

**Human Capacity Development (HCD) Assessment and Strategy Development for the Health Sector in  
Mozambique**

**Maputo, November 2004**

**Funded by the Africa Bureau, USAID**

**Management Sciences for Health  
Management and Leadership Development Project  
Cooperative Agreement Number HRN-A-00-00-00014-00**

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## ACRONYMS

<b>AMM</b>	<b>Mozambique Medical Association</b>
<b>ANEMO</b>	<b>National Nursing association of Mozambique</b>
<b>ART</b>	<b>Antiretroviral Therapy</b>
<b>ARV</b>	<b>Antiretroviral</b>
<b>ATAMO</b>	<b>Mozambique Health Technicians Association</b>
<b>CDC</b>	<b>Centers for Disease Control and Prevention</b>
<b>CRDS</b>	<b>Regional Center for Health Development</b>
<b>DPS</b>	<b>Provincial Directorate of Health</b>
<b>GFATM</b>	<b>Global Fund to Fight AIDS TB and Malaria</b>
<b>GT-SWAP</b>	<b>Technical Group - Sector Wide Approach</b>
<b>HBC</b>	<b>Home Based Care</b>
<b>HCD</b>	<b>Human Capacity Development</b>
<b>HIPC</b>	<b>Highly Indebted Poor Country Initiative</b>
<b>HR</b>	<b>Human Resource(s)</b>
<b>HRH</b>	<b>Human Resources for Health</b>
<b>HRDP</b>	<b>Human Resources Development Plan</b>
<b>LTEF</b>	<b>Long Term Expenditure Framework</b>
<b>MAE</b>	<b>Ministry of State Administration</b>
<b>MISAU</b>	<b>Ministry of Health</b>
<b>MPF</b>	<b>Ministry of Planning and Finance</b>
<b>MSH</b>	<b>Management Sciences for Health</b>
<b>MTEF</b>	<b>Medium Term Expenditure Framework</b>
<b>NAC</b>	<b>National AIDS Council</b>
<b>NGO</b>	<b>Non-Governmental Organization</b>
<b>NHS</b>	<b>National Health services</b>
<b>PARPA</b>	<b>Poverty Reduction Strategic Plan</b>
<b>PEPFAR</b>	<b>US President's Emergency Plan for AIDS Relief</b>
<b>PEN</b>	<b>The National Strategic Plan to Combat HIV/AIDS</b>
<b>PESS</b>	<b>Health Sector Strategic Plan</b>
<b>PLWHA</b>	<b>People Living with HIV/AIDS</b>
<b>PS</b>	<b>Health Post</b>
<b>PSAC</b>	<b>Portuguese Speaking African Countries</b>
<b>USAID</b>	<b>United States Agency for International Development</b>

## GLOSSARY OF KEY TERMS

**Human Capacity Development Plan (HCD):** A comprehensive and multi-sectorial strategy to increase human capacity to manage and deliver health services. This strategy focuses on identifying and finding solution to personnel barriers in policy, human resource management, partnerships, and leadership. Sustainable human capacity for health services depends on several ministries and agencies and sectors, not just the Ministry of Health (MISAU) working together.

**Human Resource Management (HRM):** HRM is the integrated use of systems, policies and practices to plan for necessary staff and to recruit, motivate, develop, and maintain employees in order for the organization to meet its desired goals. HRM concerns the internal, organizational management systems and is one of the key building blocks of a comprehensive HCD Strategy. HRM provides the means by which institutions can translate an HCD strategy into effective human resource practice.

**Human Resources for Health (HRH):** The stock of all individuals involved in safeguarding and contributing to the prevention, promotion and protection of the health of populations. This includes skilled and unskilled persons working in formal (public, private, FBOs) and informal health care sectors, including traditional healers, volunteers and community care givers. Non-medical staff providing administrative, management, planning, monitoring and evaluation services are also included.

**Workforce Planning:** A process to establish the quantity, quality, different cadres and location of health workers required to meet the HR requirements of the organization. It also involves a strategy for the recruitment, deployment and retention of those workers.

**Stakeholders:** The diverse group of organizations and actors that have a responsibility or vested interest in the health sector human capacity. They include relevant ministries as well a community and civil society groups and the donor community.

**Short vs. Long term:** For the purpose of this report, short-term recommendations are those that are considered urgent and essential in order to begin addressing specific priority issues and accomplish some results quickly. Long-term actions are those that are equally important but may require more time to negotiate and implement.

## 1. EXECUTIVE SUMMARY

The health sector in Mozambique faces enormous challenges of delivering health services within a context of a weak health infrastructure, significant budgetary constraints, endemic poverty, old and emerging diseases, and health indicators – such as infant and maternal mortality that are at the very bottom of the global table. HIV/AIDS in particular, poses a major challenge to the health sector, as it has led to a huge increase in demand for preventive and curative health services and has further burdened a health system that was struggling to cope with traditional diseases such as malaria. HIV/AIDS further compounds the situation as it weakens and kills hundreds of scarce and expensively trained health workers. Given this background, the importance of Human Capacity Development (HCD) to help the health sector rise-up to the enormous challenges it faces becomes apparent. Human Capacity Development will also be crucial in ensuring that the opportunity presented by unprecedented, huge funding inflows for supporting the health sector and in particular HIV/AIDS programs is not squandered. To reduce HIV infection of health staff and to support staff that are already infected, it is important that MISAU urgently develops an HIV/AIDS workplace policy and rolls out a comprehensive HIV/AIDS workplace program for its entire staff. The policy and program should incorporate provision of HIV treatment including ART.

A draft Human Resource Development Plan (HRDP) 2005 –2010, has been prepared and should be finalized soon. The HRDP 2005 – 2010, is expected to guide health workforce planning and human resource management within the health sector in the next 5 years. It is important that the review of this document and the development of the HRDP operational plan, be a product of a consultative and inclusive process that should include private sector and civil society stakeholders - community groups, development partners, FBOs and NGOs and also MISAU staff drawn from the provinces and districts. Involvement of diverse stakeholders in the HRDP planning process should be the beginning of a process of strengthening public – private partnership.

The human resource function is currently weak especially at provincial and facility levels due to understaffing, lack of training and the fact that many HR positions lack the requisite seniority and authority to discharge key HRM functions including workforce planning. Given the enormous HCD challenges, it is important that the HR function within the Ministry of Health be strengthened. An equally big challenge is the need to urgently scale up both pre-service and in-service training to meet the huge staffing and competencies shortfalls. As Mozambique undertakes the demanding task of strengthening its health services, one thing stands out - the urgent need for visionary and committed leadership at all levels – central, provincial, district and at facility level. We are therefore recommending that clinical training should go hand in hand with the provision of leadership and management skills for staff and teams that hold key leadership positions. To strengthen HRM, it is also imperative that an HR information system that is comprehensive, easy to use, up to date and is accessible to all those who need it, is developed.

In the table below we provide a summary of some of the key recommendations organized in accordance with the HCD framework. Detailed recommendations are given elsewhere in this report. We do appreciate that while some of these recommendations are easy to implement, others will be more challenging and may require more time, broader consultation and greater resources. These recommendations are certainly not exhaustive, as other reports and studies have also made other useful recommendations that also require implementation.

**Table 1: Key recommendations organized according to the HCD framework**

<p><b>1. POLICY – LEGAL – FINANCIAL REQUIREMENTS</b></p> <p><b>Short– term</b></p> <ul style="list-style-type: none"> <li>▪ Review the ART target numbers - PEN 2004 –2008, with an aim of increasing them</li> <li>▪ Give authority to medical technicians and nurses with appropriate training and supervision to prescribe ARVs</li> <li>▪ Develop and disseminate an HIV/AIDS workplace policy</li> <li>▪ Develop and/or disseminate the policy and provide training on Post Exposure Prophylaxis (PEP)</li> <li>▪ Strengthen the HRD – Working Group</li> </ul> <p><b>Long-term</b></p> <ul style="list-style-type: none"> <li>▪ Develop a comprehensive plan to be presented to donors, for supporting ART scale-up beyond the projections of PEN.</li> <li>▪ Address budgetary issues such as MTEF, IMF conditionalities etc. that limit employment of additional health workers and improvement of terms and conditions of service</li> <li>▪ Clarify workforce planning roles within MISAU and with the Ministries of Finance and planning (MPF) and State Administration (MAE)</li> <li>▪ Provide funds and supportive logistics to ensure regular supplies of essential health commodities especially gloves, needles and syringes.</li> </ul>	<p><b>2. HUMAN RESOURCE MANAGEMENT</b></p> <p><b>Short– term</b></p> <ul style="list-style-type: none"> <li>▪ Undertake a comprehensive survey on the impact of HIV/AIDS on the workforce. The recent survey does not provide most of the data required for planning.</li> <li>▪ Develop and role out a comprehensive HIV/AIDS workplace programme for all health staff</li> <li>▪ Ensure all infected health staff have access to ART</li> <li>▪ Review the current ART model and compute HR requirements for scaling up ART</li> <li>▪ Strengthen the HR information system</li> <li>▪ Strengthen institutes of health sciences by expanding and modernizing their libraries and developing their faculty.</li> <li>▪ Strengthen the MISAU in-service department and also CRDS</li> </ul> <p><b>Long-term</b></p> <ul style="list-style-type: none"> <li>▪ Strengthen and elevate the HR function at central, provincial and facility levels</li> <li>▪ Review and strengthen the staff performance appraisal system</li> <li>▪ Upgrade and expand the infrastructure of pre-service training institutions</li> <li>▪ Design and implement a system of monitoring and assuring the quality of students of health institutions</li> <li>▪ Support expansion of local post-graduate courses</li> </ul>
<p><b>3. LEADERSHIP</b></p> <p><b>Short-term</b></p> <ul style="list-style-type: none"> <li>▪ Develop an innovative leadership development programme for holders of key positions</li> <li>▪ Provide fora for leaders to exchange ideas and share best practice</li> </ul> <p><b>Long-term</b></p> <ul style="list-style-type: none"> <li>▪ Introduce management training in some of the pre-service courses</li> </ul>	<p><b>4. PARTNERSHIPS</b></p> <p><b>Short-term</b></p> <ul style="list-style-type: none"> <li>▪ Strengthen existing medical associations</li> <li>▪ Map and strengthen community groups, NGOs, FBOs etc operating within the health sector</li> <li>▪ Improve the coordination of health programs that interface with NAC programs such as HBC.</li> </ul> <p><b>Long-term</b></p> <ul style="list-style-type: none"> <li>▪ Create structures within MISAU for strengthening Public-Private partnership</li> </ul>

## 2. INTRODUCTION

### Context and Background

Health services and human resources development have undergone rapid change in Mozambique since independence in 1975 and also at the end of the civil war in 1990. Two consecutive 10 year human resource development plans guided the first wave of reconstructing the war torn services. The last plan envisaged strong investment in capacity strengthening and training. Its objectives, however, were achieved much earlier than anticipated due to the forceful implementation of the training plan. The government therefore decided to develop a new Human Resource Development Plan (HRDP) much earlier than originally anticipated. A number of studies have been undertaken on the situation of the Human resources for Health (HRH) in Mozambique including a study on the impact of HIV/AIDS on the health workforce. The draft HRDP 2005 – 2010 is expected to be finalised early 2005. A major objective of this assessment was to support the development of the HRDP 2005 –2010.

The country has experienced accelerated economic development with growth rates above 5 percent over the past several years. To maintain this momentum and eventually broaden access to better living and working conditions to an increasing number of people and reduce poverty substantially, it is necessary to improve the population's health status. The Country's Poverty Reduction Plan (PARPA) recognises the importance of aggressively tackling the wide range of health problems as part of the efforts of addressing the huge poverty challenge.

The rising HIV prevalence constitutes the biggest health challenge facing the country. Adult HIV prevalence at the end of 2003 stood at 12.2% and the country has 1.3 million adults and children living with HIV/AIDS. UNAIDS estimates that 110,000 adults and children died of AIDS in 2003. The Ministry of Health estimates that about 250,000 people living with HIV/AIDS require ARVs. The burden of HIV/AIDS on the health service delivery system and the demand it places on human resources is enormous and will be felt way into the future. AIDS accounts for 20-40% of bed occupancy in many hospitals. In addition to significantly increasing the health workload, HIV/AIDS significantly increases in-service training needs, as the HIV/AIDS clinical competencies for existing staff are very low. To make matters worse, it is estimated that up to 17% of the health workers are HIV infected. The Mortality rate of the NHS staff has more than doubled in the last 7 years to 1%, almost certainly as a result of AIDS. The situation is aggravated by significant regional variations. Beira Central Hospital for example lost about 7% of its workforce between 2001 and 2004.

There is growing commitment to support the health sector including HRH in Mozambique by a wide range of development partners. In particular, programs such as PEP FAR and GFATM have pledged huge resources to fund HIV/AIDS activities while at the same time addressing some of the systemic health sector challenges. Fortunately in Mozambique, there is a well-established donor coordination mechanism through the SWAP-Technical Group (GT-SWAP). A comprehensive Human Resource Development Plan will play an invaluable role in ensuring that available donor and government funds are utilized as quickly and as efficiently as possible to strengthen HRH and improve health service delivery.

