

MEDIUM TERM DEVELOPMENT PLAN, 2002- 2005

NATIONAL TUBERCULOSIS CONTROL PROGRAMME OF SOUTH AFRICA

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INTRODUCTION

In March 2000, Ministers of the 22 high burden countries (countries that together count for 80% of the burden of tuberculosis in the world) called for accelerated expansion of control measures and for increased political commitment and financial resources to reach the targets for global TB control by 2005. The Government of South Africa was one of the signatories of this Declaration.

The National Tuberculosis Control Programme (NTCP) Manager of South Africa agreed in a meeting in Cairo in November 2000, together with the programme managers of the other 21 high burden countries, to develop a Global DOTS Expansion Plan. This Plan has two pillars:

- Development of national Medium Term Development Plans (MTDP), and
- The building of partnerships.

The present document contains the Medium Term Development Plan 2002-2005 of the NTCP of South Africa. It will provide a template for mobilisation of human and financial resources needed to expand tuberculosis control as part of the national health system in order to achieve the targets the country committed itself to towards its own community and to the international community.

The plan was drafted in 2001. In the process of writing this plan all principal stakeholders of Tuberculosis Control in South Africa have been involved. In April, the time frame and process for developing the Plan was decided upon. In June, visits were paid to almost all Provincial Health Departments to obtain support for the Plan. From 17- 20 July, a Workshop was organised in Kopenong with representatives from all major actors (see Annex 10 for list of invitees) to define the basic contents of the Plan. After this a First Draft version was written that was discussed in a Workshop in Pretoria on 12-13 September with a number of selected participants (see Annex 11). Based upon the recommendations a Final Draft version was prepared that was presented to the national authorities for approval. The Royal Netherlands Tuberculosis Association (KNCV) provided technical assistance during this process to the NTCP, with financial support from USAID Washington and USAID-South Africa.

The MTDP comprises the period 2002-2005. This does not correspond with the normal period of 5 years for a MTDP. It was decided to formulate the Plan for the shorter period in view of the commitment of the National Government to achieve the international targets for Tuberculosis control in 2005.

Another critical issue is that the MTDP does not run parallel to the Medium Term Expenditure Framework (MTEF) 2000-2003. It is therefore proposed that in the beginning of 2003 a Mid term Evaluation will take place to assess whether the MTDP needs adaptation in view of the development of the NTCP and the new Medium Term Expenditure Framework. It can be considered to extend the MTDP after this evaluation to 2006 in order to let it coincide with the Medium Term Expenditure Framework 2003-2006.

Guided by this strategic framework, Provincial Implementation Plans will be developed in the first quarter of 2002.

1. COUNTRY, PEOPLE AND HEALTH

1.1 General characteristics

The Republic of South Africa is located at the southern tip of the continent of Africa and covers an area of 1,219,912 km². It has common boundaries with the Republics of Namibia, Botswana and Zimbabwe, while the Republic of Mozambique and the Kingdom of Swaziland lie to the north-east. Completely enclosed by South African territory in the south-east is the mountain Kingdom of Lesotho.

1.1.1 Political and administrative structure

On 10 December 1996 former President Mandela signed a new constitution that brought an official end to the apartheid policy. Initiatives and actions undertaken since the nineties in the fields of governance and administration have deepened and consolidated South Africa's democracy. This includes improvements to intergovernmental relations and co-operative governance and efforts to strengthen the provincial and local spheres of government.

Administratively South Africa is divided into nine provinces, each with its own Legislature, Premier and Provincial Members of Executive Councils (MECs). The provinces are Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Mpumalanga, Northern Cape, Northern Province, North-West and Western Cape.

The executive branch of the country consists of a President who is at the same time Chief of State and Head of Government. The National Assembly elects the President. The President appoints the Cabinet.

The legislative branch consists of the National Assembly (400 seats, elected by popular vote for five-years terms; last election held on 2 June 1999, next election to be held in 2004) and the National Council of Provinces (10 members elected by each of the nine provincial legislatures).

1.1.2 Social-economic profile

The GDP per capita is R18,203 (US\$ 6,900 purchasing parity power) with a yearly real growth rate of 0.6%. The South African economy includes a modern financial and industrial sector, supported by a well-developed infrastructure, operating alongside a subsistence informal sector. Agriculture (5%), industry (35%) and services (60%) compose the GDP. The labour force by occupation is agriculture 30%, industry 25% and services 45%. The mining sector played an important role in the development of the South African economy, but its importance has declined in the last decade and currently accounts for about 6% of GDP. The manufacturing sector accounts for approximately one-fifth of South Africa's GDP. The contribution of financial services and business increased from about 12% to nearly 18% during the nineties and given the high level of banking and commercial activities in South Africa, this share is expected to expand even

further. Tourism activity is also expanding its relative size and further increases in the contribution of the tertiary sector to GDP are expected.

The unemployment rate is 30%. Some 40% of all South Africans live in poverty, and 75% of these stay in rural areas where they are deprived of access to health services. The main core of the Government's health policy is eventually to provide health care that is affordable and accessible to all.

There are 11 official languages and literacy rate in people age 15 and over is 81.1% (male 81.9 and female 81.7%).

1.1.3 Demographic profile

The estimated population was 43,685,699 (July 2000), with 32.5% 0-14 years, 62.8% 15-64 years and 4.8% 65 years and over.

There are 4 race groups: Black (75.2%), White (13.6%), Coloured (8.6%) and Indian (2.6%).

Population growth rate is 1.47%. Birth rate is estimated to be 24.56 births/1,000 population, death rate 14.69 deaths/1,000 population and net migration rate -1.9 migrants/1,000 population.

Total fertility rate is 2.47 children born/woman and Infant Mortality Rate is 58.9/1,000 live births.

Life expectancy at birth is 50.4 years for males and 51.8 years for females.

1.2 Health services

The health service inherited in 1994 was a reflection of a system that focussed on supporting the Apartheid State. It had been fragmented into National, Coloured, Indian and White "own affairs", four Provincial and 10 Homeland Health Departments. Resources were distributed along racial lines with a focus on hospital care and an underdeveloped Primary Health Care System.

1.2.1 The health system

In the period 1994-1999 much progress was made in overcoming this legacy.

Achievements obtained among others were:

- The establishment of a single National Department of Health and nine Provincial Health Departments
- Upgrading of clinics and health centres and building of 500 new ones
- Introduction of free primary health care
- The establishment of a District Health System
- The launch of various programmes to tackle priority health problems such as Integrated Management of Childhood Illnesses, DOTS and Maternal Mortality Programme.

Critical elements were:

- A worsening HIV/AIDS epidemic
- A reduction of the health budget in real terms
- Problems in addressing inequities and in efficiency of staff.

For the period 1999-2004 a Health Sector Strategic Framework has been defined with a ten-point plan to strengthen implementation of efficient, effective and high quality health services:

1. Decreasing morbidity and mortality rates through strategic intervention
2. Revitalisation of public hospital services
3. Accelerating delivery of an essential package of PHC services through the DHS
4. Improving resource mobilisation and management and equity in allocation
5. Improving human resource development and management
6. Improving quality of care
7. Enhancing communication and consultation in the health system and with communities
8. Legislative reform
9. Re-organisation of certain supportive services
10. Strengthening co-operation with international partners.

The private for-profit sector is responsible for more than half of the expenditures in health. It consists mainly of general practitioners and medical specialists working in private hospitals. They are estimated to cover 20% of the population.

The private not-for-profit sector (mainly non-governmental organisations) plays a vital role in health issues at the community level (especially in relation to cancer, tuberculosis, HIV-AIDS, mental health and disability).

