

**CLINICAL EPIDEMIOLOGY RESOURCE & TRAINING**

**CENTER**

**COLLEGE OF HEALTH SCIENCES**

**UNIVERSITY OF ZIMBABWE**



**HIV/AIDS QUALITY OF CARE INITIATIVE (HAQOCI)**



**SITUATIONAL ANALYSIS REPORT ON**

**USE OF ANTIRETROVIRAL DRUGS AND THE  
MANAGEMENT OF OPPORTUNISTIC INFECTIONS,  
SEXUALLY TRANSMITTED INFECTIONS AND HIV-  
RELATED CANCERS IN ZIMBABWE**

**Based on the National Situation Analysis Survey of HIV/AIDS quality of  
care conducted in June-September, 2002**

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## **EXECUTIVE SUMMARY**

**Background:** The use of antiretroviral drugs (ARVs) and the management of opportunistic infections (OIs), sexually transmitted infections (STIs) and HIV associated cancers are major determinants of the quality of care of patients infected with HIV and those manifesting AIDS. The Specific Objective of Tool 1 was to assess the use of ARVs, and the management of OIs, STIs and HIV-associated cancers among health care workers in Zimbabwe.

**Design:** National survey using instruments (tools) developed specifically for the purpose of this survey, which seeks to describe a broad range of determinants of HIV/AIDS quality of care in Zimbabwe.

### **Results:**

**General:** A total of 883 respondents were interviewed using tool 1. Four hundred and forty-eight (51%) of the respondents were nurses and 250 (28%) were midwives. Only 62 (7%) respondents were doctors. Respondents were evenly distributed across most provinces but there were fewer respondents in Bulawayo (7%) and Matebeleland North (5%). The majority worked in district hospitals (39%).

**Antiretroviral drugs:** Of the 883 respondents 568 (64%) reported testing for HIV in their health facilities. Three hundred and seven (35%) respondents reported being familiar with ARV guidelines and 190 (22%) had guidelines within their facility. Of the 129 who reported following guidelines 76 (70%) used Zimbabwean guidelines. Of the 883 respondents 127 (14%) reported being supplied with ARVs in their facilities. However,

49 (39%) of the 127 respondents reported an erratic supply of ARVs. 192 (22%) of the 883 respondents reported having being been trained in the use of ARVs. Ninety-five (75%) of the 127 respondents who were supplied with ARVs reported doing laboratory investigations before prescribing ARVs, while only 21 respondents used laboratory monitoring as a guide to ARV use.

***Management of opportunistic infections: Candidiasis***-Six hundred and ninety-four (79%) respondents reported the availability of guidelines for management of candidiasis with 678 of 694 (98%) reporting that they follow the guidelines. Most (76%) used gentian violet for treatment. ***Tuberculosis***-857 (97%) of respondents reported availability of TB guidelines in their facilities with 99% following these guidelines. 859 (98%) reported stocking TB medications and 792 (92%) follow the DOTS program. ***Cryptococcal Meningitis (CM)***-511 (58%) of facilities had guidelines on the management of CM with 489 (96%) of respondents reporting following the guidelines. Only 85 (10%) facilities stocked Amphotericin B and 132 (15%) had fluconazole. But only 27 (3%) stated that Amphotericin B was readily available and only 51 (6%) that fluconazole was readily available. ***Herpes simplex (HS)***-678 (77%) of respondents reported availability of guidelines for the management of HS with 670 (98%) reporting that they follow them. Acyclovir was used by 286 (33%) respondents, but ready availability was reported by only 85 (10%) respondents. ***Pneumocystis pneumonia (PP)***-636 (73%) respondents had guidelines on PP management with 629 (98%) of respondents following these guidelines. Cotrimoxazole was the commonest agent (96%) used for the treatment of PP.

**Management of STIs**-837 (96%) of respondents had guidelines for STI management at their facilities. Availability of a range of STI medications was reported to vary between 17% (imidazole pessaries) to 97% (metronidazole). Other important STI drugs were reported to be available as follows: Kanamycin-88%, Doxycycline-84%, Ciprofloxacin-28% and nystatin pessaries-55%. Laboratory support for STIs was sought by 71% of respondents with only 30% reporting that they did so always.

**Management of Cancers**-656 (75%) of the respondents reported that they were aware of the association of cancers with HIV. 176 (21%) respondents reported always offering VCT in relation to cancer management, while 281 (34%) respondents reported never offering such service. Chemotherapy was always available to 142 (17%) respondents and never to 428 (51%). Other forms of treatment offered to these patients were: radiotherapy (11.0%), palliative therapy (30%), antiretroviral drugs (4%) and prophylaxis/treatment for opportunistic infections (24%). Supportive laboratory investigations were ordered by 484 (55%) of respondents in the management of cancers with only 193 (40%) doing so always.

**Conclusions:** There was a wide range of reports on the availability of guidelines for the HIV/AIDS related conditions assessed by this tool-being low for use of ARVs, but highest for management of STIs and TB. Respondents did not appreciate that most HIV/AIDS conditions have been addressed for the Zimbabwean setting in EDLIZ, although the tool did not specifically seek for this information. The tool was relatively blunt with regard to obtaining information on ARVs, because it did not distinguish

between medications used for PPTCT from those used in the management of chronic HIV/AIDS. Hence most respondents who reported availability of ARVs did so on the basis of PPTCT medication. Clearly the strongest services with indices of good quality of care were the management of TB and STIs.