## **Objectives of the HCD Assessment and Strategy Development**

The detailed Scope of Work is annexed to this report – Appendix 5. The key objectives of this assignment were:

1. To ensure that HCD, as a process, is at the center and drives the health sector reform program of the MISAU and that it is not presented and implemented as a stand-alone program.
2. To assess the HRM system capacity of the Ministry of Health sites to support the key proposals contained in the draft HCD Plan (HRDP) and adequately staff HIV/AIDS programs, retain staff, absorb and train new and existing staff and contribute to the overall productivity of the system.
3. To assess the capacity of the MISAU in-service training program to increase quality, planning, and standardization of training activities.
4. To assess the capacity of the pre-service training institutions to respond to staffing and training issues in health.

## **Limitations of the Assessment**

Some of the limitations of this assessment include:

- Although quite a few HR studies have been done in Mozambique, this study was limited by a multitude of individual programmes projections on staffing needs and a paucity of accurate, accessible and current data on many aspects of HRH and health workforce planning. In many instances different reports give contradictory statistics.
- Given the scope of work, time to carry out the assessment was a limitation. This was compounded by the wide range of stakeholders we needed to interview. We were however able to review a wide range of related studies and reports including the draft HRDP 2005 –2010.

We must add however, that we received excellent support from a wide range of stakeholders including senior MISAU staff.

### **3. HR IMPLICATIONS OF SCALING-UP HIV/AIDS SERVICES**

HIV/AIDS has significantly added to the disease burden in Mozambique. Mozambique is among the top 10 countries in the world with the highest number of people living with HIV/AIDS. Given the enormity of the problem and the equally huge resource constraints, the response of the health sector has been limited mainly to the provision of palliative care. However, given the rapid increase in international funding to support HIV prevention and treatment services, the situation is expected to change dramatically in the next few years. The envisaged rapid scale-up of HIV/AIDS services in Mozambique has significant implications on human resources for health. Some of the pertinent issues include:

#### **Delegation of service delivery to middle and lower level health cadres**

Although one of the goals of the HRDP 2001 - 2010 was to delegate more service delivery to middle and lower level health cadres, this is not happening in respect to delivery of HIV/AIDS services especially ART. An MISAU directive states that only doctors can prescribe ARVs. However, in one of the ART sites visited a medical technician was prescribing ARVs. The Mozambique Medical Association supported the idea of allowing medical technicians and even nurses to prescribe ARVs so long as they were properly trained and good referral mechanisms were in place. It will be difficult to scale up ART services to the level planned, if middle level cadres are not trained in ART delivery and authorized to prescribe ARVs. This is especially so in hard to reach provinces and districts that struggle to attract enough doctors. The first wave of training has mainly targeted doctors although there are plans to train other cadres. A study conducted by WHO on a number of ART sites in Africa found that 20% of the sites allowed clinical officers/medical technicians to initiate ART while 60% allowed clinical officers/medical technicians and nurses to prescribe ARVs once treatment had been initiated. It has to be noted that all the countries covered in this study - Uganda, Kenya and Zimbabwe have a less acute shortage of doctors compared to Mozambique. Delegation of pharmaceutical dispensing services is already happening in Day Hospitals where pharmacy technicians or nurses do most of the dispensing. However, it was also pointed out to us that some of the lower and middle level cadres had very low levels of basic education and had undergone very short clinical training. This background needs to be kept in mind when delegating clinical duties to lower level cadres.

#### **Model of ART care**

The proposed staffing norms for ART treatment centers (Day Hospitals) raise a number of concerns. One is that the model of care does not appear to take into consideration the fact that the personnel mix will be different for different sizes of Day Hospitals. The model also does not link the proposed structure to the number of patients to be treated.

**Table 2 - Proposed Staffing Norms for Day Hospitals**

Staff categories	No
Medical doctor	1
Medical technician	1
Counsellor	3
General staff nurse	3
Pharmacist	1
Data processing clerk	1
Receptionist	1

*Source: Draft Human Resource Development Plan, 2005 -2010*

It is important to define the roles of each proposed cadre and the envisaged patient flows. We also found that the current treatment centers that we visited are all utilizing significantly different models. The role and type of counselors to be used in ART sites is also vague. It is not clear whether the counseling services for patients on ART will be offered by full-time counselors, or by nurses with basic counseling skills or by PLWHA volunteers. Where counselors will be drawn from the community it is important to establish strong community linkages. Some of the day hospitals appear to have succeeded in doing this. It is important to clarify the treatment model before projections of the overall HR requirements for ART scale-up are worked out.

#### **Laboratory cadres**

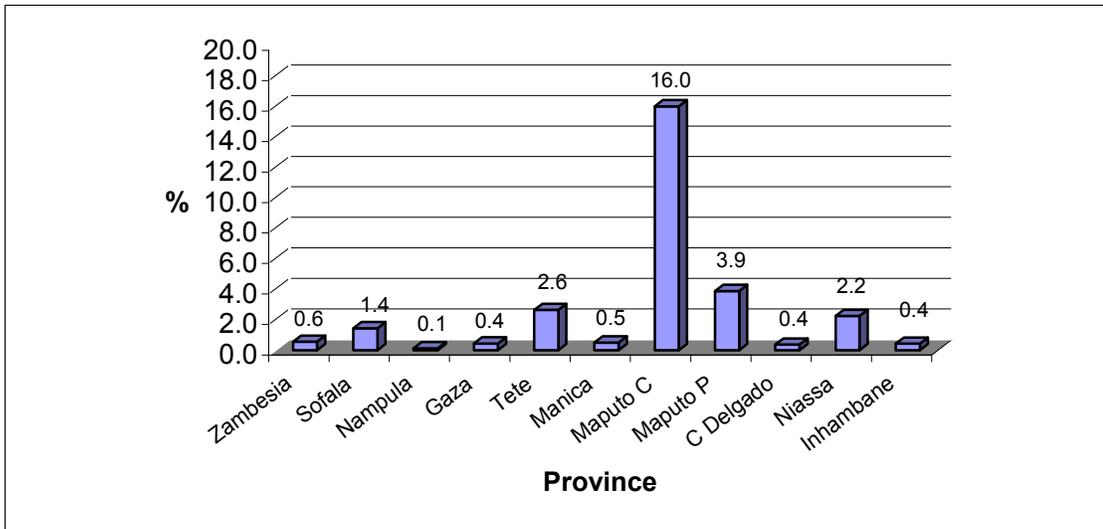
Both the HRDP 2005 –2010 and the National Strategic Plan to Combat STI, HIV and AIDS (PEN) have not determined the HR requirements of scaling up laboratory services in support of ART. Laboratory staff is not included in the staffing norms of an ART site.

#### **Treatment Targets**

As with many other African countries, the number of people accessing ARVs in Mozambique is quite low.

Mozambique is estimated to have 1.3 million adults and children living with HIV/AIDS – 2004 Report on the Global AIDS Epidemic, UNAIDS. If we assume that 15% of these individuals require ART, then approximately 200,000 people would require ART in Mozambique. According to the HIV/AIDS unit of the Ministry of Health, only 5797 people were accessing ART by November 2004. This means that only 2.9% of people who need ART currently have access. PEN 2004 – 2008 assumes that 20 –25% of HIV positive people require ART. If we use these assumptions, then the estimate for the proportion of people on ART falls to 1.8 to 2.4%. This compares with a figure of 9% and 18% for Kenya and Uganda respectively. The picture is even grimmer when one factors the huge regional disparities in ART access as shown in the table below.

**Graph 1 - % of People Needing ART That Have Access**



*Source: Computed from MISAU data – November 2004*

**Table 3 - Access to ART in Mozambique – Summary table**

PROVINCE	ADULT HIV PREVALENCE %	No. of PLWHAs	No. of people needing ART *	No. of people receiving ART **	% of eligible PLWHAs receiving ART	No. of doctors end 2003 ***	No of PLWHAs per doctor	No of operational ART sites **
Zambesia	15.4	318,308	63,661	352	0.55	49	6,496	1
Sofala	18.7	166,987	33,397	482	1.44	72	2,319	2
Nampula	7.9	159,147	31,829	38	0.12	55	2,894	2
Gaza	19.4	147,257	29,451	131	0.44	24	6,136	2
Tete	16.7	139,076	27,815	734	2.64	31	4,486	2
Manica	18.8	137,991	27,598	140	0.51	32	4,312	1
Maputo C	15.5	92,729	18,545	2,970	16.01	271	342	5
Maputo P	14.9	92,303	18,460	717	3.88	33	2,797	1
C Delgado	5	44,735	8,947	33	0.37	24	1,864	1
Niassa	5.9	32,521	6,504	146	2.24	22	1,478	1
Inhambane	7.9	63,158	12,631	54	0.43	34	1,858	2
<b>Total</b>	<b>13</b>	<b>1,394,212</b>	<b>278,842</b>	<b>5,797</b>	<b>2.08</b>	<b>647</b>	<b>2,155</b>	<b>20</b>

*Source: National Strategic plan to Combat STI, HIV and AIDS 2004 –2008(PEN) and MISAU documents*

\* Assumes 20% of PLWHAs require ART (This is based on PEN 2005 –2008 which estimates 20% –25% of PLWHAs require ARVs. WHO estimates are based on a figure of 15%)

\*\* November 2004 data from HIV/AIDS unit – MISAU

\*\*\* 2003 Annual HR report, MISAU

Not only are the numbers of people currently on ART very low, but also the projections for the number of people to be put on ART in outer years appear quite modest. The Health Sector HIV/AIDS Strategic Plan, 2004 – 2008 (PEN), estimates that 20% to 25% of PLWHAs in Mozambique require ART.

**Table 4 - Projection of number of people on ART (Scenario A)**

Year	2004	2005	2006	2007	2008
No. of people on ART	7924	20805	57954	96418	132280

*Source: National strategic Plan to Combat STI, HIV&AIDS (PEN)*

From the above data, the number of people accessing ART is unlikely to reach 50% of those eligible even by 2008 when the current Health Sector HIV/AIDS Strategic Plan ends. The HRDP 2005 – 2010 proposes scenarios B and C that cover even

fewer people. Whereas these low projections have been influenced by the enormous HR, infrastructural and other challenges that constrain ART scale-up in Mozambique, there is a need to review them given the level of international commitment and funding for scaling-up access to ART in resource poor settings. The current HR projections for scaling-up ART will obviously need to be adjusted if the treatment targets are reviewed.

### **Loss of public sector health staff to NGOs**

Scaling up of HIV/AIDS services and especially the launch of donor supported programs run by NGOs is aggravating the staffing crisis in the public sector as qualified staff leave to work for these programs either on part-time or fulltime basis. As these NGOs compete to attract qualified staff from a very limited pool, they have sparked off a salary spiral. Even some of the international NGOs feel that they are unable to compete and fear that the situation is running out of control. The loss of staff from one sector to another in itself may not be a problem. Indeed movement of staff to more efficient sectors could improve overall productivity and effectiveness. However, if this significantly escalates salary differentials, it is likely to lead to lower staff morale and productivity especially when NGOs operate within public sector facilities.

### **Recommendations:**

#### **Short-term**

1. The policy that currently limits the prescription of ARVs to medical doctors should be urgently reviewed. Medical technicians and nurses with requisite training and supportive supervision should be given authority to prescribe ARVs to new and continuing patients. If it is deemed necessary, this can be supported by the development of appropriate guidelines.
2. There is need to review the current ART model so as to ensure that projections of the HR requirements for scaling up ART that are used in the HRDP, 2005 – 2010, are realistic. The model should utilize the experience of various pilot programs that have been providing ART in Mozambique and be sensitive to the context of the Day Care facility. The model should also take into consideration the fact that ART centers will vary both in size and complexity.
3. To achieve the optimization of the ART model, conduct a rapid assessment of the functioning Day Hospitals to identify key variables and relationships (average number of patients (daily, weekly, monthly) average time spent per patient, most effective staff mix, volunteers roles, etc.
4. There is an urgent need to review the ART patient targets proposed in the Health Sector HIV/AIDS Strategic Plan, 2004 – 2008 (PEN). The numbers appear to be rather modest. This review should be done alongside other recommendations given in this section including the review of the ARV prescription policy and the ART model as they are obviously related.
5. An attempt should be made to narrow salary differentials between health staff paid by the government and those paid by NGOs especially where they work in the same ART center. Instead of compensating individual staff, supplemental remuneration could be distributed across all staff at facility level, thus enticing better quality care across the range of services offered.

