

## Chapter V

# Human Resources and Training

### OVERVIEW

The human resources and training strategy for this operational plan is founded upon four core principles: 1) quality of care; 2) investments to more generally benefit the public health system; 3) equitable access; and 4) feasibility in delivering the continuum of care and treatment services to the target number of patients. The Task Team developed this human resources plan based on advice from provincial officials, and best-practice experience in South Africa and other countries.

South Africa's public health care system is already challenged by inadequate resources and a significant burden of disease. Nevertheless, it remains possible to meet the goals of this plan through a combination of training, targeted recruitment, private sector participation, retention strategies, multi-skilling, and the adjustment of roles and responsibilities of the available health care workers to best match the needs of the programme. The additional human resources needed to begin implementation is intended be made available through active recruitment of new personnel and implementing strategies to retain the existing public sector workforce.

To implement the programme, provinces will require additional funding to upgrade their human resources in health. Within recommended guidelines for minimum personnel requirements for each service site, the provincial health managers should be able to utilise the additional funding to hire additional personnel, contract with private sector personnel, or put in place incentives to retain workers. Additional funds will also be required for training of existing clinicians, nurses, pharmacists, counsellors and affiliated health care workers. The implementation needs for the plan can be met, but this will require support from national level that leverages the strengths of the health care system, while seeking creative and innovative solutions for staffing and skill shortages.

This should not be a vertical programme. HIV and AIDS prevention, care and treatment must be tightly woven into the overall public health system. Investments made in human resources and training to get HIV-positive patients into the care they need before they become sick will in the longer-term benefit the public health care delivery system. Further, new staff needed for this programme will also provide support in filling gaps in other areas of health care delivery. The health personnel added by this plan, will be located in district hospitals and community health centres and clinics, and will serve all patients, not only HIV-positive and AIDS patients. Thus, in tackling the challenges for HIV and AIDS care and treatment, human resources for the entire public health system in South Africa will be enhanced.

## **BACKGROUND AND RATIONALE**

### **General Context of Human Resources in Health**

Matching workforce capacity with the skilled human resource needs of the operational plan represents a significant challenge for programme implementation. Significant shortages of professional nurses, medical officers, lay counsellors, and managerial/administrative personnel exist. The retention of trained personnel is a challenge throughout the public health system. Health care workers move from one province to another for family and career opportunities. Other countries actively recruit them, with recruiting firms offering attractive incentives and financial packages to relocate abroad. Rural areas face even bigger challenges for attracting and retaining qualified staff.

The impact of HIV and AIDS on the health sector has strained an already overburdened system. According to the September 2003 Department of Health report, *Essential Health Care for All South Africans*, admissions to public hospitals have increased by over 100,000 per year between 1994 and 2002.

The recommendation for additional human resource capacity to support the implementation of this plan is made in the context of:

- An already overburdened and under-resourced public health service;
- Patients requiring hospitalisation and treatment for other medical conditions are presently crowded out by ill HIV and AIDS patients; and

- ARV treatment is lifelong resulting in a cumulative increase in the number of patients that will require care and treatment over time.

### **Operational Plan: Patient Targets**

A detailed analysis, including provincial visits, was conducted to determine the level of human resources needed for implementation. Provinces submitted proposals on their requirements for additional staffing needs. These proposals were reviewed and adjusted by the Department of Health to allow a standardised approach to estimate staff requirements. (See Chapter XVI, *Budget*.)

Estimates of the underlying demand for AIDS care and treatment have been drawn from the ASSA2000 model, as used by the JHTTT. Based on these epidemiological estimates, ranges for patient demand and achievable treatment coverage have been discussed with provinces to form the basis for provincial planning. The midpoint of the range is reflected in Table 5.1 below.

Patient demand was translated into total patient visits as shown in Table 5.2, using the care model in Chapter I, *Prevention, Care and Treatment*.

Estimates of core staffing requirements per service site and workload per category of health care worker, shown in Table 5.3 and 5.4, were used to determine the total number of full-time equivalent (FTE) personnel that would be needed for the plan (Table 5.4). During the first phase, a buffer has been factored into the workload assumptions, acknowledging that it will take some time and experience before staff consistently reach these productivity benchmarks.

The above estimates will require close monitoring during the implementation and where necessary adjustments to these estimates will be made.