A private company, LifeCare, who is funded by Government, offers hospital care for TB patients. The NGO SANTA also provides hospital care for TB patients with governmental funds. From October to December 2000 a review was conducted of these services by the NTCP with technical and financial support of DFID. The expected outcome will be a restructured contract between Government and these organizations for provision of care consistent with nationally agreed standards.

A new single parastatal body, the National Health Laboratories Services (NHLS), has recently been created. This body incorporates provincial laboratories with those run by the South African Institute of Medical Research.(SAIMR)

1.2.2 The health programmes

The interventions aimed at reducing morbidity and mortality (point 1 of the Strategic Framework) are:

- Targeting children, youth and women
- HIV-AIDS, tuberculosis, malaria and diseases preventable by immunisation as priority communicable diseases

- Improving nutrition and food security
- Non-communicable diseases such as chronic diseases, substance abuse, cancer and mental health
- Improved emergency medical services.

Programmes should be offered within a comprehensive primary health care package, while still ensuring that they have the necessary focussed attention and skilled support. There is some doubt whether the allocated financial resources of R200-250¹ per capita are sufficient to finance the proposed package. However, additional resources will not easily come from reallocations within the health budget. Additionally, the implementation of the Health Sector Strategic framework is, however, confounded by the slow unfolding of the new municipal boundaries and structures. This causes lack of clarity of definition of “municipal health services”, delays in transfer of staff from provinces to local authorities, delayed service arrangements between provinces and local authorities, and problems in assuring adequate infrastructure and the developments of effective referral and support systems. Also quality issues such as opening hours, waiting time, clinical skills and availability of medicines are yet insufficiently addressed.

1.2.3 Health financing

According to data provided by WHO, health expenditure constitutes 7.1% of the GDP. This corresponds to US\$ 396 per capita of which US\$ 184 as public health expenditure and US\$ 183 as private health expenditure. Per capita comprehensive public health budget was R 932 (1996-97), R 971 (1997-98) and R 942 (1998-99) in 1999 Rand, according to The South African Health Review 2000 Report.

Sources of funding of the Comprehensive Public Health Sector in 1998/99 are:

General Taxation: R 30,908 million (94.5%); Local Authority Revenue: R 996 million (3.0%); User fees: R 340 million (1.0%); Provincial Government-own revenue: R 384 million (1.2%), and Donors: R 68 million (0.2%), for a total of R 32695 million (100%).

1.2.4 Health profile

South Africa is undergoing a demographic transition with declining fertility. The health status is still poor despite all efforts made. This is due to a triple burden of disease from a combination of poverty-related diseases, emerging chronic diseases and injuries. The HIV-AIDS epidemic has already led to increased child and young adult mortality and reduced life expectancy.

There also exist extensive inequalities in health status by population group, urban/rural area and provinces.

Major causes of death during infancy include conditions that occur during the perinatal period (22%), low birth weight (20%) and diarrhoea (16%). In the case of children aged 1-4 years, the most common cause of death is injury (24%), followed by diarrhoea (20%),

¹ 1 US\$ = 8 R

malnutrition (13%) and lower respiratory infections (9%). In 1995, AIDS accounted for 3.2% and TB for 3.1% of the deaths of children aged 1-4 years.

Injuries are the most common cause of death for adolescents aged 10-19 years. In the 10-14 year age groups, infectious diseases including lower respiratory tract infections, meningitis, diarrhoea, septicaemia and TB are the major causes of death, following injuries. In the 15-19 year age group, TB is the most common disease that causes death and is, in the case of women, followed by AIDS.

. Deaths among men are dominated by injuries. TB is the most important infectious disease causing death in all ages and stroke, ischaemic heart disease, diabetes and cancers play an important role in the 45-59 year age group.

TB, HIV, STDs, and malaria are the dominating infectious diseases. Impacting are also cancer, hypertension, obesity, work-related illness and injuries, smoking related diseases, alcohol and substance abuse and disabilities.

2. THE TUBERCULOSIS PROBLEM

2.1 The tuberculosis epidemic

In 1999 South Africa ranked 9th among the 22 high burden countries accounting for 80% of all new cases of tuberculosis, world-wide. The estimated incidence of all TB cases for 1999 was 360 per 100,000 population all cases and 165 per 100,000 population new smear positive cases. In terms of cases notified, this translates to more than 151,000 total TB cases of which more than 79,000 were new smear positive (infectious).

The total numbers of cases are predicted to increase up to 2005 because of the impact of the HIV epidemic (10%/year) and the population growth (1.46%/year). In 1997 an estimated 72,000 people died in South Africa from tuberculosis.

2.2 Tuberculosis and HIV/AIDS

HIV/AIDS represents one of the most serious challenges to health and society in general in South Africa. Since the first reported case was documented in South Africa, the prevalence has escalated at alarming rates. Estimates of the burden of disease attributable to HIV/AIDS are derived from annual unlinked, anonymous HIV surveys conducted each year by the Department of Health among antenatal clinic attendees in public health facilities.

On the basis of the 1999 and 2000 surveys, the HIV prevalence rate is estimated at 22.4% of women attending antenatal clinics being HIV positive by the end of 1999 and 24.5% by the end of 2000.

Table 1: HIV prevalence among women attending antenatal clinics in 1999-2000 and estimated among tuberculosis patients 1999.

PROVINCE	% HIV+		Est % HIV+ amongst TB cases-1999 ¹
	1999	2000	
KwaZulu/Natal	32.5	36.2	35.1
Free State	27.9	27.9	46.8
Mpumalanga	27.3	29.7	39.9
Gauteng	23.9	29.4	59.7
North West	23.0	22.9	54.2
Eastern Cape	18.0	20.2	28.3
Northern Province	11.4	13.2	31.4
Northern Cape	10.1	11.2	40.6
Western Cape	7.1	8.3	26.7
National	22.4	24.5	42.7

¹ Source: SA Medical Research Council, 1999

In general, the HIV prevalence among adult TB patients is usually 2-3 times higher than among the general population.

HIV is now the greatest individual risk factor for tuberculosis disease. HIV infection in a person who is already infected with TB increases the risk to develop tuberculosis disease from 10% in a life-time to 7-8% per year. The HIV/AIDS epidemic and the tuberculosis epidemics occur in the same age groups of the general population, the young productive age-groups of males and females. Increased tuberculosis morbidity is therefore particularly seen in the age-groups where HIV has its highest prevalence. This explains why in South-Africa HIV prevention is one of the major factors for tuberculosis control. Without effective HIV/AIDS prevention, tuberculosis will continue to increase, following the trend of the HIV epidemic.

The association of tuberculosis with HIV/AIDS has not gone unnoticed in the community. South Africa is no exception to many other countries in sub-Saharan Africa where AIDS and tuberculosis have become synonymous. As both tuberculosis and HIV/AIDS often afflict the same person, health workers must address both problems at the same time, by offering VCT to all tuberculosis patients, tuberculosis screening for all clients with HIV/AIDS, and a continuum of care and prevention during all stages of HIV/AIDS for all other opportunistic infections.