**Long-term**

1. Develop a comprehensive plan for development partners – PEPFAR, GFTAM, etc. to support scaling up ART to more people than proposed in the current National Strategic plan to Combat STI, HIV and AIDS 2004 –2008(PEN)
2. Integrate the provision of ART and other HIV services such as PMCT within the existing health delivery system. A plan to ensure that this integration takes place in the next few years should be developed. Currently these programs are virtually vertical and lead to inefficient use of human and other resources.
3. More Day Hospitals to provide ART should be established in under-served provinces such as Nampula, Zambesia, Gaza, etc. so as to minimize disparities in ART access.

## 4. HEALTH WORKFORCE PLANNING

### Human Resource Development Plan (HRDP)

The Human Resource Development Plan (HRDP) that is developed by the Human Resource Department of MISAU, guides health workforce planning in Mozambique. The draft HRDP 2005 – 2010, is being reviewed and a final version is expected soon after feedback from key stakeholders is incorporated. Once the plan is issued, a detailed operational plan will be developed to support human resource development including training, recruitment, deployment and retention. It is also anticipated that the plan will be reviewed regularly during the plan period.

The draft HRDP 2005- 2010 identifies the country's key health priorities that include HIV/AIDS, Malaria, Maternal mortality, Infant mortality, childhood vaccination, TB, Leprosy and Cholera. The plan sets out the following strategic objectives:

1. Health personnel developed and distributed according to needs
2. Decentralize planning for basic courses
3. Evaluation of the roles and competencies of basic level staff and identification of development needs
4. Improve human resource management
5. Increase efficiency of administration personnel
6. Ensure gender equity in the health workforce
7. Minimize impact of HIV/AIDS on the health workforce
8. Ensure priority areas have sufficient and competent staff

The plan reviews the staffing requirements of health facilities at all levels. These are:

- Central (Referral) Hospitals
- Provincial Hospitals
- Rural Hospitals
- Health Centers

The plan has identified the training requirements for key cadres between 2006 – 2010. This is summarized in the table below:

**Table 5: HRDP Training Plan – 2006 to 2010**

<b>Cadre</b>	<b>Level</b>	<b>No. of new staff to be trained between 2006 - 2010</b>
Doctors	Specialists	129
	General	440
Nurses	Superior	30
	Specialized	142
	Mid-level	775
	Basic	400
Pharmacy	Various	497
Laboratory	Various	400
Medicine	Basic	540
	Medium	450

*Source: Draft HRDP 2005 -2010*

Development of the Human Resource Development Plan 2005 –2010

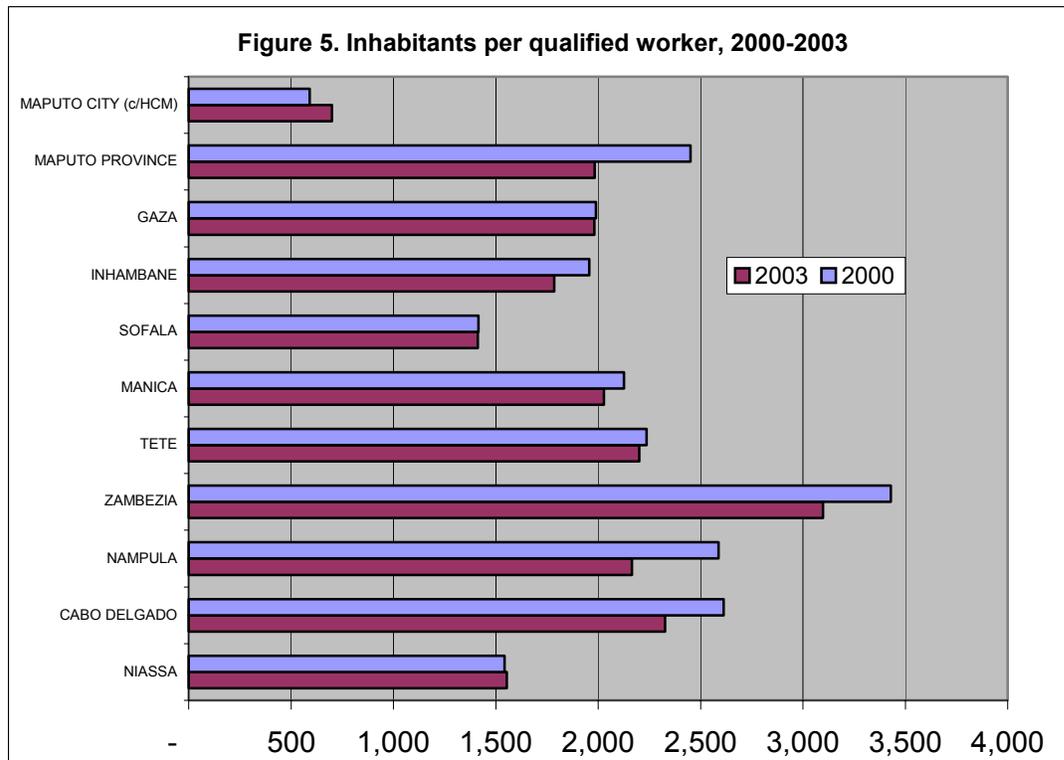
The HRDP 2005 –2010, was developed by MISAU advisors. The process also involved a visit to the provinces. The draft plan was also presented to various stakeholders and was also subjected to review by the HRD Working Group. Very useful comments have been made on the draft documents. We would like to add the following comments on both the document and the process:

- A key comment raised by one of the groups that reviewed the draft document is the importance of ensuring that recommendations on the enlargement of the health workforce and improved terms and conditions are in harmony with the plans of the Ministry of Finance and Planning. This issue needs to be proactively managed
- The process of developing and reviewing the HRDP needs to be more consultative and inclusive and in particular needs to involve provincial and district health administrators. It is appreciated that there was a rush to develop the draft HRDP. There is an opportunity to address the need for a more consultative and inclusive process when the operational plan is developed.
- The in-service section is very sketchy and more work is needed on the outputs, strategies and activities.
- There is need for greater clarity on key data for workforce planning. For example the plan should give a summary of staffing norms by cadre and region and identify any staffing gaps at the end of the plan period.
- The situation analysis and broad objectives of the plan are quite clear. However there is need to make the outputs and activities clearer and also identify key challenges and constraints.
- The private sector including FBOs and NGOs should be consulted and involved in the process of finalizing the HRDP.

## Health Workforce Distribution

The draft HRDP and other HR reports and studies, acknowledge the problem of unequal health workforce distribution. The problem of workforce distribution is shown in the table below.

**Graph 2: Health Workforce Distribution**



*Source: Draft HRDP 2005 -2010*

Urban centers, especially Maputo, have the largest percentage of superior level health cadres, with 49%, of doctors (specialists and general medicine) in the country. Rural health facilities on the other hand are mainly served by elementary and basic level cadres. Rural health facilities are unpopular with health staff due to lack of access to facilities and amenities including housing, better schools for children and limited opportunities for professional development and private clinical practice.

The HRDP 2005 –2010, proposes some solutions for the workforce distribution imbalance that include:

- Increase the rate of special bonus for staff posted to rural areas
- Provide housing with good amenities in disadvantaged areas
- Provide scholarships for children of health staff posted in rural areas

## **HIV/AIDS and Health Workforce planning**

The government of Mozambique is keenly aware that the HIV/AIDS epidemic is compounding the country's HRH problems by significantly increasing demand for health services while negatively impacting on the supply of health workers and lowering productivity. The current Human Resources Development Plan takes stock of the current situation, proposes solutions to transform and improve the health workforce and assesses the personnel and training needs. It is a well thought document that draws on all the available information.

As with other HIV/AIDS impacted countries, the epidemic has added a new and distorting variable in the planning of human resources for the health sector. As mentioned elsewhere the number of people living with HIV/AIDS is estimated to be 1.3 million, and although this number seems modest in the context of the epidemics in sub-Saharan Africa, the weight of its impact, in a country which has recently emerged from a war and serious natural disasters, is very heavy. At the moment, less than 3% of the people requiring ARTs are receiving treatment and the projected numbers for the next four years are quite sober.

The largest challenge, thus, for Mozambique is the planning and implementing of a successful, large-scale, long-term human resource plan which addresses, in a systemic way, the various processes and systems needed to plan, recruit, hire, deploy, train and retain new and old health staff, and the parallel implementation of short-term solutions to solve immediate problems. As with many of its neighbors, Mozambique is faced with the task of scaling up HIV/AIDS services without negatively impacting the rest of the health services, within the context of a health system that is currently partly relying on foreign doctors.

The HIV/AIDS national strategy (PEN) addresses the human resources training and development needs. It is, however, not specific about precisely which cadres need to be strengthened. The Day Care Model (DCM) adopted by the country to address the challenge of ART treatment is a key element in the HR planning. Though the model espoused by the MISAU sets the staff norms for these DCMs, there is little standardization in the currently functioning DCMs.

Given the number of ART sites and patients targets established for years 2005-2008, the draft HRDP calculates the medical staff needs as follows:

**Table 6: Extrapolation of staff numbers needing to be involved in ART based on 2004 coverage**

Staff categories	Years				
	2004	2005	2006	2007	2008
Medical doctor	21	83	230	383	526
Medical technician	21	83	230	383	526
Counsellor	63	248	691	1150	1577
General staff nurse	63	248	691	1150	1577
Pharmacist	21	83	230	383	526
Data processing	21	83	230	383	526
Receptionist	21	83	230	383	526
Number of sites	17	24	112	112	129
Patient coverage	5284	20805	57954	96418	132280

*Source: Draft HRDP 2005 - 2010.*

As discussed earlier, these projections need to be studied carefully and the benefits of the experience curve, delegation of service delivery to lower cadres and even community groups, standardization of services etc factored in. One of the challenges for estimating the exact number of staff, lies in the complexities emanating from the model of care chosen. If, for example, only medical doctors are allowed to prescribe ARVs, then all patients have to at least once see a medical doctor. If the prescription authorization gets extended through skills transfer, training and certification, the time requirements and thus the total numbers of specific staff would change. Table 7, below, models the possible ranges of solutions and staff numbers to be created/identified. It should be borne in mind, however, that changes in treatment flows can have drastic effects. For example, if the treatment time for a medical officer gets reduced to around 15 minutes per patient, or if follow-up by a doctor is subject to a triage nurse determining the flow, then the entire spectrum changes. In the case that the treatment time is reduced to 15 minutes for a doctor, only half of the calculated workforce will be needed. If, in addition, triage directs not all but only serious cases towards the medical work station, the doctor time needed may go down further, particularly once the 'treatment hump' of initial, very serious cases (CD4 values very much below the 200 mark) has been overcome.

The tables below illustrate the impact of changing variables such as the average annual number of visits to an ART center and the use of part-time or fulltime staff on the required health workforce. The tables demonstrate the importance of ensuring that there is a good understanding of patient workflows before determining the number of health staff required to manage ART centres.

**Table 7: Staff categories and model for full and part time ART providers per 10,000 patients**

Staff type	Full time working hours: 1,600 minus 20%	Average encounter time per visit in minutes	Scenario A Treatment capacity @ 7 visits per year		Scenario B Treatment capacity @ 12 visits per year		# of staff needed per 10,000 patients in a full time basis		Part time working: 20% of the time treating HIV/ART patients	
			A	B	A	B	A	B	A	B
Medical doctor	1280	30	366	213	27	47	137	234		
Medical technician	1280	30	366	213	27	47	137	234		
Counselor	1280	45	244	142	41	70	205	352		
General staff nurse	1280	30	366	213	27	47	137	234		
Pharmacist	1280	15	731	427	14	23	68	117		
Data processing	1280	10	1,097	640	9	16	46	78		
Receptionist	1280	10	1,097	640	9	16	46	78		

Assumption: 200 working days @ 8hrs per day

When these numbers are now associated to the patient targets of Table 6, the staff needs look as follows:

**Table 8. Staff numbers needed to be involved in ART based on Table 7 calculations (Scenarios A and B, full time basis)**

Staff categories	Years									
	2004		2005		2006		2007		2008	
	A	B	A	B	A	B	A	B	A	B
Medical doctor	14	25	56	98	156	272	260	453	357	622
Medical technician	14	25	56	98	156	272	260	453	357	622
Counselor	22	37	85	146	238	406	395	675	542	926
General staff nurse	14	25	56	98	156	272	260	453	357	622
Pharmacist	7	12	29	48	81	133	135	222	185	304
Data processing	5	8	19	33	52	93	87	154	119	212
Receptionist	5	8	19	33	52	93	87	154	119	212
<b>Total staff needed</b>	<b>81</b>	<b>140</b>	<b>320</b>	<b>554</b>	<b>891</b>	<b>1541</b>	<b>1484</b>	<b>2564</b>	<b>2036</b>	<b>3520</b>
<b>Number of sites</b>	<b>17</b>		<b>24</b>		<b>112</b>		<b>112</b>		<b>129</b>	
<b>Patient coverage</b>	<b>5284</b>		<b>20805</b>		<b>57954</b>		<b>96418</b>		<b>132280</b>	

**Table 9. Staff numbers needed to be involved in ART based on Table 7 calculations (Scenarios A and B, part time, 20% basis)**

Staff categories	Years									
	2004		2005		2006		2007		2008	
	A	B	A	B	A	B	A	B	A	B
Medical doctor	72	134	285	487	794	1356	1321	2256	1812	3095
Medical technician	72	134	285	487	794	1356	1321	2256	1812	3095
Counsellor	108	186	427	732	1188	2040	1977	3394	2712	4656
General staff nurse	72	134	285	487	794	1356	1321	2256	1812	3095
Pharmacist	36	62	141	243	394	678	656	1128	900	1548
Data processing	24	41	96	162	267	452	444	752	608	1032
Receptionist	24	41	96	162	267	452	444	752	608	1032
<b>Total staff needed</b>	<b>408</b>	<b>732</b>	<b>1615</b>	<b>3160</b>	<b>4498</b>	<b>7690</b>	<b>7484</b>	<b>12794</b>	<b>10264</b>	<b>17553</b>
<b>Number of sites</b>	<b>17</b>		<b>24</b>		<b>112</b>		<b>112</b>		<b>129</b>	
<b>Patient coverage</b>	<b>5284</b>		<b>20805</b>		<b>57954</b>		<b>96418</b>		<b>132280</b>	

As mentioned earlier, any of these extrapolations need to be continuously adjusted as training, experience and efficiency of teams improve and treatment times decrease and as the tasks assigned to specific cadres shift, etc. Regardless of what model is chosen the urgent task of MISAU is to plan, train, hire and manage increasingly larger numbers of health personnel for the next four years.