**Table 5.1: Total Patients receiving CD4 tests and ARV Treatment by Year\***

<b>Year</b>	<b>Patients receiving CD4 tests</b>	<b>ARV Patients</b>	<b>Total</b>
2003/04	212,000	53,000	265,000
2004/05	628,705	188,665	817,370
2005/06	1,078,446	381,177	1,459,623
2006/07	1,497,580	645,740	2,143,320
2007/08	2,167,834	1,001,534	3,169,368

*\*Note: This table represents the mid-point of the range of patients projected using the ASSA2000 model to access the system for CD4 tests and ARV treatment.*

**Table 5.2: Patient Visits per Year**

<b>Year</b>	<b>Patient Visits</b>
2003/04*	265,353
2004/05	3,592,428
2005/06	7,088,948
2006/07	11,661,119
2007/08	17,848,642

*\* This represents a 3-month period.*

**Table 5.3: Core Staffing Requirements Per Service Site to Treat 500 Patients with ARVs**

<b>Category of Staff</b>	<b>Minimum (FTE)</b>
Medical Officers	1
Professional Nurses	2
Pharmacists	1
Dieticians/Nutritionists	1
Social Workers	.5
Lay Counsellors	5
Administrative Clerks	1
Data Capturers	1
<b>Total</b>	<b>12.5</b>

**Table 5.4: Workload By Category of Health Care Worker, by Patient Contact-hours per Day**

	Long Visits				Short Visits			
	Assumption	Total patient visits / worker / yr	Visit length (hours)	Visits / day	Assumption	Total patient visits / worker / yr	Visit length (hours)	Visits / day
	Visits ppy				Visits ppy			
Medical Officers	2	1458	0.75	6.3	2	1458	0.25	6.3
Professional Nurses	10	2431	0.5	10.6	2	486	0.25	2.1
Enrolled Nurses	12	4375	0.25	19.0	0	0	0	0.0
Assistant Nurses	12	4375	0.2	19.0	0	0	0	0.0
Pharmacists	1	729	0.33	3.2	0	0	0	0.0
Pharmacist Assistants	12	8751	0.2	38.0	0	0	0	0.0
Dieticians	2	2917	0.5	12.7	0	0	0	0.0
Social Workers	2	2917	0.5	12.7	0	0	0	0.0
Counsellors	24	1750	1	7.6	0	0	0	0.0
Admin Clerks	12	4375	0.25	19.0	0	0	0	0.0

*\*Note: These estimates are based on worker productivity as implementation scales up. It is assumed that productivity will be lower in the initial phase, as staff members will have less experience in delivering care and number of patient visits per day may evolve over an initial implementation period. This table provides a breakdown of the total number of patient visits each health care worker will likely see, detailed by “long visits” for new patients and “short visits” for existing patients/patients with few complications.*

In total, 1,786 FTEs will be needed for HIV and AIDS care and treatment by April 2004, 6,233 FTEs total by March 05, and 13,805 FTEs by March 08. Table 5.4 summarizes the total number of personnel required per category during these time periods. The estimates for staffing are calculated using the estimated number of persons with HIV and AIDS reflected in Table 5.5.

These estimates assume no diminution of work for health professionals in the short-term through this programme. It is anticipated that these patients will visit their health professional less frequently for infections and complications associated with their HIV status. Thus, while this recruitment model assumes all ARV-related treatment as additional workload for health professionals in the system, in fact a great deal of this work is likely to replace existing time with the same patients.

Longer term, ARV treatment will require a substantial increase in human resources, notwithstanding this substitution. People will be living longer and the number of AIDS patients will increase significantly. Patients with other conditions who are now “crowded out” of hospitals by AIDS patients will continue to present themselves for care.

**Table 5.5: Total Additional Staff to be Recruited**

<b>Category of Staff</b>	<b>Through March 04 (# FTE)</b>	<b>April 04-March 05 (# FTE)</b>	<b>April 05-March 08 (# FTE)</b>
Medical Officers	76	271	628
Professional Nurses	228	813	1,883
Enrolled Nurses	152	542	1,255
Assistant Nurses	152	542	1,255
Pharmacists	76	271	314
Pharmacist Assistants	76	271	314
Dieticians/Nutritionists	76	136	314
Social Workers	38	136	314
Lay Counsellors/CHWs	760	2,710	6,275
Administrative Clerks	152	542	1,255
<b>Total</b>	<b>1,786</b>	<b>6,233</b>	<b>13,805</b>

**Operational Plan: Roles**

At the outset, medical officers situated at district hospitals will be the central health care providers for prescribing ARV treatment, in coordination with primary health care staff at accredited service points (see Chapter I, *Prevention, Care and Treatment*). The authority to prescribe ARVs will be limited to medical officers who have been certified in clinical issues associated with ARV use. Registered professional nurses with additional training in clinical assessment, diagnosis, treatment and care are a critical part of the programme, at both the district hospital and community health centres and clinics and within their existing role as primary health care workers. Dieticians/nutritionists will be required for direct patient counselling and oversight of the nutritional supplementation programme. Lay counsellors and community health workers (CHWs) will be required for a broad range of support roles, ranging from ongoing prevention, pre- and post-test counselling and ARV adherence counselling. Roles and responsibilities will be reviewed on an ongoing basis to determine the most appropriate utilization of health care workers. New laboratory staff will be required to perform the increased volumes of specialized HIV testing (see Chapter IX, *Laboratory Services*). Facility, data and programme managers will be

required for administration and oversight, particularly at the provincial and national levels (see Chapter XV, *Programme Management*).