**Recommendations:** Wider distribution of guidelines for the use of ARVs and the management of OIs and HIV-related malignancies is required. Strategies to ensure their proper and consistent use are needed. When available specific anti-cancer treatment is preferred to palliative treatment, as the former would provide a better quality of care. Ultimately, however the quality of care of HIV/AIDS as in any other medical condition requires the combination of personnel, materials, knowledge and sound policies. Future tool development should ensure that the interaction between these essential factors is brought out.

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## **INTRODUCTION**

### **HIV/AIDS in Zimbabwe**

Zimbabwe ranks among the countries worst affected by the HIV/AIDS pandemic. The prevalence in the 15-49 year old age group is estimated at 24.6%. The disease has had profound effects, which have impacted adversely upon health delivery, social standards and economic development. The burden of disease has changed the paradigm of health delivery with the inevitable participation of the entire spectrum of the population in the care of HIV/AIDS patients. The health sector has come to rely heavily on other arms of government, families, NGOs and charitable organizations to assist it in the care of the large number of HIV/AIDS patients. Although Zimbabwe was perceived to be slow in responding to the HIV/AIDS epidemic, the government undertook a series of bold policy decisions which have received recognition as appropriate and relevant responses to the scale of the epidemic. The introduction of the AIDS levy has seen the participation of every employed and taxed worker in the country making a contribution towards AIDS care. The declaration of HIV/AIDS as a national emergency allowed the registration, importation, manufacture and use of generic antiretrovirals drugs. This has brought hope to many HIV/AIDS sufferers who would otherwise have never been able to access these medications.

### **HIV/AIDS Quality of Care Initiative (HAQOCI)**

HAQOCI is a collaborative initiative of the University of Zimbabwe, College of Health Sciences, Clinical Epidemiology Resource and Training Centre, The Ministry of Health and Child Welfare and the USA Centres for Disease Control which started in 2001.

The overall goal of HACOQI is to develop and implement a strategy that will improve the quality of HIV/AIDS care in Zimbabwe. The specific objectives of HAQOCI are:

1. To develop the infrastructure and capacity for HIV/AIDS quality of care improvement.
2. To characterize the HIV/AIDS quality of care situation through consensus meeting and surveys.
3. To identify, develop, pilot and evaluate high priority, achievable models of improved HIV/AIDS care.
4. To develop standard treatment guidelines on HIV/AIDS care.
5. To develop and implement an HIV/AIDS care information dissemination plan.
6. To promote, support and advocate for high quality HIV/AIDS care in Zimbabwe.

### **Antiretroviral agents and Management of Opportunistic Infections, Sexually Transmitted Infections and Cancers**

The morbidity and mortality of HIV infection and AIDS has had a profound impact on the health delivery system in Zimbabwe. The magnitude of this impact relates to the sheer numbers of persons requiring care, the diversity of infective and malignant conditions and the severity of illness. The use of antiretroviral drugs (ARVs) and the provision of adequate services for the management of opportunistic infections (OIs), sexually

transmitted infections (STIs) and HIV-related malignancies are major determinants of the quality of care of patients infected with HIV and those with AIDS.

### **Objectives of the HAQOCI Situation Analysis Survey**

The overall objective of the HAQOCI situational analysis survey was to characterise the contemporary situation of HIV/AIDS care nationwide.

Specific objectives were:

- (i) Policy issues and treatment guidelines
- (ii) Training and manpower development
- (iii) Staff deployment
- (iv) Quality control and quality assurances

### **Specific Objective of Tool 1**

The Specific Objective of Tool 1 was to assess the use of ARVs, and the management of OIs, STIs and HIV associated cancers among health care workers in Zimbabwe.

## **Methodology**

This is described in the overall methodology of the HAQOCI survey. The questionnaires (tools) for the survey were developed in areas identified during the stakeholders meeting which included, policy issues, treatment guidelines, training and manpower development and deployment as well as management, resource allocation and availability and, quality assurance and control issues.

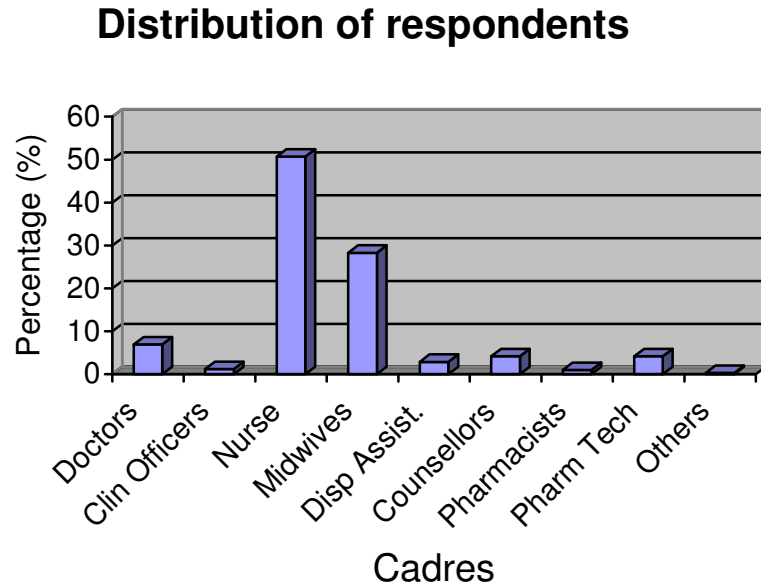
### **Tool 1**

Content experts through a series of meetings developed tool 1. The tool sought information regarding the use of guidelines in HIV/AIDS care and knowledge of the use and availability of agents used to treat HIV disease, OIs, STIs and cancers.