The table below shows the numbers of health personnel for 2004 (June 30th) and can be used to give an indication of the gaps to be filled in order to meet the ART goals set for 2008. Only those cadres for whom there is a clear correlation with the ones used in the model were selected for Table 9.

**Table 10: Health Personnel by career, 2004 (June 30th). Simplified. Source: SIP**

Careers	2004	%	Numerical increase from 2000	% increase from 2000
<b>Doctors</b>	480	2,6	56	13,2
<b>Nursing</b>	4025	21,5	361	9,9
<b>Maternal/Child Health</b>	2380	12,7	966	68,3
<b>Administration, economy, etc.**</b>	1457	7,8	184	14,5
<b>Medicine</b>	1169	6,3	349	42,6
<b>Preventive medicine</b>	495	2,6	29	6,2
<b>Lab and biochemical</b>	677	3,6	24	3,7
<b>Pharmacy</b>	530	2,8	111	26,5
<b>Other qualified personnel</b>	774	4,1	85	12,3
<b>Service and Auxiliary Agents ***</b>	6710	35,9	1193	21,6
<b>Job technicians, blue collar, drivers</b>	738	3,9	151	25,7
<b>Totals</b>	<b>19435</b>	<b>100,0</b>	<b>3358</b>	<b>21,9</b>

*Source: Draft HRDP 2005 - 2010.*

\*\* Includes 42 categories of staff with administrative tasks.

\*\*\* In 2000 in the medicine category. \*\*\* also includes unqualified personnel

N.B.: ophthalmology, psychiatry, psychology, surgery fit the medicine career. Instrumentation and anesthesia fit the nursing career. Other qualified personnel: professional physiotherapy technicians, estomatology, radiology, nutrition, biology, and veterinary chemistry.

There are actually around 700 doctors working in Mozambique but Table 10 excludes expatriate doctors and those that are directly contracted by the Central Hospital of Maputo. Table 10 also does not highlight the differences by area; Maputo, for example has 18.4 % of the total number of health personnel and 32.8 % of the licensed staff. Workforce planning for ART needs to consider the regional distribution of both the HIV burden and the health workforce.

## **Recruitment and Hiring**

Given that the health sector in Mozambique is dominated by the public sector, most of the hiring is done by MISAU and the provincial directorates (the latter ones do the hiring of the lower level cadres). Doctors' contracts are coordinated with MISAU HR, medical universities and training centers; it is the responsibility of the DAM directorate and the HR central office to do this. The actual process for hiring doctors is reported as "easier" than other cadres, because this is a priority for

the country. Nurse hiring, on the other hand, could take 1-2 years, and according to some of the interviewees, up to 1000 nurses are unemployed..

Health facilities have little control in hiring. Under the current scheme, facilities that experience shortages due to rapid increase in demand, cannot respond, for example, by turning to the “market” of the unemployed, as direct hiring is not envisaged. Exceptions occur, however; some hospitals such as Maputo Central, for example, have funds that they control, derived from other income of the hospital (fees, etc.), and which is often used for funding some positions that they urgently need to fill.

Though NGOs are not yet major players within the health system of the country, most of their health activities occur within the public sector facilities. Their hiring, on the other hand is done outside the system, i.e. they are not integrated into the MISAU process.

The difference of salaries between NGO personnel, especially NGOs’ staff working within the public sector, expatriates and staff working within special projects funded by donors was a constant theme that appeared in many of the interviews. Typical complains relate to the salary differences between staff within a cadre, often performing the same duties; there is the perception that NGO staff earns better salaries than public sector personnel. These differences are even more exacerbated when the comparison is done against expatriate doctors, although these differences are less meaningful for short-term expatriates who often maintain financial obligations in their home countries.

The impact of low salaries is felt in various areas; many health staff hold a second job, to supplement their salaries and the work climate and job satisfaction are adversely impacted. It was reported that many health graduates eventually opt out of the health sector in search of better paid jobs in other fields. The length of the search and hiring process is, at times, too long and candidates get discouraged, and get other jobs before the hiring procedure is finalized. If they are not based in Maputo, for example, yet have started working, they do not get paid until the formal terms are finalized, which creates economic stress and leads some to leaving.

### **HRD Working Group**

An HRD working Group was set up in 2004 as part of the GT – SWAP. The objectives of this group include:

- Create an environment where it is possible to discuss different strategies with the aim of a harmonized approach amongst the developing partners
- Engage in a coordinated manner with the MISAU HRD working group
- Provide constructive and consolidated comments the new HRD strategy
- Follow- up on progress in implementing the HRD operational plan.

The detailed TORs of this group are appended to this report – refer appendix 4.

The HRD working group can contribute immensely to strengthening HRH especially by focusing on the finalization of the HRDP –2005 –2010 and ensuring that it is regularly reviewed and that a comprehensive operational plan is developed and supported.

**Recommendations:**

**Short term:**

1. Clarify and coordinate the roles of the various MISAU directorates (Human Resources, Epidemiology, Medical Services) in workforce planning.
2. Use the HR working group to support coordination of all the HR planning; assign areas of responsibility to CAs, donors, MISAU, AIDS Committee, NGOs and professional associations.
3. Ensure that the draft HRDP 2005 – 2010 is finalized and that comments made by various reviewers and in this report are followed up.
4. Establish a donor-based bridging fund to pay for candidates' salaries for the short period between the time they have been selected and start working until the moment they receive their final terms or contract, to alleviate their economic stress. Alternatively, develop a fast-track hiring system.
5. Given that the number of available doctors for 2006 will fall short of the goal, develop a plan to hire more foreign doctors or devise a model that makes more use of medical technician and other cadres within the Day Hospital model; devise a training plan for those cadres, for these new specialized activities. Carry out a similar exercise to clearly assess the actual stock of nurses and counselors versus the projected numbers for 2006. Create, perhaps within the HR working group, a special committee to work with these issues, where representatives of the medical, medical technicians and nurses associations (at a minimum) are present.
6. Draw a master plan for the training and expanded use of volunteers, PLWHA, NGOS, and communities to expand the system and strengthen the expansion of the HIV/AIDS scale up. For instance, donors could fund provincial coordinators to oversee and manage the various home-based care, volunteer and community efforts sponsored by the NGOs all over the country.
7. Urgently put in place plans for recruiting additional staff required to run ART sites.

**Long term:**

1. Continue the integration of health cadres and conduct an assessment of the types of health cadres that best fit the needs of Mozambique based on the burden of disease of the country, and the projections to be adopted by MISAU once the HR plan is finalized.
2. Start designing and building up a human resource information system to streamline and improve the management of the HR system, specifically planning, hiring and deployment. Start by improving the quality of the information by offering training in statistics, survey methods, etc. Create a database that includes actual personnel by area (including losses and their causes), by facility, by cadre, together with training institutions' outputs and in service training. Transform the data into information through reports (shortages by cadre, by region, needs vs. training, etc) that can then be used for planning, for financial projections, for

donor negotiations, etc. Standardize and clearly state the variables and classifications to be used in the projections for health personnel (current norms, if applicable), and for the adopted day Hospital models for ART treatment.

3. It is recommended that a survey of the already operating Day Hospitals facilities which includes the exact number of staff by cadre, the percentage of time spent in the day hospital, the average amount of time that each of them spends with patients, the number of patients by day, by week and by month, the frequency visits, etc. be conducted in order to project accordingly. Develop a dynamic projection model that can be adjusted as the treatment targets, treatment regimes, the staff numbers and the efficiency of the teams changes.
4. Use the HR working group to support coordination of the HR 2005-2010 Plan; create technical clusters led by CAs, donors, MISAU, AIDS Committee, NGOs or professional associations to monitor, champion and implement specific areas of interest (management, HR systems, partnerships, policy, etc) within the plan.
5. Implement proposals made by the HRDP to minimize the problem of unequal workforce distribution.

## **5. HUMAN RESOURCES MANAGEMENT (HRM)**

### **The HR function**

Human Resource Management (HRM) is a critical requirement for health service delivery. Effective and modernized HRM systems can contribute to adequate and timely staffing, staff retention, teamwork and good performance. Indeed, HRM is the foundation on which an efficient, effective and robust health system should be built. In Mozambique, the HR function at provincial and health facility level is very weak, understaffed and in urgent need of strengthening. The HR department at the MISAU, HQ has only an advisory role in respect to workforce planning with the final decisions resting mainly with the Ministry of Planning and Finance and the Ministry of State Administration. At Beira Central Hospital, the visit found an HR department that is grossly understaffed. The entire department comprises of only 3 staff that provide HR services to an institution with about 1000 employees. All the HR records are manual and although the department has been provided with a computer, none of the HR staff has been trained on its use. The 3 staff are all squeezed into one room which makes it difficult for them to do their job including handling confidential matters. The HR staff are all relatively junior and have a limited role in workforce planning and in the management of senior staff including doctors. The HR staff in this hospital have received no training in HR or administration in the last 8 years. The staff however were doing a good job under difficult circumstances and the HR records were meticulous and up to date.

### **The administration function**

It was reported that qualified financial and administration managers are in short supply. The focus of increasing the quantity and quality of the health workforce has hitherto been on clinical staff. However, weaknesses in administration and financial functions are likely to be a major contributor to problems with health service delivery. In particular, as funding especially for HIV/AIDS programs increases exponentially, there will be major fiduciary and absorptive capacity challenges if these functions are not strengthened. It has also been often the case that administrators are neither consulted nor involved in programs such as the ART scale-up. The weaknesses discussed here have a bearing on HRM as the administration department plays a large HR role.

### **Motivation**

The general level of motivation of the health workforce is very low. This problem is not unique to Mozambique as it bedevils the public sector in many African countries. The problem has been recognized in many HRH reviews carried out in Mozambique in the last few years. Most of these reports have in particular highlighted grievances revolving around the remuneration and benefits package for health workers. Issues around the pay package are real and need to be addressed. Many health staff for example complained that although they qualified for promotion, this had not happened for years due to budgetary constraints. However, the softer issues of motivation and its link to the work climate have received scanty attention. The issue of motivation among most of the senior administrators we spoke to is seen as arising almost exclusively from low public sector wages. The contribution of poor supervision, lack of recognition, and a generally poor work climate is largely unappreciated by most health sector administrators. However most staff we spoke to, especially in the middle and lower ranks felt unappreciated and unvalued. For example staff at Maputo Central Hospital reported that in the past, there was an annual awards scheme for exemplary performers. This scheme had long died. Given the fact that macro-economic

constraints including the MTEF and LTEF provide health administrators with little room for significant wage rises, it becomes even more imperative to ensure that there is a focus on all the other motivation levers. Although these approaches call for a culture change and adoption of new management styles, they are relatively inexpensive.

### **Protective equipment and supplies**

A major observation of this HCD assessment is a serious shortage of protective equipment and other supplies. Most critical is the acute shortage of gloves, needles and syringes. This problem has been reported by other MISAU surveys although it has been viewed primarily as an infection control concern. During our visit, lack of protective equipment and supplies was repeatedly stated as a contributor to low workforce morale. The problem affects all health facilities from referral hospitals to the smaller health units. At the Day Hospital (ART center) in the Maputo Central Hospital, staff complained of a critical shortage of supplies. At the time of the visit, the center was using flimsy polythene gloves because disposable latex gloves were out of stock. A common sight in most of the facilities we visited were cloth lines full of washed “disposable” gloves hang out to dry for re-use. In one of the maternity centers, needles and syringes were sterilized in an oven as the autoclave had long broken down. The syringes had become brittle and discolored as a result of repeated re-sterilization. There is an urgent need to bring to an end this state of affairs where even ART treatment sites do not provide simple and inexpensive protective equipment such as disposable gloves.