## **APPROACH**

Human resource and training needs are interconnected and are therefore presented together in an integrated strategy. The needs and approach for the short term, are described first, and are followed by recommendations for the longer term.

### **HR and Training Strategy and Options during Programme Initiation**

To begin delivering HIV and AIDS care and treatment at the outset of implementation, designated service points will utilize existing experienced personnel with additional human resources to fill service gaps. Funding to replace full-time equivalent (FTE) personnel deployed for this purpose is included in the budget of this plan and will be made available to provinces.

The first priority for this phase of implementation will be to establish a comprehensive national training programme to include all categories of health care workers and support personnel required for the provision of HIV and AIDS treatment and care and with a wide geographic coverage. Service point accreditation will be tied to certification of the core team of health care workers. Certification can be achieved through the completion of the didactic portion of training followed by a clinical mentoring programme for the medical officer to be completed once ARV treatment commences at the service point.

A strategy to ensure that all students who graduate from health academic institutions at the end of 2003 have received a short, intensive course on providing a comprehensive package of care for HIV and AIDS must be developed and implemented immediately.

### ***Training Needs***

Standardised training programmes for health care workers will be developed on a national basis and implemented locally. The initial focus of this effort will be to develop basic competencies required of all health care workers that will directly deliver the required continuum of comprehensive services for HIV and AIDS care and treatment. Going

forward, the emphasis will be broadened to support ongoing HIV training and clinical support for health care workers, including continuing professional development (CPD) programmes that will update the training of health professionals on the latest developments in HIV and AIDS care and treatment nationally and internationally.

The Cluster for Human Resources and the Cluster for HIV, AIDS and TB will initially coordinate the national strategy for these training and education activities, to ensure that all training and education activities are coordinated and synchronised to coincide with other parts of the implementation plan, with a view that the Human Resource Cluster will assume full responsibility for these functions in the future. The Human Resource Cluster will identify core competencies required for the provision of HIV and AIDS care and treatment as defined in the national protocol, and match these to the scopes of practice of each category of health care professional. The intention of this framework is to facilitate the delivery of care by a multi-disciplinary team that understands each other's roles and responsibilities. Further, this framework should highlight areas where flexibility can be allowed across categories of health care workers to fulfil functions in cases where there are gaps in personnel (e.g. who fulfils the nutritional counselling role in the absence of an on-site nutritionist?).

Each province must designate an interim training coordinator from existing personnel to take responsibility for ensuring that training needs are identified and staff are fully prepared for the launch of the programme. The provincial training coordinator will work closely with the Clusters and medical advisors in the development of a strategic training plan for the province.

The provincial training coordinator will work closely with the Clusters and the provincially based medical advisors in the development of a strategic training plan for the province. The medical advisor with the provincial training coordinator is responsible for delivering the nationally defined curriculum to the site staff, especially clinicians and nurses. The medical advisor defines the specific knowledge gaps and over the course of three months delivers this tailored curriculum in the facility setting.

Training courses should be developed and scheduled immediately thereafter, based on existing curricula for the comprehensive care and treatment programme for persons with HIV and AIDS established in South Africa and elsewhere. Medical officers, nurses, pharmacists and lay counsellors at initial service points should complete training on a priority basis. Training should be delivered by experts in HIV and AIDS care and treatment, in collaboration with local and international partners. Discussions and collaboration for the long-term sustainability of the training programmes will commence at the outset especially with statutory health professional councils, educational authorities and education and training providers.

Comprehensive and concise training courses with standardized curricula will be developed to provide all current health professionals with the specialized knowledge and skills to provide comprehensive services for persons infected with HIV and AIDS using ARVs. A component of all training and certification programmes is the requirement for continuing re-certification, to ensure expertise as standards of HIV and AIDS care and treatment evolve.

In each province, all health facilities, health care workers and support personnel will be briefed and provided with comprehensive information regarding the implementation of the plan, with specific emphasis on the service sites identified, the referral systems and the criteria for referral.