## RESULTS AND COMMENTS

### Respondents

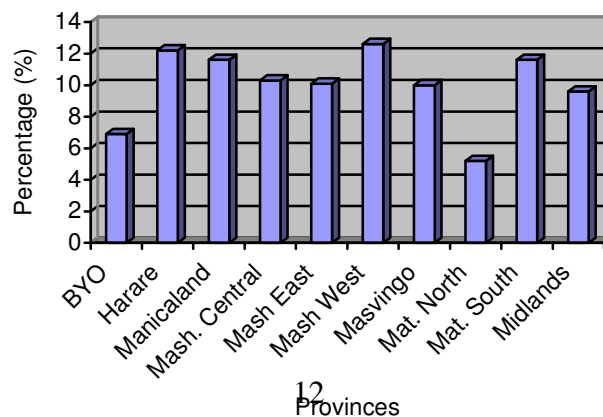
*Distribution of Respondents (Figure 1)*



There were a total of 883 respondents, who consisted of doctors, clinical officers, nurses, midwives, dispensing assistants, counsellors, pharmacists, pharmacist's technicians, others. These were distributed as shown in Figure 1. The majority of the respondents were nurses. There were 448 (50.7%) nurses, 250 (28.3%) midwives and 62 (7%) doctors.

*Distribution of Respondents by Province (Figure 2)*

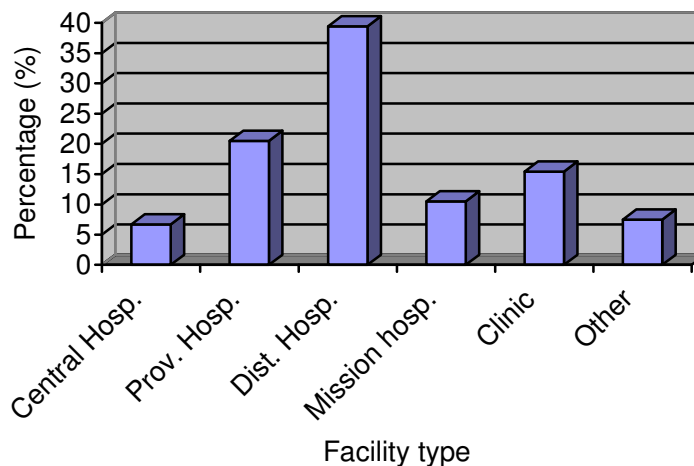
### Distribution of respondents by Province



Respondents were evenly distributed across provinces and cities with the exception of Bulawayo and Matebeleland North which had fewer respondents.

*Distribution of Respondents by Type of Facility (Figure 3)*

### Distribution of respondents by type of Facility



The majority of respondents were from district hospitals 348 (39.4%) followed by provincial hospitals, 181 (20.5%), clinics, 136 (15.4%), mission hospitals, 66 (7.5%), central hospitals, 59 (6.7%) and others 93 (10.5%).

### HIV Testing

Of the 883 respondents 568 (64.3%) stated that they performed HIV testing in their health facilities. HIV testing is an important step in all aspects of the care of HIV/AIDS patients. It is an essential adjunct to counselling, management of opportunistic infections and the use of antiretroviral drugs. It is therefore important that all health facilities have access to HIV testing either on-site or at another facility which is accessible and is in a position to communicate results efficiently. This tool did not, however seek to determine for those

facilities that could not do HIV testing on-site whether they could perform testing at other facilities.

### **Use of Antiretroviral Drugs (ARVs)**

#### **Guidelines on ARV use (Table 1a)**

Guidelines are essential tools for the management of most medical conditions. The more complex a condition is the greater the need for uniformity in all aspects of management. It is therefore necessary for all health providers in country with such a high burden of HIV disease such as Zimbabwe to have access to guidelines for ARV administration.