### **Recommendations:**

#### **Short-term**

5. The HR function at the MISAU head office and in the provinces and districts requires to be strengthened by:
  - Providing training to HR managers
  - Creating fora in which HR staff can exchange ideas and share best practice
  - Provide IT support and training to HR staff
  - Recruit more HR staff
  
2. Disposable gloves and sufficient supplies should be provided to all health staff that needs them. In particular all health facilities should have sufficient and regular supply of disposable needles and syringes. A robust logistics system to ensure that these supplies are available in all health systems should be developed.
  
3. Develop innovative, non-monetary incentive schemes to reward and recognize good performers. These could include:
  - Award schemes
  - Staff parties
  - Staff meetings
  
4. Ensure that management training provided to health administrators covers human resource management.

#### **Long-term**

1. Elevate the HR function both at MISAU, HQ and at provincial and facility level so as to give HR staff the requisite authority to discharge the HR mandate including workforce planning.
2. Provide budgetary support to facilitate promotions of eligible staff.
3. Strengthen and harmonize the Personnel Information System (SIP)
4. Review and strengthen the staff performance appraisal system
5. Offer competitive and cost of living linked wages and benefits for health workers

## 6. TRAINING OF HEALTH WORKERS

### Training Overview

HR situation analysis reports and planning documents such as the Health Sector Strategic Plan (PESS) and the Human Resources Development Plan have all highlighted the dire shortage of qualified, competent and motivated health staff. The HRDP has raised concerns on the over reliance of the health system on staff with elementary training and proposes that the focus shifts to production of middle level cadre. HIV/AIDS has further compounded the training needs of the health sector. Calculations of the required staffing levels and additional workforce vary throughout several documents. A bold, all-out attack was proposed in the 'National Strategic Plan to Combat STI/HIV/AIDS (PEN). It proposes, inter alia, the following measures to be taken during 2003 and 2008:

- Training of at least 1250 health professionals (nurses, medical, pharmacy, and laboratory technicians)
- Replacement of at least 750 staff likely to die from AIDS during that period
- Training of an additional workforce of at least 3250 professionals to cope with the increased workload due to HIV/AIDS
- Training of all health professionals in HIV/AIDS in their respective capacity.

### In-Service Training

The MISAU has an in-service training department whose mandate is to coordinate, support and evaluate in-service health training and develop supportive policies. However the department faces enormous challenges. These include:

- The department lacks staff to carry out its mandate. The department is supposed to have 5 staff but in the last year, the department has lost 4 staff members to other programs mainly due the fact that they were paid more in these programs that attract salary incentives. The department currently has only one member of staff who is also the head of the department. These staffing problems are also experienced in respect to DPS in-service training staff. The department is unable to fill the vacancies, as qualified staff prefer to work in programs that attract salary incentives.
- The department does not have a budget to carry out its activities. It relies fully on the budgets of the various programs such as MCH that it coordinates
- The department has very limited involvement in training programs outside the public sector.
- The department is largely uninvolved with ART in-service training and including the development of the training strategies and plans.

The above problems have largely paralyzed the in-service training department. One of the core objectives of the draft HRDP 2005 –2010, is skill upgrading for existing staff. Given the aforementioned problems within the in-service training department, we already have in place a recipe for a major disconnect between policy formulation and implementation.

### **Regional Center for Health Development (CRDS)**

The above center located in the outskirts of Maputo has excellent facilities especially for short residential courses. The center has accommodation, catering and teaching facilities that are well kept and maintained. The management came across as competent and committed. It also has a separate wing for accommodating resource people. The center can accommodate up to 80 trainees. The center currently offers 3-month courses in Epidemiology, health management and health education. The students are mainly drawn from Mozambique but they get a few students from other Portuguese and Spanish speaking African countries. They also have the capacity to run programs in the provinces and districts. The center is operating at about 30% of its capacity. The center faces an acute shortage of academic staff and currently has only 2 such staff including the institute's director. The center is unable to recruit qualified staff as they have no donors to provide salary incentives. They currently depend on external resource people to run their programs. They maintain a database of these resource people. The resource center is poorly equipped and in dire need of textbooks and online materials. The center has entered into collaboration with Brazil to develop graduate and post-graduate programs

### **Management Training**

When faced with diminishing resources, increasing work demands and major health challenges such as HIV/AIDS, good management is a critical factor in gaining the most value in health services. The health crisis facing Mozambique and other developing countries has both management and clinical dimensions. Training in the health sector has almost exclusively focused on conferring clinical skills. In the absence of individuals and teams with requisite management expertise, many health programs will at best have modest success. It is critical to ensure that training extends to non-clinical staff such administration, HR and financial managers. In addition, key clinical staff should be provided with management skills. It was also noted that some departments had been provided with computers but due to lack of IT training the computers remained unused or underutilized. During a visit to Beira Central Hospital, the HR department complained about the lack of training opportunities. For example, although there is an annual staff performance appraisal system in place, no training had been provided on how to conduct appraisals. As a result, the appraisal system is weak and has not served as a tool to support HR decision-making.

### **Pre-Service Training**

The draft HRDP –2005 –2010 has ambitious goals of additional health workers that need to be trained. Additional health workers are needed to grow the stock of the health workforce even as attrition levels increase rapidly driven by retirement, AIDS related mortality and departure of staff from the public to the private sector. The HRDP also calls for acceleration in the training of middle level cadres. There have also been concerns about the quality of graduates of the major health training institutions. It was also observed that most of the major training institutions have huge capacity constraints arising from limitations in infrastructure, lack of adequate teaching staff and budgets. This is illustrated in the table below from the HRDP 2005 – 2010.

**Table 11. Training institutions and capacity, 2004**

Region	Institution	Teaching rooms	Capacity of teaching rooms	Boarding capacity	Multidisciplinary laboratory	Technical teaching room	Library
North	ICS Nampula	9	270	150	Being established	Established	Established
	CFS Monapo	1	30	30	Not available	Being established	Established
	CFS Pemba	4	120	72	Not available	Being established	Established
	CFS Montepuez	1	30	24	Not available	Not available	Being established
	CFS Lichinga	2	60	59	Being established	Being established	Established
	<b>Subtotal</b>	<b>17</b>	<b>510</b>	<b>335</b>			
Center	ICS Beira	10	300	158	Implementado	Being established	Established
	CFS Nhamatanda	2	60	64	Not available	Being established	Being established
	ICS Quelimane	6	180	87	Not available	Being established	Established
	CFS Mocuba	2	60	60	Not available	Established	Established
	CFS Chimoio	5	150	176	Implementado	Being established	Established
	CFS Tete	5	150	100	Implementado	Being established	Established
	<b>Subtotal</b>	<b>30</b>	<b>900</b>	<b>645</b>			
South	ICS Maputo	14	350	280	Established	Established	Established
	CFS Chicumbane	3	90	103	Being established	Being established	Established
	CFS Inhambane	4	120	64	Established	Being established	Established
	CFS Massinga	2	60	12	Not available	Not available	Being established
	CFS Chicuque	2	60	64	Not available	Not available	Established
	<b>Subtotal</b>	<b>25</b>	<b>680</b>	<b>523</b>			
<b>TOTAL</b>		<b>72</b>	<b>2,090</b>	<b>1,503</b>			

- Eduardo Mondlane University – Faculty of Medicine

The faculty has an annual intake of 100 students. For many years, the completion rates have been very low with about 20 medical students or less graduating each year. However this has now gone up considerably and in 2004 about 50 medical students will graduate and the number is expected to rise to 100 in outer years. This higher level of output combined with the output from the Catholic University should go a long way in reducing the doctor shortage crisis. The University has also reduced the duration of the medical course from 6 years to 5 years and this should also increase the supply of medical doctors. The challenge for the university is to ensure that the shortening of the training period and the increased completion rates are not at the expense of the quality of the doctors that the institution produces. This is particularly critical as the faculty faces a serious shortage of teaching staff. It was also reported that due to low salaries most members of the faculty spend a lot of time outside the faculty doing other work to supplement their incomes. The library was reported to be very poorly equipped. The university also has capacity to offer post-graduate courses in areas such as HIV/AIDS and epidemiology but to do this, the university requires additional funding from donors. The faculty can also offer in-service courses.

Catholic University – Beira

A promising development is the setting up of a private university to train doctors. The university which was set up in 2000, has 160 students and the first batch of about 20 doctors is expected to graduate in 2007. The number of graduating students is expected to double in later years. HIV/AIDS has been incorporated in a number of teaching modules. The university plans to start an ART center which should also provide their students with practical ART skills.

### Maputo Institute of Health Sciences

Maputo Institute of Health Sciences is the major training institute for mid-level health cadres including those with specialization qualifications.

### Post Graduate Courses

Eduardo Mondlane University offers a 2-year masters program in public health. No other post graduate course is available in Mozambique. The ministry of health sponsors doctors to post graduate courses offered outside the country.

### Beira Institute of Health Sciences

The institute trains cadres for basic and medium levels (mostly medium), and beginning this year has added another specialization: pedagogues, which they hope to turn into professors for the Institute. They have 9 initial courses to form technicians and agents in anesthesia, pharmacy, radiology, ESME, instrumentation, laboratory, odontology, nursing and preventive medicine agents. Most popular choices: medical technicians and odontology. The courses have incorporated HIV/AIDS in their curriculum, and the teachers have been trained in HIV/AIDS. Currently the institute has around 400 students. There are two graduations per year, one in June and one in December.

The institute works in coordination with MISAU and three months before graduation students fill special forms with education, date of graduation, and choices for deployment information. The form is sent to MISAU, which does the deployment. According to the Director of the Pedagogy Department there is no unemployment: “when they get out, they all get jobs”. Placing of students is currently a pretty smooth process. The number of students has been increasing and this year most of the groups have almost doubled and they are running into space and equipment shortages.

### **Review of pre-service curricula**

A consultant has reviewed the curricula for all pre-service health courses offered by the Ministry of Health. Hopefully, the curricula will be approved and rolled out to all the medical colleges. However, for this process to succeed there will be a need to provide HIV/AIDS training to all the tutors that work in these medical colleges. For example, tutors at the Health Sciences Training Institute in Maputo have received no training in ART. However most of the health colleges we visited were offering some HIV/AIDS courses but without the support of a curriculum. At the Health Sciences Training Institute, Maputo, 30 hours of HIV/AIDS teaching have been added to all courses offered. HIV/AIDS is integrated within a number of modules that make up the curriculum of the Catholic University medical course. With the reduction of the length of the medical course in the Eduardo Mondlane, Faculty of Medicine from 6 to 5 years, fears were expressed that HIV/AIDS may not be adequately addressed. An individual involved in the curricula development process was of the view that the Ministry of Health has been too slow in rolling out HIV/AIDS training, and too much time is spent developing materials and planning at the expense of speedy implementation of programs.

### **Library and audio-visual services**

Most institutions providing pre-service and in-service training are in dire need of modern library services. Most of the libraries are extremely small and stock largely out of date books and periodicals. These libraries also urgently require the

introduction and/or expansion of online services. This would also give these institutions the capacity to offer distant learning courses. These institutions also lack modern audio-visual equipment including LCD projectors.

## **Recommendations:**

### **Short-term**

1. Strengthen the in-service training department at the MISAU, HQ and in the provinces. This should be done by providing funds for hiring additional staff, updating curricula, supporting production of training materials and running of courses.
2. Roll out in-service training programs to support provision of HIV/AIDS services including ART. Training should be extended to middle level cadres including nurses, midwives, medical technicians, laboratory staff, pharmacy technicians etc
3. Train all tutors of institutes of health sciences on HIV/AIDS including ART.
4. Expand, modernize and re-equip libraries of pre-service health training institutions. This should include installation of online services.
5. Support the revision and introduction of HIV/AIDS inclusive curriculum for pre-service health institutes.
6. Systematize in-service training; fund an organization (perhaps CRDS) to coordinate all in-service training, and maintain a database of all courses, schedules trainers, and trainees. This “clearing house” of training could then identify unsatisfied needs, match trainers with request and design, yearly, an in-service training plan for the public sector staff.
7. Build capacity of existing pre-service institutions to provide in-service courses including distant learning programs.
8. Provide IT and audio-visual equipment to support teaching in pre-service and in-service training institutions. This should include laptops and LCD projectors.
9. Strengthen training institutions by arranging “twinning” with established universities/health institutes in the developed countries.
10. Develop a comprehensive and innovative leadership program for top and middle level health administrators. The program should focus on creating strong management teams and should have off the job and on the job elements

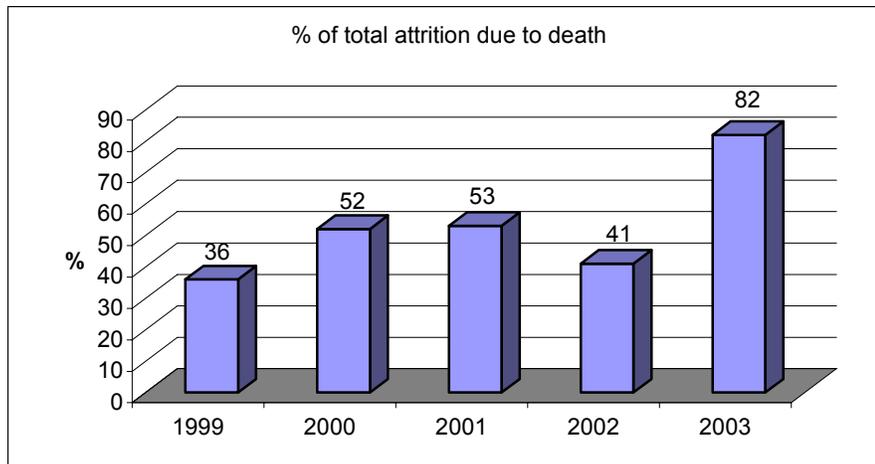
### **Long-term**

1. Integrate all in-service training including ART training in the in-service training department. Most of the training is currently done by vertical programs.
2. Support the strengthening of CRDS by providing funding for teaching staff and scholarships. CRDS is uniquely positioned to provide a wide range of short residential courses.
3. Increase the capacity of pre-service health training institutions by improving infrastructure and expanding faculty. This expansion should also be done in away which addresses the unequal distribution of the health workforce.
4. Establish a system of monitoring and assuring the quality of graduates of various health training institutions.
5. Support local medical schools to offer post-graduate programs in-line with the country’s health priorities.
6. Incorporate management training in some of the pre-service courses.