2.3 Multi-Drug Resistant tuberculosis

In 2000, the NTCP and MRC published Guidelines for the Management of MDR-TB in South Africa

Recent studies by the MRC National Tuberculosis Research Programme in three provinces indicate a rate of approximately 1% MDR in new tuberculosis cases and 4% in previously treated cases. This translates into about 2 000 new cases of MDR tuberculosis in South Africa each year. MDR tuberculosis is difficult and expensive to treat, while current cure rates range from 30-50%. Two-year case fatality rates are around 30% to 50%, being higher in HIV positive patients. The cost of treating a case of MDR tuberculosis in South Africa is 10 to 20 times the cost of treating an uncomplicated drug-susceptible case but is probably much higher when factoring in the cost of prolonged hospitalisation, cultures, and drug susceptibility testing. To better understand the magnitude of drug resistance in South Africa, a nation-wide surveillance project is underway and will be completed in 2002. The survey results will form the benchmark for informing future direction of policy with regard to MDR-TB. .

Although HIV in itself is not a biological risk factor for resistance, MDR-TB explosions have been seen in places where many HIV positive people may be concentrated such as hospitals, prisons and shelters for homeless people, because any tuberculosis infection progresses very fast to overt tuberculosis disease among persons living with HIV due to impaired immunity. Good infection control measures, in such settings are thus important to stop the spread of (MDR-) TB.

2.4 Tuberculosis in special populations

Tuberculosis can affect all people in society. However, there are people that are especially vulnerable because of their health status and/or the conditions under which they are living and working. The particular vulnerability of persons infected with the Human Immunodeficiency Virus (HIV) has been mentioned.. Other high-risk groups include that need special attention in the National Tuberculosis Control Programme are:

- Incarcerated persons (including individuals awaiting trial and sentenced) due to overcrowded circumstances, high rates of HIV and poor nutritional status
-
- Miners, as they are generally poor, and subject to occupational hazards such as silicosis
- Military personnel
- Migrant Labourers
- Small children exposed to infectious TB patients
- Health Care personnel

2.5 Case detection

Tuberculosis case notifications reflect only a proportion of the true number of cases in South Africa. This is due to incomplete coverage of health services and problems with the registration and notification systems. Districts that have implemented the DOTS Strategy are reorganising their recording and reporting system, resulting in more complete and reliable reporting

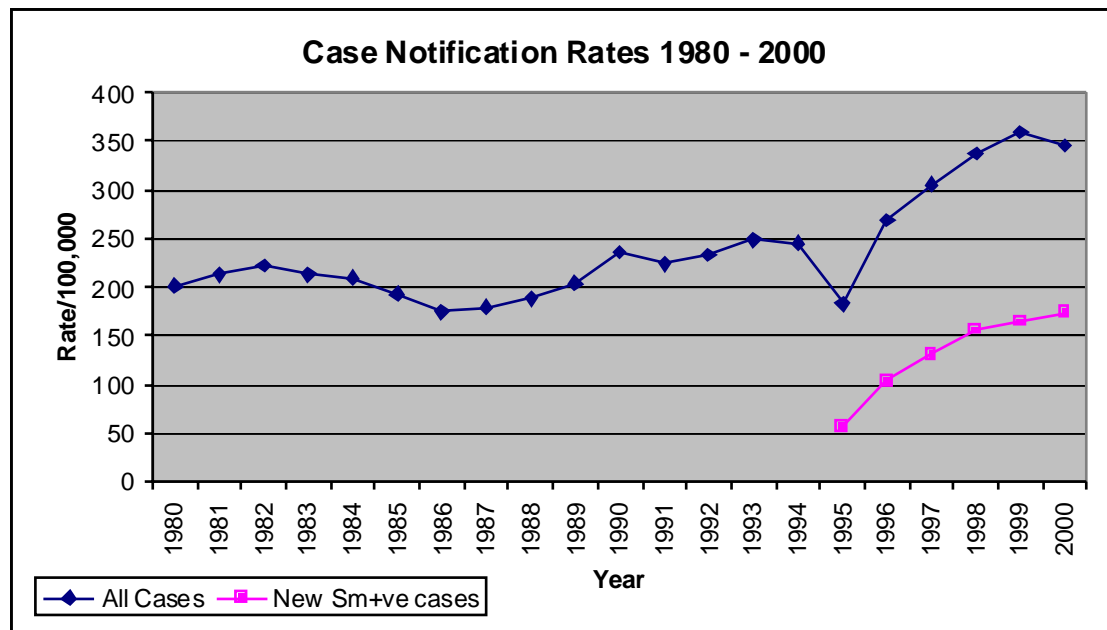
Table 2: Case notifications New smear positive patients and All forms, 1997-2000

YEAR	NEW SMEAR POSITIVE PATIENTS			PATIENTS ALL FORMS		
	DOTS	NON-DOTS	TOTAL	DOTS	NON-DOTS	TOTAL
2000	62399	14992	79391	111916	39323	151239
1999	54075	18023	72098	103714	44450	148164
1998	16246	49801	66047	25610	116671	142281
1997	4146	49925	54073	7608	118305	125913

Source: WHO Reports Global Tuberculosis Control 1999, 2000 and 2001. 'DOTS' and 'NON-DOTS' according to WHO definitions. The "DOTS" designation refers to districts that are Demonstration and Training Districts (DTDs) and thereby implement the elements of the DOTS Strategy.

These data corresponds to the following case notification rates (Figure 1)

Figure 1: Case Notification rates All cases and New smear positive cases 1980-2000.



Data on new smear positive patients available for 1995 onwards.

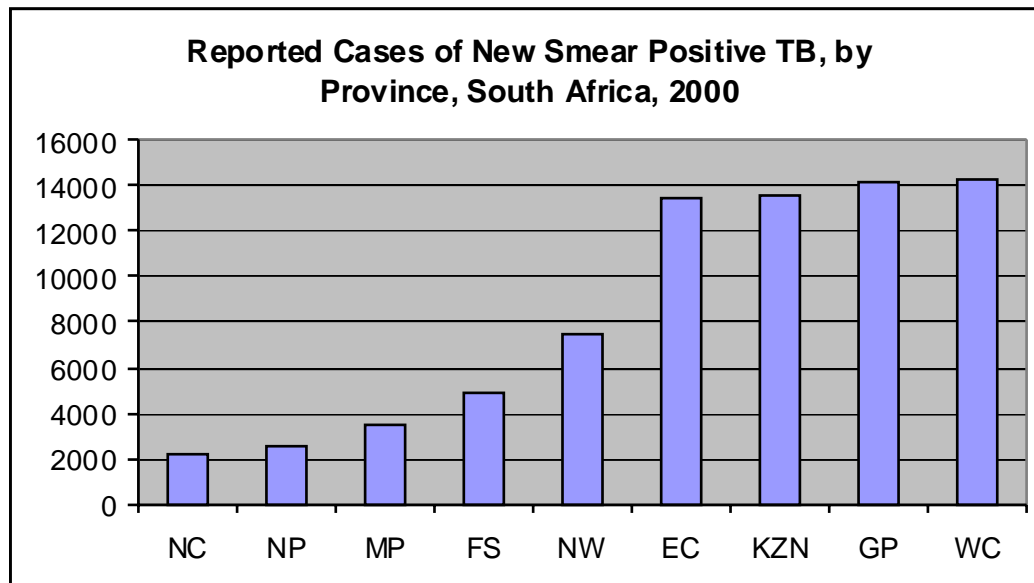
Table 3: Notified cases of PTB, by province, South Africa, 1996 - 2000

Province	Cases 1996	Cases 1997	Cases 1998	Cases 1999	Cases 2000	Rate/100,000 2000
Eastern Cape	22646	24253	26405	25381	24057	351
Free State	8958	8726	9084	7779	7773	279
Gauteng	10235	10183	14925	12868	18207	231
KwaZulu Natal	15376	23646	22658	27465	22319	248
Mpumalanga	2483	3174	3594	4880	4944	163
Northern Cape	3400	4431	2690	4175	3491	400
Northern	4023	4738	4833	4957	3872	70
North West	5568	6288	9328	8199	10703	300
Western Cape	19691	18702	21305	22983	24709	590
South Africa	92380	104141	114822	118687	120075	274
Reporting rate *	68%	70%	79%	78%	78%	83%

*: Reporting rate compares the number of facility reports received as a percentage of all expected reports.