<b>Table 1a: Guidelines on Antiretroviral drugs (ARV's)</b>		Frequency N = 883 N (%)
1.2	Number of respondents familiar with any guidelines in the use of ARVs.	307 (34.8)
1.3	Number of respondents reporting presence of guidelines on the use of ARVs at their facility.	190 (21.6)
1.4	Number of respondents reporting use of ARVs at their facility.	129 (14.6)
1.5a	Number of respondents reporting that they followed guidelines on the use of ARV.	<u>N=129</u> 114(89.8)
1.5b	Guidelines used in the use of ARVs:- (Multiple guidelines sometimes used)	
	Zimbabwean	76 (69.7)
	American	6 (5.6)
	British	8 (7.3)
	Other	9 (7.9)
1.8	Number of respondents reporting that their facilities is/was supplied with ARVs.	<u>N=127</u>
1.12	Number of respondents reporting that they prescribed ARVs in line with National/International guidelines.	81(67.5)

Of the 883 respondents only 307 (34.8%) stated that they were familiar with guidelines on the use of ARVs. Only 190 stated that they had guidelines available on-site. The number who admitted to following guidelines on ARV use was only 129. The tool sought to know if respondents used local Zimbabwean guidelines or other guidelines. Of the 129 respondents who followed guidelines 76 (69.7%) stated that they used Zimbabwean based guidelines. Small numbers mentioned use of American, British or other guidelines. Of special note was that at the time of the survey the Zimbabwean National ARV program had not been implemented and the relevant guidelines had not been published.

Unfortunately the tool was not very helpful in determining the specific circumstance of the use of ARVs. The 3 major uses in Zimbabwe being for prevention of parent to child transmission of HIV (PPTCT), pre-exposure prophylaxis of needle stick injuries and the management of chronic HIV infection. No doubt other indication for the use of ARVs such as post high-risk sex exposure prophylaxis (prepep, eg in rape, etc), management of acute HIV sero-conversion illness, prevention of transmission between sero-discordant couples, etc. Most respondents must have given their answers depending on the availability of ARVs for the 3 major uses in Zimbabwe. Unfortunately, the 2000 4<sup>th</sup> edition of the Essential Drugs List for Zimbabwe (EDLIZ) devotes only half-a-page to the use of ARVs in chronic HIV infection and for PPTCT. The Ministry of health through its appropriate organs has developed strategies and guidelines for the use of ARVs in Zimbabwe.

#### Training on use of ARVs (Table 1b)

<b>Table 1b: Training on ARV use</b>		<b>Frequency</b> N = 883 N (%)
1.6	Number of respondents reporting that cadres had been trained in ARV use.	192 (21.7)
1.7a	Number of respondents who had themselves been trained in ARV use.	105 (54.7)

By the time of the survey only 192 (21.7%) of the respondents reported knowledge of some form of training on ARV use conducted at their facility. Specifically only 105 respondents reported having received training in the use of ARVs themselves. During the survey period the national training program on ARVs had not yet been put in place. The

training alluded to by respondents probably related to PPTCT and other forms of in-house training on ARV use.

### Supply and Access to ARVs (Table 1c)

<b>Table 1c: ARV Supply/Access</b>		<b>Frequency N = 883 N(%)</b>
1.7	Number of respondents who reported that their facilities were supplied with ARVs.	127 (14.4)
1.10	How regular is the supply? Regular Erratic Irregular	63 (52.1) 49(40.5) 9(7.4)
1.11	Median number of people receiving ARVs in the Past 1 month Past 1 year	2 Range (0 - 31) 2 Range (0 - 103)

Only 127 (14.4%) respondents reported that their facilities were supplied with ARVs. Of these only 63 reported a regular supply and 49 an erratic supply. In total only 2 people were reported to have received ARVs in the preceding 1 year. This response must however be taken with caution since the respondents may have interpreted the question differently regarding the indications for use of ARVs as described above. It is true to say that ARVs for chronic HIV infection and for PEP were not available in most health facilities at this time, although Nevirapine for PPTCT use was gaining ground. Unfortunately, the tool was not designed to ascertain the types of the ARV drugs referred to by respondents.

### Laboratory Support in the use of ARVs (Table 1e)

<b>Table 1e: ARVs-related Supportive Laboratory Investigations and other clinical assessments</b>		<b>Frequency N = 883 N(%)</b>
		<u>N = 127</u>
1.16a	Number of respondents who reported ordering laboratory investigations before prescribing ARVs	95 (79.8)
1.16b	(If yes) How often?	74 (79.6)
	Always	19 (20.4)
	Sometimes	0 (0)
	Never	
1.17a	Number of respondents who reported ordering laboratory investigations when monitoring patients on ARVS.	21 (17.9)
1.17b	(If Yes) How often?	
	Always	7 (33.3)
	Sometimes	14 (66.7)
	Never	0 (0)
1.18	Number of respondents reporting that the following laboratories which service their health facility needs in relation to ARVS, (Multiple facilities possible)	
	Reference Laboratory	19 (16.1)
	Provincial Laboratory	36 (30.5)
	District Laboratory	63(52.9)
	Blood Transfusion	13 (11.0)
	Private Laboratory	6 (5.0)
1.19	Number of respondents reporting that they assess the following before prescribing ARV's.	
	Patient's visual function	10 (8.8)
	Haematological status	31 (27.2)
	Hypersensitivity to ARVs	11 (9.6)
	Other assessments	11 (9.6)

Although 95 (79.8%) of the respondents who stated that their facilities were supplied with ARVs reported ordering laboratory investigations before prescribing ARVs this response is at variance from the paucity of ARVs prescribed in the previous 1 year by the

respondents. The suspicion is that respondents merely stated their knowledge of what should be done before prescribing ARVs, rather than what they actually practiced.