## 7. IMPACT OF HIV/AIDS ON THE HEALTH WORKFORCE

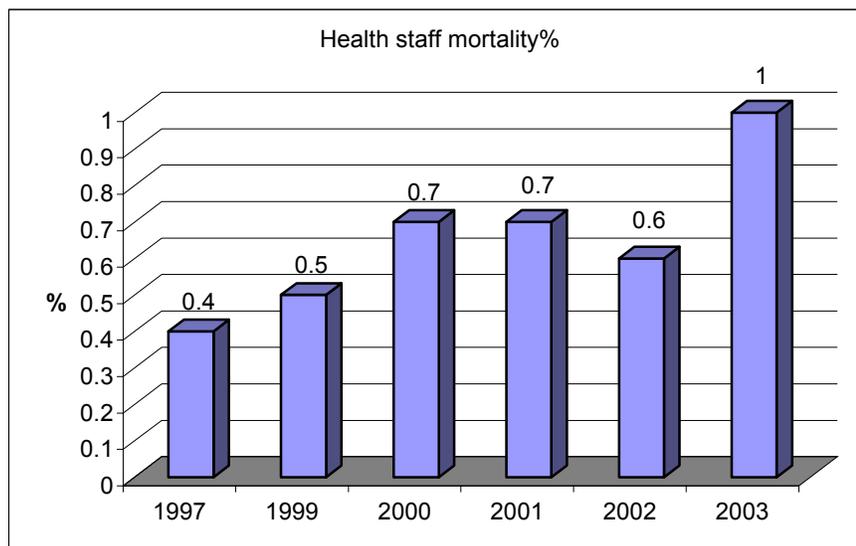
There is a lot of indirect evidence that HIV/AIDS is having a significant and negative impact on the health workforce. There has been a dramatic rise in health workforce mortality, a trend that is almost certainly attributable to HIV/AIDS. The contribution of death to total attrition of MISAU staff has also been on the increase. This is shown in the tables below:

**Graph 3: Attrition due to death**



Source: HRDP, 2005 - 2010

**Graph 4: Health staff mortality**



Source: Computed from HRDP, 2005 - 2010

A study conducted by MISAU, on the impact of HIV/AIDS on the health workforce estimates that 17% of NHS staff is HIV positive. The draft HRDP 2005 – 2010 assumes an AIDS associated attrition within the NHS of about 1%. However, information on the quantitative and qualitative dimensions of the HIV/AIDS problem within the NHS remains scanty and appears insufficient to guide decision-making. But without doubt, HIV/AIDS has and will continue to negatively impact on the health workers as they fall sick, die and also care for and attend funerals of relatives. The impact of HIV/AIDS is further compounded by regional, gender, age and cadre prevalence disparities. The central region is estimated to account for nearly 60% of all HIV infected health workers.

In 2003, mortality from all causes at Maputo Central Hospital was 1%. However no attempt has been made to estimate what proportion of these deaths are AIDS related. At Beira Central Hospital, 7% of the nurses were known to be HIV positive, as they had informed the administration of their HIV status. An additional 25% were on light duty due to chronic illnesses most of which could be AIDS related.

The tables below show the mortality of staff at Beira Central Hospital between 2001 and 2004.

**Table 12: STAFF MORTALITY AT BEIRA CENTRAL HOSPITAL**

Cadre	Number of deaths				
	2001	2002	2003	2004*	Total
Nurses	7	2	2	5	16
Other medical staff**			3	1	4
Administration staff	1	1	4		6
Subordinate staff	7	9	8	10	34
<b>Total</b>	<b>15</b>	<b>12</b>	<b>17</b>	<b>16</b>	<b>60</b>

*Source: HR Department, Beira Central Hospital*

\* January to October

\*\* Includes medical technicians, lab staff etc

**Table 13: ANALYSIS OF STAFF MORTALITY BY CADRE, BEIRA HOSPITAL**

Cadre	No of staff (2001)	Total deaths from 2001 to October 2004	Total deaths (2001 – 2004) as a % of 2001 staff
Nurses	216	16	7.4
Other medical staff	194	4	2.1
Administration	42	6	14.3
Subordinate staff	448	34	7.6
<b>Total</b>	<b>900</b>	<b>60</b>	<b>6.7</b>

*Source: HR Department, Beira Central hospital*

Although Beira Central Hospital is in one of the regions with the highest prevalence, the above data is truly grave and it points to the potential human resource catastrophe that may befall the health sector as the HIV/AIDS epidemic grows and matures. It is not just the NHS staff that are affected by HIV/AIDS. One of the international NGOs working in the health sector, had lost 1% of its staff to AIDS in the prior year and 2% of its staff were on ARVs.

In all the health facilities visited, there were no workplace programs to address HIV prevention, stigma, treatment and HIV testing for staff and their families. There is also no national or institutional HIV/AIDS policy for health staff. Although some health staff access ARVs in the Day Hospitals, there is no policy on the provision of ARVs to staff and their families. Given the prevailing high stigma levels, it is important to give special consideration to HIV treatment for health staff, as they may not seek treatment in the same health facilities in which they work.

Although some of the referral hospitals had a Post Exposure prophylaxis (PEP) program, there does not appear to be widespread knowledge about a PEP policy for MISAU staff. In the smaller health facilities, staff did not appear to be even aware of PEP and related protocols.

All the pre-service health training institutes visited reported that some of their students had tested HIV positive or died of AIDS. A situation in which medical students contract HIV before or while in college has serious HR implications as such individuals may die very early in their career. This would constitute a loss of very heavy investment.

## **Recommendations:**

### **Short-term**

1. There is need for a more comprehensive rapid survey on the impact of HIV/AIDS on the health workforce. Ideally the survey should incorporate anonymous and unlinked HIV prevalence surveys in selected facilities including pre-service health training institutions. There should also be more extensive analysis of mortality and absenteeism records.
2. A workplace policy for health workers should be developed and distributed. This should address such issues as discrimination, care and support, HIV/AIDS education for staff and family, infection control and post exposure prophylaxis (PEP). In particular, the policy should address the provision of ART to health staff and their families. This is particularly important since health staff may be reluctant to seek HIV/AIDS care in the same institutions they serve due to stigma. The policy should also cover students and staff of pre-service health training institutions.
3. A comprehensive workplace HIV/AIDS program targeting all health workers and their families should be developed and rolled out. The program should incorporate the following elements:
  - Education and awareness
  - Knowledge, attitudes and practices (KAP) survey
  - Peer education
  - Prevention
  - Condom supply
  - Stigma reduction

- Voluntary Counseling and Testing (VCT)
- Infection control and Post Exposure Prophylaxis (PEP)
- Positive living
- Treatment, Care and support including ART
- Impact assessment

Organizations such as CARE that have experience in running workplace programs in Mozambique could be used to run the program.

4. The above workplace program should also be extended to staff and students of pre-service health training institutions.
5. Develop clear PEP protocols and provide training and drugs to ensure that PEP is available to all health workers and students that may be exposed to HIV in the course of caring for patients.
6. Develop an HR monitoring system to capture relevant data on the impact of HIV on health staff and students including hospitalizations, absenteeism and mortality.

#### **Long-term**

1. Develop national and regional strategies for mitigating against the impact of HIV/AIDS on the health workforce
2. Develop a support network for health workers caring for huge numbers of HIV infected patients

## 8. PARTNERSHIPS

This HCD assessment found that the level of partnership between the MISAU and relevant stakeholders is generally weak. The strengthening of partnerships does not appear to rank sufficiently high in the ministry's priorities. This may be partly due to the fact that the contribution of the private sector, both for-profit and not-for-profit to the overall health service delivery is still relatively small. However this sector is growing rapidly. For example the sector currently provides and/or finances virtually all the ART services in Mozambique. It is therefore imperative that there is a mind set change by public sector health administrators on the need to constructively engage this sector. Many of the technical working groups of the ministry of health do not have representation from outside the public sector. Many of the civil society and private sector organizations that we interviewed complained that they were neither consulted nor involved in the development of key health sector policies and plans that affect them. Below are some of the stakeholders that the ministry needs to create stronger linkages with:

### MOZAMBIQUE MEDICAL ASSOCIATION (AMM)

The association has a membership of about 300 Mozambican doctors and 50 foreign doctors. The association has been involved in the training of doctors on ARVs. The association is concerned about the terms and conditions of doctors.

### ASSOCIATION OF DOCTORS AGAINST HIV/AIDS

Although this is an initiative of the Medical Association of Mozambique, membership is open to other health cadres and not just doctors. The objective of the association is get local health workers involved in HIV/AIDS programs. They are concerned that locals if not involved will continue to view HIV/AIDS as a problem that is to be addressed by outsiders.

### NATIONAL NURSING ASSOCIATION OF MOZAMBIQUE (ANEMO)

The nursing association is a legally constituted group; it has a central office and provincial delegations (2 per province) and a strategic plan. They advocate for the nurses at every level: training, better salaries, changes in the salary differences that now exists between public, and private.

The association has the same problem as the other associations: insufficient funds to maintain itself. Though there are fees (5,000 M), few members can pay them due to their low salaries. Thus, they have engaged in various projects to generate funds; as a result they have been able to establish special programs, e.g. home-based care programs in 5 neighborhoods, training of community activists, re-training of nurses, training in biosecurity, and construction of houses for PLWHA.

According to their president/coordinator, there are not enough nurses in most of the health facilities. There are training institutes for nurses all over the country. There are four levels for nurses training:

- Elementary: 1 year of studies (not enough training; according to ANEMO this level should be eliminated)
- Basic: 1.5 year of studies (also should be eliminated)
- Medium: 2.5 years of studies (ANEMO thinks that all nurses should be medium level and up)

- Master (licenciaturas): 4 years of study (out of the approximately 4,000 nurses in the country about 40 or less have this level of training)

They do participate at the ministry or central level when there are discussions about nurse's careers curriculum. They are currently in discussion with MISAU to "own" their training.

#### MOZAMBIQUE MEDICAL TECHNICIANS ASSOCIATION (ATAMO)

The association started in 1997 and has an office in Maputo, but not in the provinces. There is a general Secretary of the Association. The goals of ATAMO are to defend the interests of the TMs in all areas, to keep and continue developing good professional TMs, to make sure that the quality of their work is maintained, and to fight for continuous training and postgraduate courses. Though in theory the association should have support from the dues paid by its members, many do not pay their contributions. The association relies on income from special projects; 10% of the income from such projects goes to the Association.

They recognize their role as key assistants and aids to doctors, though the reality is that in rural areas it is generally the MTs that do all the work see almost all of the more frequent pathologies and treat some of the most frequent chronic illnesses (TB, diabetes, etc). They would like to be in the forefront of health and participate in the scale up of the fight against AIDS; but they need to be prepared and trained to do that.

TMs have 3 years of training, and belong to the medium level. There are three places where TMs get their degree. According to the General Secretary all graduates are "integrated" in the system, absorbed by the state, though often they abandon their profession, to take on more profitable work. Salaries are low, even incentives are low. Work conditions are hard: remote sites with no possibilities of professional development, lack of communications, and lack of transportation, affecting them and their patients.

One of their main concerns is training. The association has little input in training selection and planning. The association believes that they need a voice in MISAU, where they have no representative, and are, thus, not invited to technical meetings.