Long-term professional training should be an extension of the short-term process defined above. This training must focus not only on the comprehensive approach to HIV and AIDS prevention, treatment and care, but also on the broader spectrum of diseases that will allow qualified assessment of other disease categories and treatment strategies for both adults and children. Specific attention to the integrated management of childhood illnesses, management of TB, malaria, sexually transmitted infections, and gender-related issues must be included in all the basic curricula of health professional training. Specific curricula and CPD programmes will be developed in collaboration with the health professional councils in South Africa.

The general challenge of raising the standard of all existing CPD programmes remains. The mechanisms for maintaining educational standards and ensuring quality of education presently promoted through the South African Qualifications Authority (SAQA) will be utilised to ensure that the training in HIV and AIDS care and treatment will be formally registered as unit standards in comprehensive HIV and AIDS prevention, care and treatment. These unit standards will be utilised for both CPD and to enhance existing pre-professional programmes, provided by universities and colleges, medical schools, schools and colleges of nursing, pharmacy colleges and other health professional schools. In addition it is envisaged that all training provided to lay counsellors and community health workers will be formalised through a similar process of registering unit standards on the appropriate level of the National Qualifications Framework, to facilitate career advancement for these categories of health workers.

### **Training of Health Care Workers**

An intensive training course to prepare clinicians and selected senior professional nurses to deliver comprehensive HIV and AIDS clinical care, inclusive of antiretroviral therapy, should be developed. Training is targeted at medical officers, general practitioners, medical specialists and selected nurse specialists. Training should utilize didactic teaching and interactive discussion.

### **Basic Competency on Completion of Training Course**

It is envisaged that the following basic competencies will be covered in the training course:

- Understand natural history of HIV disease
- Diagnose and manage opportunistic infections
- Initiate and manage antiretroviral therapy
- Utilize referral and consultation mechanisms

### **Training programme – Curriculum Components**

The curriculum components are as follows:

- Unit 1: HIV Care and Treatment Programme
  - Programme overview
  - Levels of care - referrals

- Staff roles and responsibilities
- Expert support
- Documentation and reporting
- Universal precautions – occupational risks, PEP
  
- Unit 2: HIV Basics
  - Epidemiology
  - Immunology, virology
  - Natural history of disease – signs and symptoms, staging
  
- Unit 3: Management of the HIV-positive Patient
  - Counselling – prevention
  - Nutrition
  - Infant feeding choices
  - Recognition and integration of traditional medicine
  
- Unit 4: TB and Opportunistic Infections
  - TB management
  - OI prophylaxis
  - OI treatment
  
- Unit 5: Antiretroviral Drugs
  - Introduction
  - Initiation – criteria and drug selection
  - Special considerations – pregnancy, prior ARV exposure, concurrent TB treatment
  - Adherence
  - Monitoring
  - Drug interactions
  - Side effects – identification, management
  - Resistance
  - Immune Reconstitution Syndrome
  - Pharmacovigilance – documentation and reporting
  
- Unit 6: Paediatric HIV and AIDS
  - Progression of disease

- ARV treatment
- Assessment and monitoring

### ***Medical Officers***

Medical officers who complete the short intensive didactic HIV and AIDS training course will be certified to prescribe antiretroviral drugs within the context of a clinical mentoring programme. (See Annex V.2 for a description of required competencies and training modules for clinician training.) Medical officers will be certified to prescribe ARVs independently after completing this programme, which entails:

- Evaluating 10 ARV-eligible patients jointly with an assigned clinical mentor;
- Evaluating 10 ARV-eligible patients, with on-site mentor consultation; and
- Evaluating 10 ARV-eligible patients, with off-site mentor consultation and written or oral review of the follow-up plan.

It is expected that the requirements for certification can be completed over the course of two clinical sessions. Clinical mentors authorized to mentor and certify clinicians will be selected from the pool of acknowledged clinical HIV experts from both within and outside South Africa. For medical officers with established expertise in ARV treatment, clinical mentors will have discretion to adjust the numbers of patients evaluated in order to obtain certification. The standardised curriculum will apply to private medical practitioners to ensure quality care and treatment in the private sector as well.

### ***Clinical Mentor Training***

All mentors will undergo the basic training outlined above and in addition should receive specific training that will include skills required for mentoring. Authorisation to mentor and certify training will be on completion of a suitable mentorship training programme.

### ***Nurse Training***

Professional nurses will need to complete a training course based on a standardized HIV nursing curriculum and case studies (see Annex V.3). A set of training materials and protocols for nurses will need to be provided at service points to assist nurses during normal patient care for persons on ARV treatment. The Health Promotion and Quality

Assurance Training Centres will need to establish ongoing clinical consultation and in-service support in each province.