### Management of HIV related Cancers (Tables 1f to 1i)

Knowledge of the relationship between HIV and certain cancers was only 76%. Cancers are such an important association with HIV in the Zimbabwean environment that one expects all health providers to be aware of the association. This is especially relevant for Kaposi's sarcoma which is easy to suspect on skin inspection and has such a strong link with HIV even among the lay public. Again many respondents did not appreciate how common HIV-related cancers are in Zimbabwe.

<b>Table 1f: Knowledge on HIV – related cancers</b>		<b>Frequency N = 883 N(%)</b>
10.2	Number of cadres who knew that cancers are HIV/AIDS defining conditions.	656 (75.7)
10.3	Number of respondents reporting that, in Zimbabwe, HIV/AIDS related cancers are-:	
	The most commonly seen	189 (23.1)
	Often seen	345 (44.2)
	Seldom seen	144 (17.6)
	Rarely seen	140 (17.1)

Diagnostic and therapeutic services for patients with HIV-related cancers were not consistently offered to patients. Voluntary counselling and testing (VCT) was always offered by 176 (21.3%) respondents, chemotherapy by 142 (16.9%), ARV therapy by only 30 (3.5%) respondents. Other forms of treatment offered to these patients were: radiotherapy (11.0%), palliative therapy (30%), antiretroviral drugs (4%) and

prophylaxis/treatment for opportunistic infections (24%). It was not expected that all the facilities would be able to offer the wide range of services and neither would they be in a position to offer complex interventions such as chemotherapy.

<b>Table 1g Diagnostic services for AIDS related cancers</b>	<b>Always</b>	<b>Sometimes</b>	<b>Never</b>
VCT	176	371	281
Referrals for prophylaxis and treatment of Ois	203	458	173
Chemotherapy for these patients	142	272	428
Radiotherapy	94	174	579
ARVs in their treatment	30	118	688
Other Palliative treatments	250	422	165
VCT for other malignancies (which are not HIV related)	153	387	299

Laboratory support for cancer management was reported by 484 (55.3%) respondents. But given the paucity of services currently available for the management of cancer particularly at provincial and district level, it is unlikely that respondents were referring to laboratory support for specific management of cancers. It is also possible that some respondents were merely stating their knowledge of the requirement for laboratory support in the management of cancers, rather than referring to the actual performance of laboratory tests to support cancer management at their hospitals and clinics.

<b>Table 1h Supportive Laboratory Investigations</b>		<b>Frequency N = 883 N(%)</b>
10.6a	Number of respondents who reported ordering laboratory investigations in the management of cancers.	484 (55.3)
10.6b	(If yes) How often?	
	Always	193 (40.2)
	Sometimes	286 (59.6)
	Never	1 (0.2)
10.7a	Number of respondents who reported ordering laboratory investigations when monitoring patients with cancers.	328 (37.5)
10.7b	(If yes) How often?	
	Always	97 (30.2)
	Sometimes	221 (68.8)
	Never	2 (0.9)
10.8	Number of respondents reporting that the following their laboratories service health facility needs in relation to cancers, (Multiple facilities possible)	
	Provincial Laboratory	296 (34.6)
	District Laboratory	396 (45.9)
	Blood Transfusion	319 (37.0)
	Private Laboratory	170 (19.8)

Most respondents reported that they normally referred patients with cancer to other facilities. Specialized cancer treatment is available in a limited number of centres in the country.

<b>Table 1i Referral of cancer patients</b>		<b>Frequency N = 883 N(%)</b>
10.4	Number of respondents who reported that they refer patients with cancers to other centres.	757 (87.1)

## OPPORTUNISTIC INFECTIONS

### Candidiasis (Table 1j-1k)

Candidiasis is an extremely common presentation of HIV infection. We would have expected a larger number of respondents than 694 (79%) to be acquainted with the guidelines (such as the relevant section of EDLIZ) regarding the management of candidiasis. It was pleasing however to note that 98% of respondents with guidelines at the site reported following them. Table 1k gives the stock levels of various antifungals available at the site. Gentian violet was the commonest agent in most centres but azoles were also stocked at various levels of availability. A large number of respondents (76.3%) reported using azoles for the treatment of candidiasis. It is suspected that many respondents misclassified cotrimoxazole as an azole a misconception which needs to be addressed during training.

<b>Table 1j Guidelines for Candidiasis</b>		<b>Frequency N = 883 N(%)</b>
3.1	Number of respondents reporting presence of guidelines on the treatment and management of candidiasis at their sites	694 (79.0)
3.2	Number of respondents who reported following guidelines on treatment and management of candidiasis.	678 (98.1)

<b>Table 1k Treatment of Candidiasis</b>		<b>Frequency N = 883 N(%)</b>
3.3	Number of respondents who reported using the following medications for treatment of candidiasis. Gentian Violet (GV) Fluconazole Other Azoles	670 (76.3) 177 (20.3) 664 (76.3)
3.4	Number of respondents who reported that their facilities had the following medications readily available. Genitian Violet (GV) Fluconazole Other Azoles	600 (68.4) 83 (9.5) 530 (60.8)
3.5	Number of respondents who reported that their facilities had adequate stock levels for the following medications. Gentian Violet (GV) Fluconazole Other azoles	425 (48.6) 42 (4.8) 331 (38.1)