#### NATIONAL AIDS COUNCIL (NAC)

NAC has the role of coordinating the multi-sectorial HIV/AIDS response while the Ministry of Health is responsible for managing the health components such as ART, HBC, PMCT etc. There has been little attempt to coordinate and develop synergies in the activities of NAC and MISAU. NAC for example funds NGOs and CBOs that provide HBC but this is not linked with the HBC program of MISAU. NAC has also developed a database (CRIS) of civil society organizations involved in HIV/AIDS programs. Such a database could be used for example to support ART scale-up by supporting linkages with organizations that could provide community mobilization and counseling services. NAC has also not looked into the human resources implications of scaling-up HIV services within the multi-sectorial approach.

## PRIVATE FOR-PROFIT HEALTH PROVIDERS

Although the private for-profit health sector in Mozambique is still small, it is growing rapidly and has the potential of reducing the pressure on the public sector and increasing the overall health sector investment and employment. This sector is also able to provide expensive and specialized services such as ICUs, renal dialysis, mammography etc that may lie low in public health sector priorities. Provision of such services may save the country money, as patients do not have to fly outside the country to access them. For this sector to keep growing, it requires support from the ministry of Health. Currently the sector has largely been excluded from the MISAU planning process.

## PRIVATE NOT-FOR-PROFIT HEALTH PROVIDERS

A number of large international NGOs such as CARE and some Faith Based Organizations such as the World Vision are engaged in this sector. Most of these operate in specific regions and most of their operations are within government health facilities. This sector is a relatively small contributor to the overall health services delivery in Mozambique. In most African countries, this sector delivers up to 50% of health services and this is a pointer to the potential of this sector in Mozambique. There has been very little done to encourage this sector and integrate it within the National Health Service planning process.

## DONORS

A wide range of Donors play a crucial role in the financing of health services in Mozambique. In addition to the traditional multilateral and bilateral development partners, GFTAM and PEPFAR are expected to play an increasingly greater role in the funding of HIV/AIDS programs. In Mozambique, an excellent mechanism, the GT-SWAP, of coordinating donor funding exists. As a result of a proposal offered during the preparatory MSH/WHO supported mission to the current effort, the GT-SWAP has recently established a sub-working group dedicated specifically to Human Resources issues.

## COMMUNITIES

Communities are key players both in the treatment and prevention of illnesses. There seems to be, though, little coordination and definition of programs that work with the community, HBC programs, volunteers. MISAU is trying to address some of the issues and is supporting a program to coordinate HBC efforts around the country.

Some institutions, like the Day Hospital run by MSF at the Iro the Mayo health center has a clear HBC program that uses a nurse, a health technician and 16 volunteers. Volunteers are identified by the community; they are well known citizens of the community (*idóneos*). The Center trains them for 2 weeks (following a MISAU training module). They are the nexus with the neighborhoods and their activities include neighborhood visits and house visits. They visit patients in ART treatment to monitor adherence, TB patients for adherence, patients that are bed ridden, patients that for other causes cannot come to the hospital, etc. These volunteers receive incentives in the form of food and a supplement of 300,000 M (15 US). The Hospital also has well established support groups run by an educator councilor and assisted by volunteers that are HIV+. These groups are a nexus to the surrounding communities, from where the majority of the patients come. Their work has inspired a group of PLWHA (mostly women) to establish a PLWA association named Tinhena.

The Day Hospital in Beira is also starting to work with and support a small NGO: Care for Life, who has activists in Beira. There is a coordinator but the DCH's spokesperson said: "We know little about what they (the community?) are using and doing". Stigma and discrimination is still a big disincentive.

Care has a HBC program, and it was felt that MISAU's wish to coordinate everything stifles initiatives. On the other hand they welcome MISAU's coordination for all the NGOs, which generally lack on management skills. They pointed out that most HBC programs do morale boosting and offer some support, when they should also be providing health support. They strongly believe that community groups and partnerships with the communities are key factors and that community groups need to be strengthened. CARE has created an open space for these groups (about 400 according to their count) and for communities to explore their knowledge, their needs, etc.

The Nursing Association (ANEMA) has several community programs; they do home treatment/home visits using nurses and local activists. Activists and nurses are specially trained to participate and they have manuals for home visits. Both the activists and the nurses receive incentives. They also work with communities in the construction of houses for PLWHA.

According to the person in charge of HBC programs at MISAU, there are 50 NGOs that offer HBC, but she had no numbers for the volunteers. No one in the provinces does coordination of HBC. Many donors are funding organizations that do HBC, and coordination is sorely needed.

There does not seem to be a volunteer shortage; the issue is to find compassionate, literate individuals, willing to do the job. Generally the communities select them and the capacity (including literacy) of many of them is low. The training supported by MISAU has a module on adherence to ARTs. Volunteers do not receive incentives now, but MISAU would like to give them 60 % of minimum salary (which is 32 us) or 18.20 us. Many members from NGOS have already been trained and accredited as trainers.

MISAU has now part time, focal points in each DPS for coordination at country level. What motivates these people to take on added responsibilities? It is the perceived concentration of funds for HIV/AIDS programs, the possibilities of doing different activities, the opportunities to organize meetings and assume other responsibilities, etc. HBC volunteers attend to people that do not adhere or are at risk for non-adherence, people with social problems, people who can not continue with the treatment for a variety of reasons, and people who are on palliative care. The ratio is about 5-6 patients per volunteer.

Small community groups like Tinhena (a CBO or PLWHA) have gone through the steps needed to organize into a formal civil society organization, but are now facing the challenges of sustainability and recognition (which once obtained will have an impact in attracting funds). They still face discrimination (gender, job and illness-related discrimination), disruption of family life, little incentives to belong to the association and economic problems. This particular CBO was an outcome of the MSH Day Care Hospital support groups at Iro de Mayo. It has about 200+ members, the majority women.

Their goals include

- Be trained and be part of the home-based care program at MISAU; have not had formal contact with MISAU yet.
- Offer training to people in the community
- Receive training and seed money to start small initiatives that can generate income for the groups

- Be trained as activists to be able to go to the community, explain HIV/AIDS, their association and do advocacy.
- Work with HIV/AIDS orphans to register them in the system, to make sure they go to school, to make sure they have school materials and food.

**Recommendations:**

**Short-term**

1. Strengthen existing medical associations – AMM, ANEMO and ATAMO, by providing financial and other support. At the same time encourage the formation of other medical associations for medical disciplines that do not currently have a national association. Strengthening of medical associations should facilitate more rapid training and a general improvement of health standards.
2. Provide financial and other support to the newly formed Association of Doctors against HIV/AIDS.
4. Strengthen linkages with not-for-profit health organizations including NGOs and FBOs. These organizations should be represented in various MISAU technical working groups. The MISAU should extend services such as training, HIV/AIDS workplace programs and even supply of drugs and other supplies to this sector.
5. Fund and support CBOs like Tinhena who have access to the communities, knowledge of the challenges facing PLWHA and are willing to contribute to prevention and education of their communities
6. Engage and support the for-profit health sector. The MISAU should extend services such as training, HIV/AIDS workplace programs and even supply of drugs and other supplies to this sector.
7. Support umbrella organizations representing the not-for-profit and for-profit health providers such as NAIMA.
8. Support employer-based health services, private organizations that provide prevention, care and support (including ART,) to their employees and community outreach programs. This should include training opportunities and access to materials.
9. Improve the coordination of HIV/AIDS health services such as HBC and community ART mobilization between the MISAU and NAC
10. Create a forum to facilitate information and best practice sharing between the public and non-public health sectors.
11. Using existent lists of health NGOs to do a rapid survey of all the NGOs that do HBC, to record all the CBOs working with these NGOs and make an inventory of the different programs now functioning and the various training associated with HBC, activists and volunteers.
12. Strengthen the MISAU department that works with NGOs and community health so it functions as a coordination body, which would be in charge of drawing general guidelines for training, partnerships, selection of volunteers, etc.
13. Contract out some of the most successful NGOs to strengthen smaller, local NGOs and to promote their best practices in HBC, volunteer collaboration, and training.

**Long-term**

1. Create structures within the MISAU to support the non-public health sector.
2. Design a program of leadership for communities, whose objectives would include developing moral leadership, training in ART adherence, prevention and counseling; start with a pilot program in one of the areas of highest prevalence (Beira, for example.)

## 9. APPENDICES

### Appendix 1: Reports and Documents reviewed

1. Health Sector Strategic Plan (PESS), 2001 - 2005, April 2001
2. National Strategic Plan for Combating STIs, HIV and AIDS in the Health Sector, 2004 – 2008, March 2004
3. Global Health Sector Strategy for HIV/AIDS, 2003 – 2007, WHO, 2003
4. Human Resources Strategic Plan for the Health Sector, 2005 - 2010 (Draft), November 2004
5. UNAIDS 2004 Update, Epidemiological Fact Sheet for Mozambique
6. The Human Resources for the Health Situation in Mozambique, May 2004
7. Scaling up HIV/AIDS care: Service Delivery and Human Resources Perspective, WHO 2004
8. Using Mid-Level Cadres as Substitutes for Internationally Mobile Health Professionals in Africa. A Desk Review – Delanyo Dovlo, June 2004
9. The Impact of HIV/AIDS on Health Systems and the Health Workforce in Sub-Saharan Africa, U SAID Bureau for Africa, Office of Sustainable Development, June 2003,
10. Recommendations for a medium term salary reform strategy in Mozambique, Bernard Myers, January 2004
11. Demographic Impact Of HIV/AIDS Epidemic On Human Resources In The Mozambican National Health Service, MISAU, September 2004
12. Eastern and Southern Africa regional HIV/AIDS training needs assessment, CAFS/USAID/RATN
13. Health Sector Human Resources Crisis in Africa, An Issues Paper, USAID, Bureau for Africa, Office of Sustainable Development, May 2003
14. The Impact of HIV/AIDS on the Health Sector, South African Department of Health, 2002
15. Expenditure Tracking and Service Delivery Survey. The Health Sector in Mozambique. Magnus Lindelow, February 2003
16. 2003 Annual HR report for MISAU, January 2004

## **Appendix 2: List of Sites/Persons Visited**

### ***Ministry of Health (HQ)***

Dr Alphonso Trindade, Director of Training  
Dr. Jose Antonio Davuca, Deputy HR Director  
Dr. Ferruccio Vio, Coordinator, HRD Strategic Plan  
Dr. Avertino Barreto, Director, Epidemiology and Endemic diseases  
Dr. Rosa Marlene, Director, Clinical Services  
Dr Lagrima Mause, Head of Training  
Dr Ana Paula Siteo, Chief, In-service training  
Dr Mouzinho Saide,  
Dr Teresa Seisdedos, consultant  
Dr Birgitte Christensen, HR adviser  
Dr Angel Mendoza, HR Adviser  
Sandy McGunegill, HBC adviser  
Isabella Viandro – Head, Planning and Management  
Ricardo Barradas, Consultant, Curriculum Development

### ***Maputo Central Hospital***

Antonio Bouse Bomba, Director General  
Alfredo Chichava, Administrator  
Luciano Mungucumbe, Head of Human Resources

### ***Maputo Day Hospital (ART clinic)***

Dr Ruenda Manuel, Consultant Dermatologist  
Felix Conjua, Nurse  
Adelaide Francisco de Oliveiro, Nurse

### ***MSF ART Clinic, MAPUTO***

Artur Antonio Nhantunho, Assistant Coordinator

### ***Beira Central Hospital***

Dr Josefo Ferro, Director General  
Pedro Manuel Cruz –Head HR

### ***Beira Day Hospital/ Health Action International (HAI) (ART clinic)***

Dr Gael Claquin

***Munhaba Health Centre – Beira***

Monica Sebastiao – Midwife

***Sommerschild Clinic – Private Hospital –Maputo***

Maria Jose Natividade – Administrator

***Institute of Health Sciences – Maputo***

Dr Julio Langa, Director

***Institute of Health Sciences – Beira***

Martas dos Santos, Academic Director

***CRDS - Centre Regional de Desenvolvimento Sanitario de Maputo***

Dr Fatima Simao-Cuembelo, Director

***Faculty of Medicine – Eduardo Mondlane University***

Prof. Julie Cliff

Elias Valdez Llanes

***Catholic University, Beira***

Konrad Steidel, Academic Director

***National AIDS Council***

Pascoa Themba

***Centers for Disease Control, Mozambique office***

Dr Alfredo Vergara, Country Director

Dr Irene Benech

Dr Lucy Ramirez

***US Embassy***

Mr. James Potts, US Embassy, Vice-Consul

Ms Marjoke de Grijjs, US Embassy, HIV/AIDS Coordinator

***MONASO – Mozambican Network of AIDS Services Organizations***

Ms Ana David, National Coordinator

Ms Teodora Cassamo

Mr. Alfredo Munguambe

***NAIMA – NGO AIDS Impact Mitigation Association***

Chiara Panaroni, Technical Assistant

***TINHENA - PLWHA Association***

Amelia Joaquim

***CARE***

Louise Robinson – Health and HIV/AIDS Coordinator

***Mozambique Medical Association***

Dr Mohamed Rafik, President

***Mozambique Nursing Association***

Matilde Basilio

***Medical Technicians Association***

Domingo Fernando Quinica

***WHO***

Dr Bocar Touré, Representative

### Appendix 3: Human Capacity Development Framework

Human Capacity Development Framework, a comprehensive approach to addressing the human resource crisis in health in Sub-Saharan Africa.; developed my Management Sciences for Health, M&L Program, with support from the Office of HIV/AIDS, USAID and in collaboration with FHI, JHPIEGO, and the Synergy Project, December, 2003.