Data reflect the start of the Revised NTCP Programme in 1996, when the DOTS strategy was gradually introduced, resulting in improving notification rates and case finding. This period also reflects the period of the escalating HIV/TB epidemic.

Figure 2: Newsmeat positive cases by province, 2000



73% of all new smear positive cases are reported in just 4 provinces where 64% of the population of South Africa is living.

Treatment outcome

All tuberculosis patients are treated with a short-course rifampicin-containing regimen for the full six-month treatment period.

Treatment outcome of new smear positive patients treated in DOTS areas and in Non-DOTS areas and of re-treatment patients under DOTS for patients diagnosed in 1996-1999, are presented in Tables 3 a-c.

Table 3a: Treatment outcome (%) of new smear positive patients in DOTS areas, 1996-1999

YEAR	Cured	Completed	Died	Failed	Interrupted	Transferred	Not evaluated	Success
1999	52	8	7	1	13	18	2	60
1998	68	7	6	2	7	12	0	74
1997	68	5	5	3	11	7	1	73
1996	65	5	4	1	12	9	5	69

Table 3b: Treatment outcome (%) of new smear positive patients in Non-DOTS areas, 1996-1999

YEAR	Cured	Completed	Died	Failed	Interrupted	Transferred	Not evaluated	Success
1999	33	16	6	1	19	23	1	49
1998	30	17	5	1	13	34	0	47
1997	56	12	7	2	17	3	4	67
1996	45	15	5	3	15	17	0	60

Table 3c: Treatment outcome (%) of re-treatment patients in DOTS areas, 1996-1999

YEAR	Cured	Completed	Died	Failed	Interrupted	Transferred	Not evaluated	Success
1999	40	7	8	4	20	20	1	47
1998	57	13	12	3	10	5	0	71
1997	63	5	6	3	11	8	4	68
1996	62	4	5	2	12	3	11	67

The main conclusions to be drawn from these data are:

- Cure rates for new smear positive patients and re-treatment patients under DOTS are improving year by year but are not reaching WHO targets (85% cure rate) that were adopted by South Africa in Amsterdam.
- High rates of treatment interruption and transfers are main problems to be solved.
- Cure rates in DOTS areas are consistently better than in Non-DOTS areas for new smear positive patients

3. THE NATIONAL TUBERCULOSIS CONTROL PROGRAMME

South Africa's apartheid health policies prior to 1994 resulted in wide variances in tuberculosis incidence, depending on race. Incidence ranged from less than 20/100,000 in the white community to 400-600/100,000 in black and coloured communities.

3.1 History of tuberculosis control in South Africa

In 1995 a revised National Tuberculosis Control Programme (NTCP) was established, based on the Directly Observed Therapy Short-course strategy (DOTS) of WHO. Its aim was to gradually replace the non-standardised short-course chemotherapy that had been applied throughout the country for several years.

In June 1996 the South African Department of Health and WHO carried out a joint review of the NTCP. They identified four key factors reflecting the seriousness of the tuberculosis epidemic in South Africa:

- High tuberculosis notification rates;
- Increasing HIV prevalence among TB patients;
- Emergence of multi-drug resistance;
- Failure to control the epidemic despite yearly expenditures of R 500 million.

The Government committed itself to control tuberculosis and determined that diagnosis and treatment should be free of charge to the patients. WHO and the IUATLD agreed to send monitoring missions every 6 months to provide technical guidance.

In March 2000 the Government of South Africa signed the declaration of Amsterdam to STOP TB as one of the 22 high burden countries. The Declaration called for accelerated expansion of control measures for TB and for increased political commitment and financial resources to reach targets for global TB control by 2005. In May 2000 a World Health Assembly resolution restated this call for all WHO member states.

In November 2000 at a meeting in Cairo, NTP managers of the 22 high burden countries, technical and financial partners and the global TB network of the WHO agreed to develop a Global DOTS Expansion Plan. A pillar of the Global DOTS Expansion Plan is the development of a national Medium Term Development Plan in each country. The WHO/IUATLD monitoring mission of July 2000 recommended that the Director of the NTCP to initiate the elaboration of this Medium Term Development Plan as soon as feasible.

3.2 Structure and organisation of the NTCP

The NTCP has four levels: national level, provincial level, district level and health facility level, all within the general health services. The national tuberculosis unit plays the role of co-ordination, facilitation and evaluation of tuberculosis services for the whole country. The provincial level is responsible for implementation and budgeting. The district level is the key level for the management of primary health care and is the most peripheral unit of the health services administration. The health facility level is within a district. It is the level of primary care and includes district hospitals, health centres, dispensaries and clinics within a district.

This structure may vary to some extent. In some provinces, a regional level has been established between the provincial and district levels.

3.2.1 Central level

The central unit is at the National Department of Health. Its key levels of activity and functions are to:

- In general facilitate, enhance and support communication, co-ordination and collaboration between all stakeholders in tuberculosis control, involving all appropriate sectors and all provinces.
- Establish and update consensus-based national technical policies and guidelines on TB case detection and treatment for health facilities and laboratories.
- Conduct bi-annual supervision visits to all provinces to advise and build capacity on planning monitoring and evaluation of TB control activities.
- Produce and update training materials on case management, programme monitoring and supervision, and bacterial laboratory techniques.
- Organise workshops to introduce TB control guidelines into the teaching curricula of medical schools, schools for laboratory technicians and other educational institutions that train health professionals.
- Advise the corresponding DOH directorates (dealing, for example, with essential drugs, procurement of supplies, laboratories) and the provinces in defining drug and laboratory material and equipment needs, facilitate their procurement, and advise on rational distribution and accountable drug management. guaranteeing an uninterrupted drug supply.
- Organise and co-ordinate activities for improving access to quality assured bacteriological diagnosis of tuberculosis and surveillance of anti-tuberculosis drug resistance.
- Develop, implement and support the establishment of a standardised Recording and Reporting System with quarterly reporting of data on case notifications and treatment outcomes from the peripheral, district and regional to the central levels.
- Assess the progress of the NTCP towards achieving its programme and activity targets, by analysing relevant data (for example, on indicators such as case notification, treatment outcomes, number and quality of microscopes) and by carrying out regular supervision and audits to each of the 9 provinces to advise these how best to improve their performance further.
- Promote co-operation with national academic institutions and international agencies in support of research and development projects, to advise on solutions to problems encountered during implementation of control activities.
- Establish and update national technical policies and guidelines on TB case detection and treatment for health facilities and laboratories.
- Maintain links with national NGOs to ensure optimal collaboration in providing high quality TB control in the community. .
- Initiate, develop and support a long-term IEC strategy at national and provincial levels aimed at patients and the community.

- Produce a national annual report analysing programme achievements and constraints, and support the same for each province.
- Initiate and support a long-term advocacy strategy for the national and province-levels.
- Promote, coordinate and support operational and epidemiologic research activities.
- Communicate and collaborate closely with the HIV/AIDS/STI unit in the national DOH and promote the same in the provinces.

The organogram of the Department of Health and the Central Unit NTCP are attached as Annexes 1 and 2 respectively.