### **Tuberculosis (Table 1l-1m)**

<b>Table 1L Guidelines on treatment /management of Tuberculosis (TB)</b>		<b>Frequency N = 883 N(%)</b>
4.1	Number of cadres who reported the presence of guidelines on the treatment and management of Tuberculosis.	857 (97.4)
4.2	Number of respondents who reported that they were following guidelines on the treatment and management TB.	849 (99.0)

<b>Table 1m Treatment and medication for Tuberculosis (TB)</b>		<b>Frequency N = 883 N(%)</b>
4.3	Number of respondents who reported that their facilities were giving TB medication.	859 (97.6)
4.4	Number of respondents who reported that their Facilities using DOTS. (Directly Observed Therapy-short course)	792 (92.2)
4.5	Number of respondents who reported that their facilities had an adequate supply of TB medication.	775 (90.2)

There has been a sharp rise in the incidence of tuberculosis in Zimbabwe as a result of the HIV epidemic. Historically Zimbabwe has had a strong national tuberculosis program developed over several decades. This is reflected in the fact that nearly all (97.4%) of respondents reported having guidelines at their sites and 99% of these indicated that they followed these guidelines in the management of patients. Antituberculous drugs were available in most (97.6%) of facilities, but supply was considered adequate in only 90.2% of sites. 792 (92.2%) of respondents said they used the Directly Observed Therapy-Short Course strategy. Only a small number of respondents reported assessing patients for important side effects and dangers in the management of tuberculosis. Issues like visual function assessment, determination of hypersensitivity to antituberculosis drugs and assessment for neurological defects are important issues in the management of tuberculosis.

<b>Table 1N</b>	<b>Clinical Assessment in the management of Tuberculosis (TB)</b>	<b>Frequency N = 883 N(%)</b>
4.7	Number of respondents who reported taking the following precautions before commencing patients on anti TB drugs. Test visual function Determine Hypersensitivity to TB drugs Assess for neurological deficits	68 (7.9) 145 (16.9) 127 (14.8)

### **Cryptococcal Meningitis**

Data shows that the commonest type of meningitis seen at least in tertiary hospitals in Zimbabwe is cryptococcal meningitis. Management of cryptococcal meningitis was only scantily mentioned in EDLIZ 4<sup>th</sup> edition. This was because specific therapy in the public sector was not widely available because of expense. As a result only 511(58.3%) of respondents reported having guidelines for the treatment of cryptococcal meningitis at their sites. Similarly amphotericin B, fluconazole, itraconazole and fluocytocine were reported to be available by only 0.8-9.7 % of respondents.

<b>Table 10</b>	<b>Guidelines on the management of Cryptococcal Meningitis</b>	<b>Frequency N = 883 N(%)</b>
5.1	Number of respondents who reported facilities have guidelines on the treatment and management of Cryptococcal meningitis?	511 (58.3)
5.2	Number of cadres who reported following guidelines on the treatment and management of Cryptococcal meningitis.	489 (95.7)

<b>Table 1P Medications for the Treatment of Cryptococcal Meningitis</b>		<b>Frequency N = 883 N(%)</b>
5.3	Number of respondents who reported that their facilities were using the following medicines for the treatment of Cryptococcal Meningitis. Amphotericin B Fluconazole Itraconazole Fluocytocine	85 (9.7) 132 (15.1) 46 (5.2) 7(0.8)
5.4	Number of respondents who reported that their facilities had the following medicines readily available. Amphotericin B Fluconazole Itraconazole Fluocytocine	27 (3.1) 51 (5.9) 15 (1.7) 3 (0.2)
5.5	Number of respondents who reported that their facilities had adequate stock levels of the following medications. Amphotericin B Fluconazole Itraconazole Fluocytocine	13 (1.5) 27 (3.1) 6(0.7) 5(0.4)

### **Herpes Simplex (1q-1r)**

EDLIZ gives a rather brief mention of the therapy of this condition. Nonetheless 678 (77%) of respondents reported having guidelines for its management. Acyclovir use was reported by 32.5% of the respondents, most however used other drugs presumably agents like gentian violet for local skin treatment.

<b>Table 1Q Guidelines on Management of Herpes Simplex</b>		<b>Frequency N = 883 N(%)</b>
6.1	Number of respondents who reported that their facilities had guidelines on the treatment and management of herpes simplex.	678 (77.0)
6.2	Number cadres who following reported guidelines on the treatment and management of herpes simplex.	670 (98.2)

<b>Table 1R Medication for the treatment of Herpes Simplex</b>		<b>Frequency N = 883 N(%)</b>
6.3	Number of respondents who reported using the following medications for the treatment of Herpes Simplex Acyclovir Other	286 (32.5) 371 (43.1)
6.4	Number of respondents who reported that the following medications were readily available. Acyclovir Other	85 (9.7) 290 (33.9)
6.5	Number of respondents who reported that their facilities had adequate stock levels of the following medications. Acyclovir Other	52 (5.9) 237 (27.8)

### **Pneumocystis Pneumonia (Table 1s-1t)**

Of the 883 respondents 636 (72.8%) reported having guidelines for the management of PCP at their facilities. This is a common and important manifestation of HIV infection which requires urgent recognition and prompt therapy. This condition lends itself to treatment in even relatively small facilities since the first line treatment is cotrimoxazole, which is available in most facilities. 95.6% of facilities reported availability of

cotromoxazole with clindamycin being available in 63% of facilities. Although the tool asked respondents to indicate if clindamycin/primaquine was available this combination is generally not commonly found in Zimbabwean health institutions. So the responses given most probably refer to the availability of clindamycin alone rather than the combination.