***Lay counsellors and community health workers***

Excellent HIV training programmes already exist for lay counsellors. More than 5,000 counsellors in 1,569 VCT centres throughout the country have received HIV training; nearly all of the initial service points have trained VCT counsellors in place. These individuals will be called upon to play a critical role in prevention care and treatment, specifically in the areas of ARV adherence and counselling of new patients. To perform these new functions, experienced VCT counsellors will need to receive an additional one-day of training in ARV treatment and adherence counselling. Other community based health workers i.e. DOTS workers and community health workers, including home based carers, who have not completed initial VCT training will be needed for both on-site care and outreach. These counsellors will be required to complete a more extensive training programme in the history of HIV disease, pre- and post-test counselling, drug readiness training and palliative care. (See Annex V.4 for complete list of topics.) Additional training in ARV adherence and counselling of new patients should be provided for existing mentors providing support to VCT counsellors.

***Administrative staff***

One day of training will be needed for administrative staff, clerks and data capturers. Training will cover such areas as relate to the specific responsibilities of the staff. For instance, training for administrative support staff would cover HIV and AIDS basics, basic communication skills, procedures to follow and track patients that do not keep appointments, completion of forms, patient confidentiality, and appropriate interactions with patient and family. Data capturers will need to be trained on specific data needed for patient tracking and monitoring and evaluation purposes, as well as how to use the software selected for this purpose.

***Nutritionist and dietician training***

Nutritionists and dieticians have an important role to play focused on maximizing nutritional status of PLWHA. Dieticians should oversee the implementation of the nutritional supplementation programme at accredited service points. The Directorate of

Human Resources Development, in collaboration with the provinces and with existing providers of educational programmes, will prepare a standardized curriculum for nutritionist/dietician training.

### **Human Resource Strategies**

In preparation for the introduction of the programme, a core team of health professionals will be identified at each of the service points designated for early implementation. To be accredited, each service point must have a minimum core team available and responsible for HIV and AIDS care and treatment which shall consist of a minimum of 1 FTE medical officer, 2 FTE nurses, 5 FTE lay counsellors/community health workers, and 1 FTE pharmacist. In addition, 1 FTE administrative clerk and 1 FTE data capturer will be needed per service point. This staffing norm is based on the HR needs to treat 500 patients. Where personnel are available, this core team will also include 1 FTE nutritionist or dietician and 0.5 FTE social worker. If these categories of workers cannot be readily obtained, the functions they perform may be incorporated into the tasks of existing health care workers during a transitional period, and a plan will be established for building this capacity over time.

### **Recruitment of Health Personnel**

The training of new lay counsellors and the recruitment of additional administrative support staff should not pose too much difficulty provided that the mechanisms to appoint them exist. All new personnel appointed will require training according to the guidelines described above.

Provincial Heads of Health must review current capacity against the need for initial implementation and submit plans to the Department of Health for funds to meet additional staffing needs. Based on the review by the Department, funds will be made available and the provinces will exercise discretion to fill gaps using strategies most appropriate for their given context. Options for recruiting health care workers include:

- 1. Target community service graduates and new placements** – Upon completion of training, many health care workers must complete one year of community service. Of the workers needed for the core HIV and AIDS teams, medical officers,

pharmacists, and nutritionists/dieticians participate in community service. (Nurses, lay counsellors and community health workers do not participate in community service programmes currently.) The class of 2003 will complete the programme in November and December and are about to enter the workforce. If provinces actively recruit these graduates and ensure that the vacant posts are identified or new posts are created, it may still be possible to attract these graduates to fill needed functions.

The class of 2003 will be placed in late October and November for community service beginning January 2004. The window for affecting these decisions is very narrow. However, with quick and concerted action at the national and provincial levels, it may be possible to create additional community service posts for the service points that could use additional support for functions that can be handled by junior staff (see Table 5.6).

**Table 5.6: Community Service Class of 2003 and Placements for 2004**

	<b>Community Service Class of 2003</b>	<b>Community Service Placements for 2004</b>
Medical Officers	1,100	1,100
Pharmacists	350	350
Nutritionists/dieticians	150	150

- 2. Recruit from pool of new nursing graduates** – The estimated 6,000 nursing students, pupil nurses and pupil nursing auxiliaries completing training offer a potential pool of new recruits.
- 3. Community service for nurses** – presently nurses completing training do not perform community service. The projected target date for community service for nurses can be adjusted to meet the need for additional nurses required.
- 4. Establish targeted bursaries** - The establishment of bursaries for targeted groups of potential health professionals, especially in the more scarce categories, may assist in ensuring that the medium- and long-term human resource needs can be

met. These bursaries would be granted in the years after community service requirements are completed, on the condition that students receiving bursaries commit to working in the public health service for one year for each year of bursary received. Funds will need to be made available for these bursaries. For example these bursaries can be awarded to medical students in the fourth and fifth years of training for the academic year starting January 2004. In two and three years these professionals should be available to work in the public health service for at least two to three years. Bursaries can also be made available for trainee pharmacists and nutritionists.