3.2.2 Provincial level

Key functions at provincial level are:

- Co-ordinate with district managers and CDC/TB co-ordinators
- Conduct regular visits to all districts to advise and build capacity on planning, monitoring, and evaluation of TB control activities including the use of data as are routinely collected in the recording and reporting system.
- Facilitate and provide access to adequate and appropriate training courses for the districts.
- Ensure that supervisory and support visits are conducted in each district.
- Facilitate procurement of anti-TB medications and advise on rational distribution and accountable drug management, guaranteeing an uninterrupted drug supply across the province.
- Supervise the record keeping of the TB registers and the TB laboratory registers.
- Review all periodic reports submitted by the districts for accuracy and completeness, and provide feedback to the district officers.
- Collaborate with other agencies and NGOs as well as private doctors, who provide care for TB patients in the district.

A full-time Provincial TB Co-ordinator should be appointed. Due to the high TB caseload, there is a need to establish TB Provincial teams to assist the provincial co-ordinators. Details will be provided in Chapter 4.

3.2.3 District level

The district is the key level for primary health care management. The district level initiates the implementation of the DOTS strategy in district health facilities, such as district hospitals, health centres and health posts, and monitors its application in these facilities.

The district level's main functions are to:

- Co-ordinate training of doctors, nurses, laboratory technicians and other staff.
- Register each notified case in the District TB Register, and record results of the follow-up sputum examinations and treatment outcome for each registered patient.

- Submit quarterly reports on case detection, sputum conversion and treatment outcomes by cohorts of patients and programme management to the provincial level.
- Conduct quarterly supervisory visits to the health facilities to ensure that TB activities are performed efficiently and effectively, and recorded.
- Use the recording and reporting system for programme performance monitoring and to foster the use of data at facility level..
- Order drugs and forms for TB control activities and oversee distribution of supplies to the health facilities.
- Co-ordinate with the laboratory supervisor to ensure that sputum-smear examinations are performed correctly, the TB Laboratory Register is correctly maintained and laboratory reagents and slides are available.
- To develop, monitor, supervise and evaluate the DOT modality/ies used in the district.
- Assist health facilities to trace treatment interrupters.

There is a need to appoint District TB teams with a District TB Co-ordinator. Details will be provided in chapter 4. In districts that have a high caseload, subdivision should be considered in order to keep the programme manageable.

3.3 Objectives

The objectives of the Medium Term Development Plan are taken from the objectives of the NTCP, adapted to the time frame of 2005 and take into account internationally agreed objectives

3.3.1 Overall objectives

The overall objectives of the National Tuberculosis Control Programme are:

- To reduce mortality, morbidity and transmission of the disease
- To reduce human suffering and the social and economic burden families, communities and the country bear as a consequence of the disease
- To establish optimal co-ordination and co-ordinated action with the HIV/AIDS&STD Programme
- To prevent the development of drug resistance

3.3.2 Short-term objectives

The short time objectives of the National Tuberculosis Control Programme, to be reached in 2005, are:

- To achieve a cure rate of 80 - 85% among sputum smear-positive tuberculosis cases detected and to reduce the interrupter rate to < 10% and the transfer rate to < 5%
- To detect 70% of the estimated new smear-positive tuberculosis TB cases
- To achieve DOTS coverage to all Districts

In Chapter 4 a more extensive list of indicators for monitoring and evaluation will be presented.

3.4 Strategies

The following strategies are guiding the implementation of all control activities:

- Integral application of the revised DOTS Strategic Framework of WHO:
 - a. Sustained political commitment expressed by availing sufficient human and financial resources for achieving the international targets for TB control in the context of the national health system;
 - b. Good access to quality-assured tuberculosis sputum microscopy for case detection among persons presenting with symptoms of tuberculosis, screening of individuals with prolonged cough and special attention to case detection among high-risk groups including HIV infected and institutionalised persons;
 - c. Standardised short-course chemotherapy to all cases of tuberculosis under proper case-management conditions including direct observation of treatment (DOT) – proper case management conditions imply technically sound and socially supportive treatment services;
 - d. Uninterrupted supply of quality-assured drugs with reliable drug procurement and distribution systems and,
 - e. Recording and reporting system enabling outcome assessment of each patient and assessment of the overall programme performance.
- Partnership building
In the multi-faceted and decentralised health sector, partnerships will be established and/or strengthened at the national level among the various departments, institutions and organisations relevant to the NTCP: HIV/AIDS&STD, strategic health programmes, laboratory, health service delivery, academic institutions, private for profit health organisations, NGOs, police, correctional services, military services, mines, etc. At the international level partnerships will be strengthened/build with a/o Belgian Government, CDC, DFID, IUATLD, KNCV, SADC, SATCI, USAID and WHO (South Africa, AFRO and Geneva).

4. PROGRAMME ACTIVITIES

All activities of the Programme are listed with a short summary description, strengths and weaknesses, proposed solutions and priority.

The first priority of the Programme is to get the basics right throughout the whole country by country wide implementation of an NTCP “core package.” However, it is recognised that, in view of the diversity of development of the Programme in the different provinces, a whole spectrum of additional activities will be implemented according to a process of prioritisation in the provinces. These additional activities are described in the following sections as well.

Technical assistance by the central level (training, supervision and monitoring visits) will focus on strengthening the core package until they are well established without excluding assistance related to additional activities. If provinces request assistance to conduct additional activities, such assistance will be provided under the condition that activities are considered to be reasonable and feasible in relation to the development of the Programme in that province.

Core Package

The NTCP core package includes the following interventions:

- A well accessible and efficient laboratory network functioning with a quality control system in place, providing early passive case finding
- Uninterrupted drug supply
- Adequate supply of laboratory materials
- Well-accessible treatment services utilising DOT for at least the initial two months of treatment
- Regular high-quality support and supervision by provincial and district staff
- Presence of sufficient well-trained Staff
- District based TB register in use
- A reliable MIS using quarterly reports complete, coherent, correct, timely, cohort-based and analysed
- Referral system in place
-
-
- Simple, basic infection control measures in place in relevant institutions
- Availability of appropriate IEC for each patient with TB
- A reliable drug resistance surveillance system
- Adequate and reliable funding of the essential programme elements mentioned above.
- Development and implementation of sector and area specific DOTS programmes in special populations (mines, prisons, major industries, migrant workers, etc)

Additional Package

With the core package well implemented, the following interventions can increase the effectiveness of the TB control programme:

- High quality, easily accessible VCT for all tuberculosis patients and people wanting to know their HIV status, combined with appropriate HIV/AIDS care and prevention and screening for active TB among PLWH.
- Enhanced passive case-finding in high-risk groups (“active finding of symptomatic patients”) such as miners, prisoners, PLWH/AIDS, contacts of infectious TB cases, etc.
- Tuberculosis preventive treatment of close contacts of infectious cases (particularly small children) in whom active tuberculosis is excluded, and people living with HIV.
- Second line treatment for cases with MDR-TB

Key elements of the additional package include, on top of other key elements:

- Co-ordination/collaboration with HIV/AIDS/STD program in training, IEC, operational research, surveillance, home-based care programmes, VCT and care for people with HIV/AIDS,
- Implementation and monitoring of a standardised and evidence-based policy on MDR-TB management
- Co-ordination, collaboration, consensus building and implementation with key stakeholders: mines, industry, private sector, prisons, etc

One guiding principle of the implementation of the NTCP is a patient-centred approach at the service delivery level. Details are provided in Annex 3.

Priority steps are listed in each paragraph, wherever feasible.

4.1 Case finding and diagnosis

The objective of case finding is to detect cases as early as possible in order to reduce transmission in the community, maintain health and prevent disability among the patients.

