	
% of rooms with a reference chart for the PEFR	100%	
% of rooms with a published asthma guideline	100%	
% of rooms with a spacer for demonstration and education	100%	
% of rooms with placebo inhalers for demonstration and education	100%	
% of rooms with printed patient educational material	100%	
Clear protocol on who to refer to specialist care	Yes	
Member of staff with ongoing specific responsibility for asthma	Yes	
Provision of group health education on asthma	Yes	
Availability of patient education materials in all languages	Yes	
Height measure	Yes	
Spacer in the emergency room	Yes	
Nebuliser in the emergency room	Yes	
Oxygen in the emergency room	Yes	
Peak expiratory flow meter in the emergency room	Yes	
% of medication in stock on day of audit	100%	
% of medication in stock over previous month	100%	
<b>Process criteria</b>		
% of patients with a consistent diagnosis of asthma	95%	
% of routine visits with an assessment of asthma control	80%	
% of patients with written self-management plan	80%	
% of routine visits where the PEFR was recorded	80%	
% of patients with an assessment of inhaler/spacer technique	95%	
% of patients with record of smoking status	95%	
Controller / Reliever ratio	>0.5	
<b>Outcome criteria</b>		
% of patients who are totally/well controlled	80%	
% of patients who can explain the difference between reliever and controller medication	80%	
% of all visits for asthma emergencies / exacerbations	<10%	
% of patients who have been hospitalised	<5%	

**ACT questionnaire (ask the following questions to 20 patients. Fill out one form per patient. Remember to also keep their folder number and review their medical record).**

	<b>Folder number (record folder number)</b>					
<b>Question 1</b>	During the <b>past 4 weeks</b> , how often did your <b>asthma</b> prevent you from getting as much done at work, school or home? (Circle correct number)					<b>Answer</b>
	<b>1.</b> All of the time	<b>2.</b> Most of the time	<b>3.</b> Some of the time	<b>4.</b> A little of the time	<b>5.</b> None of the time	
<b>Question 2</b>	During the past 4 weeks, how often have you had shortness of breath? (Circle correct number)					
	<b>1.</b> More than once a day	<b>2.</b> Once a day	<b>3.</b> 3 to 6 times a week	<b>4.</b> Once or twice a week	<b>5.</b> None at all	
<b>Question 3</b>	During the past 4 weeks, how often did your asthma symptom (wheezing, coughing, shortness of breath, chest tightness or pain) wake you up at night or earlier than usual in the morning? (Circle correct number)					
	<b>1.</b> 4 or more times a week	<b>2.</b> 2 to 3 nights a week	<b>3.</b> Once a week	<b>4.</b> Once or twice	<b>5.</b> Not at all	
<b>Question 4</b>	During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as salbutamol)? (Circle correct number)					
	<b>1.</b> 3 or more times a day	<b>2.</b> 1 or 2 times a day	<b>3.</b> 2 or 3 times a week	<b>4.</b> Once a week or less	<b>5.</b> Not at all	
<b>Question 5</b>	How would you rate your <b>asthma control</b> during the <b>past 4 weeks</b> ? (Circle correct number)					
	<b>1.</b> Not controlled	<b>2.</b> Poorly controlled	<b>3.</b> Somewhat controlled	<b>4.</b> Well controlled	<b>5.</b> Completely controlled	
	<b>Total score (add up numbers selected from questions 1 to 5)</b>					
<b>Question 6</b>	Can the patient explain the difference between (their ) reliever and controller medication? ( Answer Yes / No )					
<b>Question 7</b>	Have you been admitted / slept in hospital because of asthma in the past year? (Answer Yes / No)					
<b>Question 8</b>	How many times have you had to make an emergency visit (without an appointment) to a health worker during the last year?					