- 5. Create preferential registration for qualified foreign workers who commit to work in designated service points** – In order for foreign health care workers to seek employment in South Africa, they must apply to the Department of Health for approval before they register with the relevant health professional council. Each year, hundreds of applications are received from nurses and clinicians. For example, during the first half of 2003 alone, 561 applications for registration were submitted from foreign nurses; 58 were reviewed and approved. The review process tends to be slow and restrictive. The Department of Health could adapt this registration process to meet the needs of this programme, by offering preferential registration to qualified health professionals who are prepared to work in the designated service points.
- 6. Recruit retired health care professionals** - Advertise posts to attract professionals that are presently not actively employed to assume work in the public sector on a flexible basis e.g. a sessional, part-time or full-time employment with flexible working hours.
- 7. Extend over-time hours** – Existing personnel may be available to perform additional work if they are granted permission to perform overtime work for additional remuneration.
- 8. Review policy of rotation for nurses** – It is current practice in many provinces for nurses to rotate into a different function on a 10-week basis. This practice has the

potential to cause service disruptions. While in the long run, it is a goal to have all nurses trained in HIV care and treatment, in the near term, it is more critical to build up the skills of the core team of health care workers by keeping them in that role for a longer period of time.

A review of work practices, skills, roles and responsibilities against the care framework would ensure optimal utilization of existing workers. This review would highlight functions that might be performed by lower categories of health workers and mid-level professionals or support personnel in order to free up clinicians for the essential clinical aspects of treatment and care.

**9. Increase retention of existing health care workers** - Retention of existing and new workers is an important short- and long-term goal. Strategies already identified by the Department for increasing retention include:

- Retention incentives to include rural allowances for selected categories of health workers, additional remuneration for scarce skills, mentorship/support mechanisms, providing occupational health services and support programmes for employees, and time off for study.
- Provision of care and treatment for health care workers with HIV and AIDS within the health care sector. This will serve immediately to diminish losses.
- Support programmes to assist health professionals to cope with burnout.

**10. Capacity development and support to non-governmental organisations, faith-based organisations and community-based organisations** - These organisations are vital for assisting with community mobilisation support programmes, education and communications programmes, programmes to integrate education and prevention with treatment, adherence support, support groups, home-based and palliative care and other related activities. The personnel involved in providing the required services to support this plan require training in the standardised training programmes. In addition, many of these organisations require capacity building in management, writing of funding protocols and financial management. As many of these organisations are dependent on government and donor grants, lack of

capacity in management and finance could compromise their ability to obtain government and donor support. Capacity-building initiatives for these groups is important to ensure the services required for the continuum of care at a community level.

**11. Establish public-private partnerships** – HIV and AIDS is a national priority. The engagement of private sector partners to assist with addressing the challenges of provision of care and treatment is essential.

- **Incorporate HIV care into work-based health care programmes.** Currently the private sector (especially large industries) provides work-based health care for their employees. These services are often well resourced and provide primary health care services to employees that would normally utilise the public sector. Entering into partnerships with these industries to support the implementation of this plan for their existing workers that may require HIV and AIDS care and treatment could prevent these workers from flooding the public health facilities. In addition, these industries could provide support in areas where the existing public health care services cannot meet all the requirements for the continuum of care.
- **Utilise clinical expertise in the private sector.** There are private sector medical professionals who may be utilised to support the public health care delivery system in South Africa. To tap into this resource, provinces could contract with specialists and skilled clinicians or sessional private practitioners to fill vacant posts that cannot be filled by full-time public sector personnel. The basis of all contracts must ensure that health care delivery will occur at an accredited public service point, health practitioners must be trained and certified in accordance with the standardised training programmes and all care and treatment would be delivered in accordance with national treatment guidelines established under this plan.
- **Education and training of professional nurses.** The majority of professional nurse training currently occurs in the public sector. The lack of availability of clinical facilities for the midwifery component of professional nurse training presents an obstacle. Through a public-private

partnership, this obstacle could be overcome, resulting in a greater supply of professional nurses to provide health care in South Africa.