The basis of diagnosis of tuberculosis is direct sputum-smear examination which is cheap, reliable and fast in identifying the infectious sources of tuberculosis in the community. Sputum smear microscopy needs to be undertaken in all tuberculosis suspects who have a productive cough of >3 weeks. Sputum microscopy services must be of high proficiency, have a turn-around time of 24-48 hours and be well accessible to the community.

Case finding is primarily focussed on “TB suspects,” patients presenting themselves to a health facility with symptoms of cough with a duration of 3 weeks or more that designate them as “tuberculosis suspects”. High-risk groups especially people living with HIV/AIDS, need particular attention.

For diagnosis of tuberculosis among these suspects the diagnostic pathways are described in the Practical Guidelines

The NHLS, NTCP and provinces must determine optimal standards for access to bacteriological services.

In principle sputum smear microscopy must be:

- Of reliable quality, confirmed by regular external and internal quality control systems
- Available in each primary health care unit, on a daily basis and with a maximum turn-around time of 24-48 hours.
- Be offered free of charge.

WHO recommends on average one diagnostic centre per 100,000 population (range 50,000/150,000 population).² Care must be taken that each microscopist involved in sputum smear examination reads at least 2-3 smears per day/10-15 per week, to maintain proficiency. On the other hand, 20 smears per day per reader is considered a maximum when using a regular light microscope, as otherwise visual fatigue leads to deterioration of reading quality. Decentralisation of microscopy services must therefore strike a balance between maximum accessibility, minimum burden to maintain proficiency, and feasibility of regular laboratory supervision and external quality assurance.

Monitoring the yield of diagnostic sputum smear examinations³ is a useful tool for identifying locations where special attention needs to be paid to the diagnostic services may be substandard. High yield of examination (>20%) might indicate, among others, poor lack of access to services, a high risk of the particular population or late lack of identification of suspects among those presenting to the health service.

Detailed situational analysis of the current services performance and the remedial steps required to arrive at sufficient service provision are required. For provinces not already undertaking this analysis, it should be commenced within 6 months of adoption of the Medium Term Development Plan. The National Tuberculosis Programme shall outline the framework and tools for the analysis and support the process.

Annex 4 provides more details about the role of the laboratory services.

4.2 Chemotherapy and case-holding

Patients identified as suffering from tuberculosis start treatment with anti-TB drugs according to the Practical Guidelines established by the Programme. During treatment, patients are monitored by sputum smear microscopy. Direct Observation of Treatment (DOT) is provided to the patient as a support mechanism in order to ensure adherence with treatment and to prevent the development of drug-resistance. Procedures are established for referral of patients from inpatient to outpatient treatment within a district as well as for movement of patients from one district to another. Active follow-up of referral and transfer must be implemented to ensure that referred patients are actually registered at their stated destination. Patients who interrupt are timeously

² Laboratory services in tuberculosis control. Part I, Organisation and management. WHO/TB/98.258. Page 15.

³ The proportion of positive smears among all tuberculosis suspects examined, normal range 5-20%.

identified and traced. Procedures for tracing defaulting patients are developed, implemented and monitored..

Different options exist for providing DOT to the patient. Selection depends on the preferences of the patients and availability of DOTS supporter networks. Impact of the different options should be evaluated, taking treatment outcome results as the basic parameter.

The management of MDR-TB patients in South Africa is a part of NTCP responsibility. Drug resistant tuberculosis, especially multi-drug resistant tuberculosis (MDR-TB), forms a serious threat because MDR-TB is not only extremely expensive but also very difficult to treat. Recalling that MDR-TB is the result of inappropriate prescription of drugs, failing drug management (bad quality of drugs, interruption of stock), or inappropriate taking of drugs (lack of DOT), the first priority of any programme is to identify the causal factors for the emergence of drug resistance in that setting and to prevent further development of drug resistance.

As far as treatment of MDR-TB is concerned the protection of second line drugs has the highest priority. Failure to adequately use the few second-line drugs available will destroy the last tools available to combat drug-resistant tuberculosis and will eventually result in super-resistant strains and thus in an uncontrollable tuberculosis situation which will affect all levels of the South African society. Therefore the use of second line drugs must be strictly supervised during both intensive and continuation phase of treatment. A rational stepwise approach to control of MDR-TB includes surveillance of drug-resistance, prevention of the development and spread of drug resistant tuberculosis, assessment and strengthening of the quality of (MDR-TB)-treatment in South Africa and systematic implementation of infection control measures in MDR-TB-treatment centres.

Priorities:

Given that still a significant proportion of patients receive self-administered treatment or incomplete DOT and that the interruption-rate is high, the programme must focus on:

- 1. Strengthening, expansion and evaluation of the different DOT modalities currently used;*
- 2. Reducing the interruption-rate, and*
- 3. Strengthening of the recording and reporting of transferred patients.*

Consequently, supervision and training of all levels of the NTCP must be intensified. In addition, steps should be undertaken to link the laboratory register and the TB register in order to be able to monitor whether diagnosed patients are put on treatment.

As far as MDR is concerned the first priority is to review the current MDR-treatment programme and to finalise and analyse the drug resistance surveillance data (see annex 5).

4.3 Supportive activities

4.3.1 Training

Pre- and in-service training of staff in tuberculosis control is an essential part of the NTCP responsibility.. Training activities are implemented at all levels of the system: national, provincial, district, clinic and community. Training content must be related to job descriptions / responsibilities of the staff to be trained. This may focus on, for example, programme management, supervisory, budgeting, case management and other such skills, as appropriate. Training methods must be (inter)active and participatory. Pre and post training assessment tools should be developed to measure the outcome of training. Staff turnover and staff rotation have to be considered carefully when planning training needs.

National and provincial staff can also be trained in international courses or courses organised by international organisations in South Africa. A national health intelligence strategy has to be developed to inform health workers and communities of international and national developments.

Training is implemented in a graded manner meaning that e.g. the provincial staff (assisted by the national level staff if required) are responsible for the training of the district management team. The district management team is responsible for training those providing services in the facilities and in the community.

Training is provided to the staff of organisations collaborating with the Programme.

Specific emphasis should be placed on integrating training for HIV / STI with TB. Details related to such training are;

- Ensure that guidelines of TB, for HIV and for STI are included in medical and nursing school curricula
- Conduct joint in-service TB/HIV/STI training of doctors and nurses including TB and HIV/AIDS case management rapid HIV testing, prevention and management of opportunistic infections and management of STI
- Train DOT supporters on HIV prevention, promotion of voluntary HIV counselling and testing (VCT) and condom distribution
- Train HIV home based carers on DOT
- Training for district management teams to ensure maximum efficiency in the use of resources.

Priorities:

Within the context of accelerated DOTS expansion, and in face of burgeoning morbidity related to HIV/AIDS and the need to adopt integrated approaches, the NTCP should:

1. Conduct a needs assessment that takes into account the training needs at all programme levels and sectors;
2. Develop prioritised training framework with role clarification for each level
3. Evaluate existing training material; develop, produce and implement revised material according to results of needs assessment.

4.3.2 Supervision

Supervision is the process of visiting health staff to help them to improve their performance. Correct performance can be observed and reinforced. Inadequate performance can be identified and corrected before it becomes a major problem. Supervision entails continuous evaluation, guidance, support and on-the-job training.

A clear, written policy is necessary at national, provincial and district level. Special emphasis is given to maximising efficiency by co-ordinating the activities with those of other programmes in the district. To ensure that supervision is carried out effectively, supervisors will receive specific training in supervisory techniques.