<b>Table 1S Guidelines on Management of PCP</b>		<b>Frequency N = 883 N(%)</b>
7.1	Number of respondents who reported that their facilities had guidelines on the treatment and management of PCP?	636 (72.8)
7.2	Number cadres who reported that they were following these guidelines.	629 (97.8)

<b>Table 1T: Medications for the Treatment of PCP</b>		<b>Frequency N = 883 N(%)</b>
7.3	Number cadres using the following medications for the treatment of PCP.	
	Cotrimoxazole	839 (95.6)
	Clindamycin/Primaquine	553 (63.0)
	Pentamidine	11(1.3)
	Other	127 (14.7)

### Sexually Transmitted Infections (Tables 1u-1w)

<b>Table 1U: Guidelines on Management of STIs</b>		<b>Frequency N = 883 N(%)</b>
9.1	Number of respondents who reported that their facilities had guidelines on the treatment and management of STIs.	837 (95.8)
9.2	Number cadres who reported that they were following these guidelines.	837 (99.2)

<b>Table 1V Medication for the treatment of STI's</b>		<b>Frequency N = 883 N(%)</b>
9.3	Number of respondents who reported that their facilities were offering treatment for sexually transmitted diseases.	834 (95.1)
9.5	No of respondents also reported the available of the following drugs for the treatment of STDs.	
	1. Kanamycin	776 (88.3)
	2. Doxycycline	735 (83.6)
	3. Norfloxacin	343 (39.2)
	4. Metronidazole	851 (96.9)
	5. Cirpofloxacin	248 (28.2)
	6. Gentian Violet	651 (74.1)
	7. Nystatin Pessaries	486 (55.4)
	8. Imidazole Pessaries	145 (16.6)
	9. Erythromycin	775 (88.2)
	10. Cotrimoxazole	817 (92.9)
	11. Benzathine Penicillin	594 (67.6)
	12. Podophyllin Pain 20%	304 (34.6)
	13. Gamma benzene Hexachloride	365 (41.5)
	14. Benzyl Benzoate 25% emulsion	225 (25.7)

<b>Table 1W Training in STI management</b>		<b>Frequency N = 883 N(%)</b>
9.6	Number of respondent who reported that their Facilities had staff trained in the STI- related management of STIs.	731 (83.3)
9.7	The average number of staff per site who were reported to have received training?	33 Range (0 – 100)
9.8a	Number of cadres who reported that they themselves had received any STI training.	408 (55.0)

STIs are an important disease burden in their own right, but are also intimately associated with HIV transmission and acquisition. The management of STIs, is therefore an

important strategy in the prevention and control of HIV infection. Guidelines for the management of STIs were available in most facilities with 95.8% respondents reporting having them. In fact this is one condition that the Ministry of Health and Child Welfare has laid emphasis on over the years. Modules and guidelines have been developed for training and to guide management of STIs throughout the country. We would have expected 100% of respondents to be aware of guidelines for their management. Availability of a range of STI medications was reported to vary between 17% (imidazole pessaries) to 97% (metronidazole). Other important STI drugs were reported to be available as follows: Kanamycin-88%, Doxycycline-84%, Ciprofloxacin-28% and nystatin pessaries-55%. Laboratory support for STIs was sought by 71% of respondents with only 30% reporting that they did so always.

<b>Table 1X Supportive Laboratory Investigations</b>		<b>Frequency N = 883 N(%)</b>
9.9a	Number of respondents reporting that their facilities order laboratory investigations in the management of STIs.	621 (70.6)
9.9b	(If yes) How often?	
	Always	181 (29.6)
	Sometimes	426 (69.6)
	Never	3 (0.8)
9.10a	Number of respondents reporting that their facilities order laboratory investigations when monitoring patients with STIs.	416 (47.3)
9.10b	(If yes) How often?	
	Always	95 (23.6)
	Sometimes	306 (75.9)
	Never	1 (0.5)
9.11	Number of respondents reporting that the following	

laboratories service their needs in relation to STIs?	
Reference Laboratory	165 (19.1)
Provincial Laboratory	402 (46.1)
District Laboratory	477 (54.7)
Blood Transfusion	163 (18.7)
Private Laboratory	201 (23.1)