The HCD Framework is based on the understanding that an integrated and comprehensive response is needed to address this global priority. It provides a pathway for governments and health ministers to address human capacity development in a sustained way. It does this through a multi-sector approach that addresses barriers to HCD in four relevant components: policy/financial; human resource management; leadership and partnerships.

Component	Goal	Factors that affect achievement of the goal
Policy and financial requirements	Multisectoral collaboration streamlines the employment process in government, and appropriate human resource policies and plans support HCD	<ul style="list-style-type: none"> <li>• Health expenditures</li> <li>• Salary structures</li> <li>• National civil service rules</li> <li>• Government policies and structure for HRM (such as centralized hiring and firing)</li> <li>• Incentives to prevent migration of health staff</li> </ul> <p>authorized scopes of practice for health cadres (categories of health workers, such as laboratory technicians)</p>
Human resource management	HRM systems are in place that result in adequate and timely staffing, staff retention, teamwork, and good performance	<ul style="list-style-type: none"> <li>• HRM capacity in health facilities, local governments, and local health offices</li> <li>• Personnel systems: planning, recruitment, hiring, transfer, promotion, firing</li> <li>• Staff retention strategies</li> <li>• Training</li> <li>• Human resource information systems</li> </ul> <p>workplace programs for HIV prevention</p>
Partnerships	Planned linkages among sectors, districts, and nongovernmental, community, and religious organizations increase human capacity	<ul style="list-style-type: none"> <li>• Number and types of linkages among the public sector, private sector, and community networks</li> <li>• Collaboration between the MISAU and ministries of finance and education</li> </ul>
Leadership	Managers at all levels demonstrate that they value health workers and provide staff with leadership to face challenges and achieve results	<ul style="list-style-type: none"> <li>• Visionary leadership</li> <li>• Advocacy for reform of human resource policies</li> <li>• Leadership development for managers at all levels</li> </ul>



## **Appendix 4: HRD – Working Group: Draft TORs**

### **Context and background**

Human Resource Development (HRD) has over the last few years received increased attention in Mozambique due to different factors. Three of the main issues are that, as an aftermath of the civil war, there is a genuine lack of human resources in the country, migration, and the HIV/AIDS situation.

On the supply side the Government has increased the number of medical doctors, nurses and basic nurses trained each year. On the demand side there is an increased need for well-trained health professionals as there are new demands for the scaling-up ART activities, adolescent friendly activities and reproductive health activities.

Although, there is an increased production of medical staff there are also increased losses due to the HIV/AIDS epidemic.

Human Resource Development issues are now slowly receiving the attention of different offices in the Government and the donor community in Mozambique. At the same time there are many other issues competing for attention and resources at national and district levels. As such, maintaining the current prominence of HRD will require strong advocacy by all stakeholders.

### **Participants:**

Interested in HRD issues in the Pre-GT SWAP group. A certain number to be determined by MISAU will represent this group in the MISAU HRD working group.

### **Objectives**

The objective of the HRD working group is to:

- Create an environment where it is possible to discuss different strategies with the aim of a harmonized approach amongst the developing partners
- Engage in a coordinated manner with the MISAU HRD working group
- Provide constructive and consolidated comments the new HRD strategy
- Follow- up on progress in implementing the HRD operational plan.

### **Scope of work**

The scope of work for the HRD working group is proposed to be in three main areas: HR management and administration, HRD and upcoming issues:

#### **A. HR management and administration:**

- HRD policy improvements and implementation: Discuss a streamlined systemic approach to HR planning (Staffing plan and recruitment plan), recruitment and management systems for the health sector;
- Demand and supply side of HRD: Try to get an overview and projections of needs;

- Internal institutional capacity building: Discuss how to improve management capacity of human resources at national and provincial level and capacity building needed to manage HRD at the different levels.

#### **B. HRD:**

- Pre-service training and supply of health workers: Discuss strategies for increasing the capacity of pre-service and in-service training institutions and reform the in-service training process. Discuss the infrastructure needs;
- Skills- mix needs: Discuss the skills-mix needed to be in place to provide for the existing and up coming needs. Investigating a bottom-up approach to skills-mix and number needed in the health facilities.
- In-service training of health workers: Discuss strategies and coordination in place to maximize efficiency of capacity building of health workers;
- Overarching issues, enabling and constraining factors: Link with other groups working on civil service reform and decentralization. Understanding the workforce issues promoted by IMF and how to deal with them;
- Compensation, benefits and allowances: Advocate for long-term strategies for improving health staff salaries and to ensure compensation, benefits and allowances are equitably distributed. Discuss ways to introduce effective changes in deployment of essential cadres to rural areas;
- Gender issues: Discuss and assess workplace policies that promote gender equity;
- Alternative ways of meeting the demand in HR: Discuss other ways of improving the response to the increased demand; and
- Technical Assistance (TA) and gap filling: Discuss the MISAU and developing partners' policies on TA and gap-fillers and ways to coordinate approaches.

#### **C. Upcoming issues:**

- HIV and AIDS and the health workforce: Discuss information of numbers of health workers infected; support development of work place prevention programs to protect and ensure the safety of the uninfected and develop practical strategies for treating those infected;
- Scaling- up health interventions: Discuss the staffing needs to scale- up the HIV/AIDS care and treatment plan as well as youth friendly activities and reproductive health. Other areas are chronic diseases and mental health.
- External and internal migration – although external does not seem to be a major issue in Mozambique it is nonetheless important to collect evidence on external migration and the flow and destination of migrant Mozambican health workers. Discuss workplace and benefits policies that encourage staff retention and effective re-entry of staff that return to Mozambique. Discuss issues pertaining to the internal migration and ways to introduce a more equitable distribution of health staff in the country;

## Appendix 5: Scope of Work

**Human Capacity Development (HCD) Assessment and Strategy Development** (edited on 10/13/ 2004 by Ummuro Adano, MSH, Nairobi Kenya)

Consultants: **A team of 3 consultants**

Consultancy Period: **5 – 20 November 2004**

Context and Background

Shortages of health workers and weak human resource capacity are repeatedly assessed as the biggest constraint to service provision in the health sector. Chronic under funding, coupled with weak management and better incentives in the private sector and in other countries, contribute to health workers moving gradually out of the public sector. HIV/AIDS has also taken a direct toll on the public workforce and contributed to deteriorating working conditions.

Various initiatives have been developed in Mozambique during the last couple of years in order to scale-up programs to control major killing diseases and strengthen the health sector and Government response. Successful implementation of such initiatives will greatly depend on the capacity of the Government to ensure adequate numbers of trained staff, human resource development and appropriate management.

In that context, USG in Mozambique set up a preliminary working group to prepare an initial scope of work (SOW) for a Human Capacity Development (HCD) assessment. A team of 3 consultants (2 MSH and 1 WHO) arrived in Maputo early October to work with MISAU and the local stakeholders and reach agreements on the focus of the assessment and preparing the ground for the second planned activity scheduled to take place mid November 2004. During this planning visit the team of consultants engaged in intense consultations with the MISAU national level HCD staff, CDC and the donor community; and a decision was reached about expanding the scope and focus of the second assessment and rewriting the SOW to cover system-wide HCD issues affecting the national health system in the context of the 5 year HCD Plan.

The Ministry of Health is in the process of finalizing a comprehensive draft 5 year HCD plan that has generated a lot of interest amongst all stakeholders and it was felt that the HCD assessment should contribute to the process of helping the sector to move forward with this Plan which also covers HR needs for HIV/AIDS prevention, treatment, care and support.

The November mission and the recommendations it will produce is viewed as the first step toward strengthening human resource capacity for the scale-up of HIV/AIDS but within the context of a holistic approach to tackling priority HCD challenges outlined in the new HCD National Plan for the health sector. The next step will include coming to agreement on which recommendations to implement and followed by implementation of these recommendations. While this assessment is focused on the scale-up of HIV/AIDS services, it is understood that improvements in the management of human resources within the Mozambique health system will benefit the delivery of health services in general.

### Guiding principles:

*Similarly to other countries, human resource capacity development and management are crucial and sensitive issues in Mozambique. **In order to be successful,***

- This assessment and strategy development needs to reflect a consensus among the main stakeholders and therefore should not be restricted to an USG initiative. The option to extend the existing HCD working group to other development partners, including a Representative from UN agencies, needs to be considered. Not having most partners on board may disrupt or weaken the strategies and recommendations that will be issued from the assessment. The HCD mandate would be to approve the SOW and guide and monitor the consultants during their work. The HCD group would then have a fundamental role in advocating and helping to implement the recommendations issued from the whole assessment. Changes will be achieved only through coordinated efforts from key development partners.
- Similarly the full involvement and leadership from the Ministry of Health, and the National Aids Council is fundamental so that the recommendations of the assessment be endorsed and enforced. The Ministries of Planning, Finance and Education as well as the Public Service Commission will also need to be strongly involved.

Objectives:

1. To ensure that HCD, as a process, is at the center and drives the health sector reform program of the MISAU and that it is not presented and implemented as a stand-alone program.
2. To assess the HRM system capacity of the Ministry of Health sites to support the key proposals contained in the draft HCD Plan and adequately staff HIV/AIDS programs, retain staff, absorb and train new and existing staff and contribute to the overall productivity of the system.
3. To assess the capacity of the MISAU in-service training program to increase quality, planning, and standardization of training activities.
4. To assess the capacity of the pre-service training institutions to respond to staffing and training issues in health.

Assessment Phase (November 5 – 20, 2004)

The following activities are illustrative of tasks to be undertaken by the consultant team during the assessment phase:

1. Facilitate a meeting early November to unite stakeholders around an inspiring HCD vision for Mozambique and to offer support and commitment of resources to implement the HR Plan (Result: create a common picture of desired HCD results for Mozambique that reflects the nation's disease burden and focusing on HIV/AIDS needs for prevention, prevention, care and support)
2. Review draft HCD Plan for the health sector, identify remaining gaps - in consultation with national HR staff - and make proposals for ensuring that systems for human resource management, logistics, quality assurance and information and effectively support plan (Result: Determine key priorities for action and develop draft multi-year operational plan; particularly identify activities for making improvements in the critical human

resource management system including supervision, leadership and ensuring a structure that provides accountability and delineates authority at all levels).

3. Review donors' and government policies on pre-service and in-service training and make recommendations to ease policy and institutional bottlenecks around staff development programs so that HIV/AIDS programs can be staffed quickly by trained and competent staff.
4. Hold meetings and focus group discussions with a diverse range of HR stakeholders in all sectors of the national health system.
5. Meet with selected training institutions and interview managers and faculty to establish skill gaps especially in HIV/AIDS, unmet HR needs and in-service capacity.
6. Use the "HCD framework" to assess and analyze data collected in the assessment.
7. Formulate both short and long term recommendations and cost elements that require costing.
8. Address additional HCD issues that may emerge in discussions with national HR development staff and others.
9. De-brief draft findings and recommendations with stakeholders agreed to in advance.

#### Output:

The main output of this assignment will be a comprehensive report clearly outlining the current HR situation, HR constraints, and gaps that exist in the provision of HIV/AIDS services and a set of short and long term recommendations to address issues. The trip report should also provide specific steps describing how the draft HCD Plan can be moved forward to ensure adequate human resources are made available and developed to serve the basic health care needs of the vast majority of the Mozambican population. A bibliography together with a critical review on documents existing in HCD and human resource management will be included as an appendix, along with 'maps or graphs' with closest approximations on numbers and trends of the existing human resources for HIV/AIDS.

#### Next Steps:

HCD Working Group, USAID, and other key stakeholders will review the recommendations and make decisions on those recommendations that constitute a priority for immediate action to enable scale-up to begin, and those recommendations that are a priority to be addressed in order to achieve long term sustainability. An implementation plan and operational budget will then need to be developed and resources identified and committed to implement the HCD plan.

Qualifications of the team required

- Senior Human Resource Development Specialist
- Experience in Institutional development / Organizational Development, managing change in public sector institutions
- Experience in strategic approach to HCD and in the design and implementation of training and human resources development using a systems approach
- International experience in managing assessment at national level
- Previous work in Mozambique, preferably in the health sector
- Portuguese speaking
- Tact and sensitivity

Coordination process

The consultants will be closely working with staff in the Human Resource Directorate. Regular (weekly) briefing will be held with the HCD working group.

Logistics and financing: Sub-contract through MSH

Logistic: MSH office in Maputo