Special emphasis of supervision training includes

- Using information for guiding implementation,
- Proper application of policies,
- Identifying sustainable solutions to key problems (referral, interruption, etc)

Supervision is implemented in a step wise manner. National level staff visit all provinces with a minimum frequency of twice yearly for at least 2-3 days and support provinces to achieve the Provincial Implementation Plans.

Provinces visit all districts at least quarterly. District staff visit the health facilities in their jurisdictions 1-2 times per quarter, depending upon the performance of the facility. Staff of the health facilities should pay supervision visits to volunteers performing DOT on a regular basis.

Checklists are used and adequate feed back provided to the staff supervised.

Reliable transport is indispensable for performing supervision and is the responsibility of the relevant provincial or district management teams.

4.3.3 Recording and reporting

A reliable TB Information System is an essential component to monitor programme performance and to identify and correct problems. It provides the basis for evaluating progress in achieving programme targets. Elements of the TB information system includes reporting and recording, collection of epidemiological information from other sources and analysis).

For recording the most important documents are the Patient Record, the Laboratory Register and the TB Register. Accurate patient records are the prerequisite for completion of all other documents and represents legal requirements for care of patients.

In response to WHO recommendations, a simplified, district-based register has been devised. An additional tool, the electronic TB register, was successfully piloted in 2 provinces since 2000. This system will be expanded to the remaining provinces, together with the revised stationery.

For reporting (adapted) IUATLD/WHO forms are being used.

Reported data will be analysed at all levels and proper feedback will be given to those who collect the data..

4.3.4 Quality assurance

Quality assurance is essential to providing high quality care at all levels. It includes all activities, such as, the diagnostic service, treatment and monitoring. Description of the quality assurance system for diagnostic services is included in Annex 4, which addresses laboratory services. Quality assurance procedures for each activity need to be specified and written. Routine monitoring of certain indicators is an example of a quality assurance procedure, such as:

- Bacteriological coverage
- Smear conversion
- Treatment outcome

Routine evaluation of completeness and accuracy of records, comparison of tuberculosis and laboratory records, etc, are important as well.

4.3.5 Advocacy

Advocacy aims to win the support of key constituencies in order to influence policies and funding for tuberculosis control.

Advocacy will be a key issue at all levels in the decentralised health system of South Africa to obtain continuous support for TB control activities. Advocacy messages need to be targeted to different audiences, an important one being politicians. Various influential groups can be used to transmit the messages. An action plan is required to guide advocacy activities. These activities should contribute to national campaigns (e.g. World TB Day) but always need to be adapted to the local situation and local cultural settings and sensitivities

Advocacy should be done in co-ordination / collaboration with key partners, especially the HIV/AIDS/STD programme. A TB-HIV advocacy document will be developed in year 1 of the MTDP.

Advocacy must have a dedicated budget and the impact of advocacy activities must be evaluated.

One advocacy officer in the NTCP will support national and provincial advocacy activities.

4.3.6 Information, Education and Communication (IEC)

IEC activities need to be intensified. Proper IEC contributes to tuberculosis control by improving health-seeking and adherence behaviour. The outcome of these activities is to improve the knowledge of the population about tuberculosis, promote behaviours and life styles beneficial to TB prevention and control, strengthen the involvement of patients and the entire society in TB control.

IEC activities will be developed, as part of the patient centred approach, based upon the KAP studies done. IEC activities must be developed in co-ordination with the Health Promotion Unit at national and provincial level. IEC must be targeted to solve problems identified at district, facility and community level. IEC activities require a dedicated budget based on actual need..

4.4 Programme management

Programme management is required at all levels of the NTCP (facility, district, province and national) and involves both technical and organisational activities. Adequate programme management ensures that the complete package of TB control activities can be delivered. Key management activities include: co-ordination, evidence based planning, costing and budgeting, adequate staffing and action orientated monitoring of programme performance. Intra- and inter-level supervision and co-ordination is crucial for sustainable programme development.

4.4.1 Staffing

There is a need to strengthen human resource allocations in support of the NTCP.

In order to ensure that the minimum core package of activities is delivered at all levels of the health system, the quantity and quality of dedicated staff must be adequate to implement the required activities. Staff allocations are based on detailed task-descriptions describing all core activities at different levels of the programme. Furthermore, local conditions (travel time, population served) must be taken into account. This approach guarantees sufficient time for the delivery of the minimal TB package, but allows provinces and (sub) districts to adopt location-specific solutions.

At national level the NTCP team is strengthened to meet increasing demands in the fields of co-ordination, technical consultation, supervision, training, in-patient management including MDR, surveillance and monitoring programme performance. Co-ordination with the HIV Directorate requires special attention, especially in the field of advocacy, IEC, and home based care. Although the proposed expansion of staff at National level with 4 additional posts is probably sufficient to deliver the minimal package of supportive activities, the adequacy of national staffing has to be closely monitored.

Staffing at provincial and district level needs to be expanded. Clear job descriptions must be developed At all levels and adequate staff allocation ensured.

In view of the assigned responsibilities at provincial level (see paragraph 3.2.2) besides a full-time TB co-ordinator, additional staff must be present for supervision, training and data management. Co-ordination with relevant Programmes like HIV/AIDS Directorate, NGO's, academic institutions, correctional institutes and mines must be strengthened. Given the increasing number of actors involved the establishment of a 'Provincial Co-ordinating Committee for TB control' (PICC-TB) should be considered.

The PICC would facilitate and co-ordinate joint ventures and new initiatives within the framework of TB control set by the Department and based on the National guidelines.

According to WHO guidelines, the optimal district size (management unit) serves a population of 500,000 inhabitants. In larger districts, it is advised to subdivide it into TB operational units, each with appropriate staffing. It must be remembered that this calculation is based upon an estimated incidence of 50 new smear positive cases per 100,000 population. All provinces will critically assess this issue and decide whether a subdivision of their district(s) is indicated, taking into account the above guiding principles

At the district level there must be a TB co-ordinator, possibly with a combined responsibility for the TB and the HIV/AIDS/STD programmes. However, although combination of different responsibilities has been proven feasible and useful in some settings, other observations show that combined responsibilities often result in district co-ordinators being overwhelmed by competing demands. In order to prevent the TB programme to collapse and to allow for further strengthening and expansion of the DOTS programme, dedicated (sub) district TB co-ordinators must be appointed with protected time for delivery of the core package of co-ordinating and supervisory activities as described in paragraph 3.1.3. Time allocation must be based on the more detailed task descriptions to be developed by the NTCP and taking into account district-specific problems. Such as geographical extension and travel time.

Depending on the local situation, supportive staff for supervision and data management should be appointed.

The need for a stricter implementation of Directly Observed Therapy (DOT) may require extra involvement of personnel at facility (clinic) and community level (community health care workers). This will be carefully assessed by the district management and will largely depend on the local situation.

In relation to staffing it is also important to analyse carefully the predicted increasing turn over of staff, due to the HIV epidemic. Also support and mentorship programmes must be set up for health care workers and counsellors to help staff cope and to prevent burn out.

Priorities

- *The weaknesses of the NTCP (high defaulter rates, low DOT coverage, lack of use of programme data for policymaking) require a major strengthening of the implementing and supervisory activities.*
- *Therefore, first priority is to appoint, train and mentor sufficient qualified staff at national, provincial and (sub) district-level with focus on (sub) district co-ordinators.*
- *The national team, in close collaboration with the provincial co-ordinators, should develop detailed task-descriptions to facilitate the process of adequate staffing (before March 2002).*

4.4.2 Practical Guidelines

In 2000 the NTCP/DOH issued the Practical Guidelines 2000 of the South African Tuberculosis programme. It will be important to upgrade these Guidelines into National Guidelines, taking into account the agreed policies and strategies of this MTDP. The participatory process used to develop this MTDP guarantees the input of the major stakeholders. It will, however, also be important to ensure that policy guidelines are implemented in all health services: provincial and municipal, military, correctional services, mines and private health care institutions.