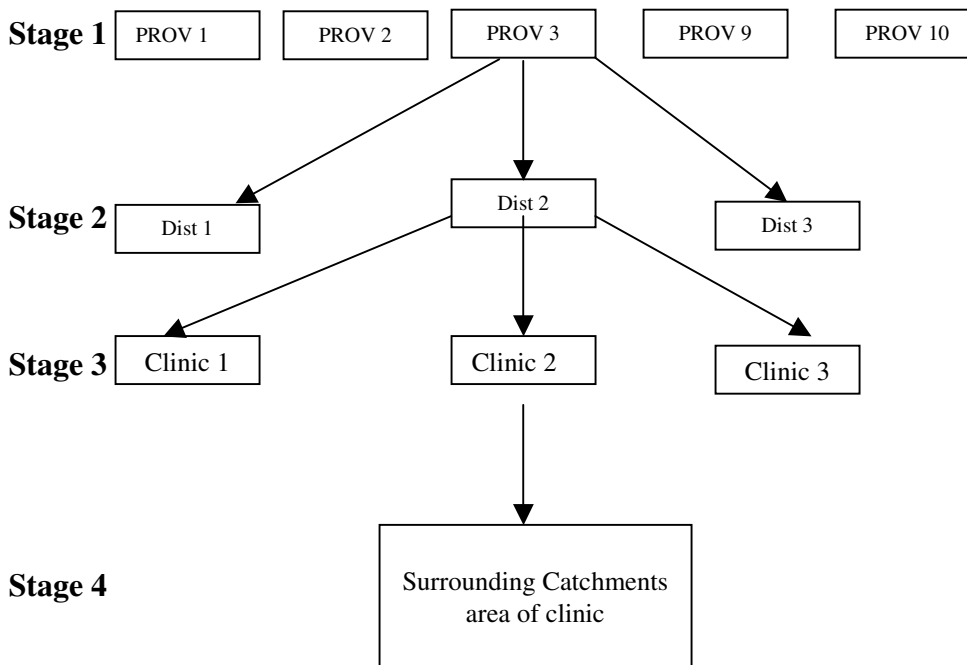
**Conclusions:** There was a wide range of reports on the availability of guidelines for the HIV/AIDS related conditions assessed by this tool-being low for use of ARVs, but highest for management of STIs and TB. Respondents did not appreciate that most HIV/AIDS conditions have been addressed for the Zimbabwean setting in EDLIZ, although the tool did not specifically seek for this information. The tool was relatively blunt with regard to obtaining information on ARVs, because it did not distinguish between medications used for PPTCT from those used in the management of chronic HIV/AIDS. Hence most respondents who reported availability of ARVs did so on the basis of PPTCT medication. Clearly the strongest services with indices of good quality of care were the management of TB and STIs.

**Recommendations:** Wider distribution of guidelines for the use of ARVs and the management of OIs and HIV-related malignancies is required. Strategies to ensure their proper and consistent use are needed. When available specific anti-cancer treatment is preferred to palliative treatment, as the former would provide a better quality of care. Ultimately, however the quality of care of HIV/AIDS as in any other medical condition requires the combination of personnel, materials, knowledge and sound policies. Future tool development should ensure that the interaction between these essential factors is brought out.

## MAIN SURVEY

### Sampling

The sampling plan adopted for the survey was based on the national profile that comprises of 10 provinces including the cities of Harare, and Bulawayo. The multi stage sampling procedure that was followed is summarized in the organogram below. This sampling plan that was drawn up was designed to maximise representativeness by insuring that all 8 provinces and 2 cities were incorporated in the survey. The resultant sampling frame included all provincial hospitals, 3 districts within each province, 3 rural health centres within each district and the catchments area surrounding the rural health centres



## **Researcher training**

Research assistants identified from the provinces and districts were trained in a joint workshop before the survey. A team of three data entry clerks was also trained during the same period. The research assistants were taken through the objectives of HAQOCI and the aims of the situation analysis survey. They were then introduced to each of the survey tools and together with tool developers, went through each tool item by item. Points which needed clarification were dealt with until there was unanimity on what each tool item meant and what information it was designed to obtain. The research assistants were briefed on the logistics of conducting the survey, procedures in the completion of questionnaires and interviewing techniques.

## **Field survey**

The field survey was conducted from August to September 2002. In each province the survey was conducted by a team comprising of one co-ordinator and 3 research assistants backed by a field supervisor who reported to a 3-member situation analysis task force. The co-ordinators were tasked to facilitate entry into the field, supervise and monitor data collection and liaise with the task force. The provincial supervisors' major task was to trouble shoot, monitor the progress of data collection in their area, perform quality control checks on the completed questionnaires and forward completed questionnaire to the CEU.

## **Results**

### **Survey Process**

## 1. Tool related constraints

- Medical staff, especially medical practitioners, did not have ample time to complete questionnaires.
- Sometimes non –management level respondents gave conflicting information compared to information from management -level respondents on managerial issues.

## 2. Respondent-related constraints

- There was a lot of client migration that resulted in failure to reach the targeted sample size e.g. going for rural/urban migration for care.
- Chronic disease registers at some health centres did not turn out to be a reliable sources of information for sampling of clients as many of the clients on the register where deceased. In addition, some of those who were on the register could not be accessed due to road conditions and geographical scatter.
- A number of caregivers were minors/children and this problem was particularly cited in Matabeleland North, Bulawayo and Midlands.
- Some health institutions were so short staffed that some respondents (e.g. Doctors) were reluctant to give adequate time to the interviewers especially where they had to respond to more than one tool.

### 3. Health Institution-related Constraints

- Interviewers were denied access to some institutions despite the fact that authorities had been formally notified of the survey in good time.
- Some health institutions did not have a chronic disease register that made the follow up of clients/ home based care clients difficult.