- **Private sector practitioners.** Due to limited medical aid coverage for HIV and AIDS treatment, many patients on ARV treatment commenced by private practitioners will seek the continuation of treatment in the public sector. To ensure that the treatment of these individuals is not compromised, it is essential that the national treatment guidelines also apply to the private sector. Discussions with health professional councils, associations, the Board of Health Care Funders and other stakeholders to reinforce the implementation of the national guidelines should commence immediately to develop mechanisms to facilitate the training of private practitioners in the standardised training programmes.

**12. Other Supports** - In addition to measures aimed at recruiting and retaining personnel, back-up support services will be provided to enhance the productivity and effectiveness of health professionals in the programme.

- **Phone-based Clinical Consultation:** “The Clinical HIV Treatment Help Line” - Each service point should have backup through medical expertise and referral networks at the provincial level. To provide additional backup for health-related questions that cannot be answered at this level, a clinical consultation line will be established prior to the start of treatment to assist health practitioners. This line, which will be staffed during normal work hours, will provide clinical consultation to all health care workers involved in HIV and AIDS care and treatment, including clinicians, nurses, and pharmacists. Detailed information on how to contact this consultation line will be included in all established training courses, and will be posted prominently at all initial service points. The Department of Health HIV, AIDS and TB Cluster will coordinate staffing, in consultation with national and international experts in HIV care.
- **Mentorship for Lay Counsellors** - The VCT programme has introduced a mentorship and support programme for lay counsellors. This programme

will be strengthened to include the support required by lay counsellors and community based workers in their role in the implementation of this plan.

### **HUMAN RESOURCE NEEDS FOR 2005-2008**

Over the longer term, the Department of Health will need to employ additional strategies to expand the skilled labour force for health in general, and for HIV and AIDS care and treatment, in particular. Table 5.7 below demonstrates that by March 2005, 6,233 health care FTEs will be needed, growing to 13,805 by March 2008. With the exception of nutritionists and pharmacists, new hires represent from 4 to 8 percent of the current in-post workforce. Recruiting and hiring these additional health workers will require creative solutions, and yet should be achievable. The number of new dieticians and nutritionists increases the existing workforce in this category by 25 percent, and for pharmacists more than doubles the numbers. Hiring these categories of workers may require a re-evaluation of pay scales. It may also require looking at ways to increase enrolment and class size in allied health programmes to prepare today for the need in a few years' time.

**Table 5.7: Number of FTEs Needed**

	April 04-March 05		April 05-March 08	
	# FTEs needed	New HCWs as % of current workforce	# FTEs needed	New HCWs as % of current workforce
Medical Officers	271	3.8%	628	8.8%
Professional Nurses	813	2.0%	1,883	4.7%
Enrolled Nurses	542	2.6%	1,255	6.1%
Assistant Nurses	542	1.9%	1,255	4.4%
Pharmacists	271	21.9%	314	25.4%
Pharmacists Assistants	271	N/A	314	N/A
Dieticians	136	51.0%	314	118.4%
Social Workers	136	N/A	314	N/A
Counsellors	2,710	N/A	6,275	N/A
Admin Clerks	542	N/A	1,255	N/A
<b>TOTAL</b>	<b>6,233</b>		<b>13,805</b>	

Funding to each province under this plan will be sufficient to hire or contract with health care workers in each of these categories to meet the targets in the table above. Funding decisions will include an explicit goal of redistribution of resources to underserved provinces to redress former inequalities. The staff to be hired under this programme will likely not work exclusively with PLWHA. Rather, it is the intention of this programme to integrate the service into the general health infrastructure. As such, hiring additional medical officers, nurses and other categories of workers will benefit the overall public health system.

### **Longer-Term Strategies for Increasing the Health Care Workforce**

**1. Increase production of health professionals** - The national Department of Health should engage academic and training institutions to increase the intake of students in accordance with the projected needs of provincial and national human resource plans. Special attention should be given to increasing the number of medical graduates, professional nurses, enrolled nurses and nursing auxiliaries, pharmacists, post basic pharmacist assistants and nutritionists by increasing the number of trainees. The Health and Welfare SETA learnership programmes could provide a useful conduit for increasing training nurses and pharmacist assistants.

**2. Increase public health employment opportunities** - Additional posts should be created for pharmacist assistants, enrolled nurses and community service health personnel.

**3. Create new categories of health care workers** - Create the category of phlebotomist and develop certification requirements for blood collection. The placement of phlebotomists within the public sector is likely to free medical practitioners and nurses to assume more of their clinical functions.

Coordinate with existing DoH activities around the creation of mid-level positions for dietitians/nutritionists and psychologists.

**4. Explore changes in the practice of care** - Steps to redefine work definitions and scopes of practice could increase the efficiency of health delivery.