In relation to the required co-ordination with the HIV/AIDS/STD programme, guidelines must be written on how to establish TB/HIV Training Districts including a clear description of who should take responsibility of each activity. These guidelines must be based upon experiences acquired from TB/HIV Pilot Districts and Demonstration and Training Districts (DTDs).

Priority

To upgrade the technical guidelines and develop a draft National Manual (including TB/HIV care) by June 2002 and to organise a workshop with relevant stakeholders to review and finalise the manual.

4.4.3 Drug supply

A regular uninterrupted supply of drugs forms an essential element of the NTCP. It requires an effective process of drug ordering, distribution, stock keeping and quality assurance procedures at different levels of the NTCP. Based upon the predicted number of TB patients and the available supplies, required amounts are calculated for all patient categories, including MDR patients and budgeted for. Also drugs are programmed for preventive therapy as provided for in the National Guidelines. Drug management guidelines will be issued and usage/stock reporting will be included in the regular reporting system (form 3). Training will be provided on proper drug management to staff responsible.

Priorities:

- *The NTCP must focus on strengthening of drug-management at provincial level, involving all relevant Directorates.*
- *The possibility of 'protected funds for TB drugs' or ring fencing must be explored.*
- *In addition, drug-shortages or worse – treatment interruption - and interruption of stock must be systematically reported to the next higher level.*

4.4.4 Laboratory supplies

Based upon the predicted number of TB patients and the guidelines for diagnostic procedures, the amounts of laboratory reagents and equipment will be calculated and budgeted for in order to ensure the continuity of the diagnostic process. Usage/stock reporting will be included in the regular reporting system (form 3).

Priority

Introduce a systematic monitoring system for incidents involving shortage of laboratory supplies

4.4.5 Logistics

Stationary

Sufficient amounts of registers, recording and reporting forms, technical guidelines, manuals etc. will be calculated and budgeted for by the NTCP.

Transport

An important issue is the availability of transport for supervision and diagnostic services (transport of sputum-samples) Transport need to be guaranteed: Without transport supervision is impossible. National, provincial and district authorities must tackle this issue in a creative way. There are various alternatives worked out over the years in a lot of countries (refunding of use own transport, public transport, joint transport/supervision). However, one must budget as well for acquisition, running and maintenance of own transport for places where the above alternatives are not feasible and/or advisable.

Communication

Facilities, laboratories and other relevant institutions and individuals must be equipped with adequate means of communications (phone, fax, computer, e-mail) depending on local needs and procedures.

Priorities

- *Lack of transport is seriously jeopardising case finding activities (long smear turn around times) and supervision throughout the country. This problem must be addressed without further delay.*
- *Second, the introduction of the electronic register needs to be facilitated by the provision of adequate hard/software and supporting materials.*

4.4.6 Protection of health care staff

The NTCP has developed 'Guidelines for the prevention of transmission of tuberculosis in health care facilities in South Africa'. These guidelines will be implemented throughout the NTCP.

Special attention should be given to implementing policies to prevent/reduce HIV infected staff being exposed to MDR patients.

4.4.7 Monitoring and evaluation

Monitoring programme performance is an essential activity in every tuberculosis programme at all levels, from national to facility level. It allows programme staff and policy makers to assess base line performance, to monitor progress and to detect system failures leading to potential programme collapse.

A systematic approach to programme performance monitoring and supporting (PPM&S) involves four major activities:

- i) Regular supervision;
- ii) A systematic and complete collection of data, using the uniform NTCP recording-reporting system;
- iii) Operational research focusing on specific programmatic issues, including drug-resistance surveys, and
- iv) Aggregation, interpretation and action-oriented use of the collected information at the appropriate levels of the NTCP.

Supervision comprises regular personal semi-structured visits, which allow for facility/region specific approaches and tailored supportive activities. In contrast, the quality assurance and interpretation of routinely recorded programme data (cohort data, drug stock, expenditures) allow for a more generic approach, following (inter) national guidelines. Research activities are not part of the programme management routine but may be initiated (depending on available funding and technical capacity) to provide a scientific basis for new programme strategies and to evaluate these strategies. The different levels of the NTCP (national, province and district) have different PPM&S responsibilities.

In the current situation there are widely variable approaches to PPM&S greatly depending on the technical skills, human capacity and local infrastructure.

However, a systematic approach to PPM&S is urgently required and therefore a minimal PPM package for the different NTCP levels must be introduced.

Stepwise approach to implementing a uniform minimal PPM&S package in the South African NTCP

1. ***Development of a minimal PPM&S package for national, provincial and district levels, describing i) supervisory activities (frequency, content and reporting), ii) quality control and use of routinely collected cohort/patient data, iii) collection and use of operational information (drugs, lab reagents, smear TAT etc).***
2. ***Development of an accessible targeted PPM&S manual for the national, provincial, district and facility levels (in the form of a checklist).***
3. ***Appointment of a technical skilled PPM&S co-ordinator at national level.***
4. ***A 'train the trainer course' aiming for high quality PPM&S capacity building at national and provincial level (district level to be trained by provincial level).***
5. ***Simultaneous introduction and implementation of the PPM&S package at all levels of the NTCP.***
6. ***Evaluation of the PPM package as a tool for programme management under routine conditions.***

In Annex 6 a minimal set of monitoring indicators is listed for case finding, case holding and programme management. In addition suggestions are done for additional indicators, which may be relevant and feasible in certain settings.

The results of the PHC Review 2000 (component of Health Sector Review 2000) gave a picture that corresponds well with the opinion of the NTCP on the process of NTCP implementation in the provinces. It can therefore serve as a baseline assessment in comparison with the future systematic and continuous PPM&S approach.

In the districts and at the provinces quarterly meetings will be organised to discuss and analyse the quarterly reports and the general progress of the programme. At national level, such evaluation meetings will be planned twice yearly.

Priorities

The development of the minimal PPM&S package and the subsequent translation in manuals should have the highest priority on the list of National activities. Input of both TB control experts with ample programmatic experience and experts in the field of training is required.

4.4.8 External monitoring and evaluation

External monitoring visits in consultation with Stop TB partners will take place on request of the NTCP and terms of reference will be available before the visit. Preferably, these missions should coincide with the half yearly national evaluation meetings. Provinces can request external technical assistance if they feel there is a need.

4.4.9 Mid term evaluation

The MTDP has been written for the years 2001-2005. The year 2005 has been chosen as endpoint because it is the date that the South African Government has committed itself to reach the global targets of WHO.

It is realised that this period covers 2 years of the existing Medium Term Expenditure Framework 2000-2003 and 2 years of the new Medium Term Expenditure Framework 2003-2006. Therefore a Mid Term Evaluation will take place at the beginning of 2003 to see whether the MTDP needs adaptation in view of the development of the programme and in view of the new Medium Term Expenditure Framework. It could be considered to extend the MTDP at that time to 2006, in order to let it run parallel with the Medium Term Expenditure Framework 2003-2006.

4.5 Operational research

Operational research (OR) is defined as the systematic collection of information linked to the improvement in service provision. An outline of this component and a first set of priority issues to be investigated are attached in Annex 7.

4.6 Co-ordination and collaboration