- Review the scopes of practice for most health professional groups with respect to skills and functions e.g. review the training and scope of enrolled nurses to perform intake assessments.
- Enhance the skill set developed for enrolled and auxiliary nurses during pre-professional education to meet the specific needs of HIV care and treatment.
- Establish cross-training programmes to promote multi-skilled healthcare workers
- Improve the model of how HIV care is delivered by the health worker in various categories in South Africa based on operational research.
- Review the different categories of community based health care workers i.e. DOTS workers, home-based carers, community health workers and lay counsellors to ensure that their roles and responsibilities are clearly developed and rationalised where necessary.

**5. Employee retention strategies** - Retention of trained health care providers should be achieved in part through the use of incentives targeted particularly to rural and underserved areas and improving working conditions for health workers in rural health services.

- Evaluate the potential of offsetting loans established during the pursuit of professional degrees. This may likewise serve to make these positions more desirable and to enhance retention.
- Establish provider incentives (e.g. adjustment of pay scales, professional advancement additional payment for scarce skills). Other creative mechanisms should be explored on an ongoing basis.
- Develop and enhance existing employee support programmes.
- Increase initiatives to recognise service excellence through awards such as the Khomanani Health Worker Excellence Award and the Cecilia Makiwane Award for nurses.

**6. Recruit qualified overseas clinicians and health professionals**

- Establish twinning programmes with international centres of excellence. Current twinning programmes could be expanded to include programmes with international centres of excellence in the field of HIV and AIDS treatment and care. South African service sites could aim to become international centres of excellence for HIV and AIDS treatment and care themselves in the near future
- Explore the repatriation of South African health care workers currently working outside the country.

- Put in place government-to-government agreements for work exchange programmes for health care workers.

## **SPECIAL CONSIDERATIONS**

There are a few other issues that should be addressed to assure that human resource needs for the plan are met.

### **Laboratory training**

The NHLS laboratories are staffed by highly skilled laboratory technologists and technicians, and there is currently sufficient human resource capacity to perform nearly one million CD4 count assays per year. Nonetheless, vacancies exist for phlebotomists, technologists and technicians, particularly in peripheral laboratories, and the expanded volume of laboratory assays required to support the ARV treatment plan will require an increase in laboratory staffing over five years. To address these human resource needs, the NHLS should establish a national training centre at the National Institute for Communicable Disease.

While NHLS will need to train its professional laboratory staff, health professionals at service points will also require basic laboratory skills - the initial collection, processing and handling of blood samples from HIV-infected patients. Training in blood handling and safety for service site health professionals should thus be part of the nationalized curriculum.

### **Certification**

Health professionals who complete an approved training curriculum will be certified as proficient in HIV care and service delivery. Demonstration of a sufficient roster of certified health professionals will be necessary for service points to be accredited, and consideration for streamlined certification will be given to those professionals who have established experience in HIV and AIDS care (see Chapter IV, *Accreditation of Service Points*).

## **ADMINISTRATIVE STRUCTURE**

### **Department of Health Human Resources Cluster**

The Human Resources Cluster will be responsible for management of the operational plan's human resource deployment, and will pay particular attention to initial deployment. The HIV, AIDS and TB Cluster will oversee and coordinate the HIV training activities described above (see Chapter XV, *Programme Management*). The development of curricula for health care workers will emit directly from the standard of care defined through the guideline process. The Cluster will also establish a regular newsletter and a website containing HIV care updates and other clinical information relevant to HIV practitioners informed by Helpline inquiries.

### **Health Promotion and Quality Assurance Training Centres (Quality Training Centres)**

Quality Training Centres within each province will coordinate HIV training activities at the provincial and local levels. These may be based in a single institution or across multiple institutions. The centres will work closely with a clinical consultant team to implement training programmes based on a standardized national curriculum, particularly during the inception of the programme. The HIV, AIDS and TB Cluster will need to assign clinical experts in HIV care to assist provincial Quality Training Centres in implementing training programmes and provider certification, as necessary.

### **National Health Laboratory Service**

Laboratory training should be established by the NHLS. The HIV, AIDS and TB Cluster will coordinate laboratory staffing issues with the NHLS, to ensure that unexpected human resource needs at NHLS do not delay the initial implementation.

## **PROGRAMME ASSESSMENT**

The Human Resources Cluster will monitor the ongoing human resource needs of the treatment programme. It is envisaged that the staffing ratios and funding assumptions that underlie this plan will be reviewed in March 2004 and October 2004, and annually thereafter in light of the patients being served, to ensure that quality patient care is provided, that training is adequate and that equity is achieved in human resources

deployment. The competency of health care workers will also need to be reviewed to ensure that skills are both learned and retained. In addition, operational research will need to be conducted to determine how best to maximize use of available human resources by skills and functions.