CURE TB TO STOP TB

TECHNICAL ASSISTANCE MANAGEMENT AGENCY

TO THE NATIONAL HEALTH & POPULATION WELFARE FACILITY PAKISTAN

SITUATION ANALYSIS, PUBLIC-PRIVATE PARTNERSHIP MODELS, OPERATIONAL AND MONITORING & EVALUATION GUIDELINES FOR NATIONAL TB CONTROL PROGRAMME PAKISTAN

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tama

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Options
Applying expertise and effective management in health

CONTENTS

ACRONYMS

AJK	Azad Jammu and Kashmir
AMCH	Assistant Manager Community Health
ACD	Association for Community Development
ASD	Association for Social Development
BDN	Basic Development Needs
BHU	Basic Health Unit
CBO	Community Based Organisation
CDR	Case Detection Rate
CIDA	Canadian International Development Agency
CP	Complete Picture
DC	Diagnostic Centre
DHQ	District Head Quarter
DOTS	Directly Observed Treatment Short Course
DTCs	District TB Control
DTO	District TB Officer
EDOH	Executive District Officer Health
ECTB	European Commission TB Control Programme
FANA	Federally Administered Northern Areas
FATA	Federally Administered Tribal Area
FBO	Faith Based Organisation
FDCs	Fixed Dose Combinations
FIDELIS	Fund for Innovative DOTS Expansion through Local Initiatives to Stop TB
GDP	Gross Domestic Product
GFATM	Global Fund for Aids TB and Malaria
GLRA	German Leprosy Relief Agency
GNP	Gross National Product
ICT	Islamabad Capital Territory
JICA	Japanese International Cooperation Agency
JPRM	Joint Program Review Mission
LHW	Lady Health Worker
MC	Mercy Corps
MCHC	Maternal and Child Health Care
MDG	Millennium Development Goal
NGO	Non Government Organization
NPO	National Program Officer
NTP	National TB Control Program
PATA	Pakistan Anti TB Association
PC- 1	Planning Commission 1
PHC	Primary Health Care
PMA	Pakistan Medical Association
PMDC	Pakistan Medical and Dental council
PMRC	Pakistan Medical Research Council
PPM	Public-Private Mix
PPP	Public-Public Partnership
PSI	Population Services International
PTP	Provincial TB Control Program
RHC	Rural Health Centre
SFO	Social Marketing Franchised Organisation
SMP	Social Marketing Pakistan
TAF	The Asia Foundation
TAMA	Technical Assistance Management Agency
TB	Tuberculosis

TC	Treatment Centre
THQ	Tehsil Head Quarter
TSR	Treatment Success Rate
USAID	United States Aid for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

Pakistan has the 7th highest tuberculosis (TB) burden in the world, with an estimated prevalence rate of 177/100,000. There are therefore approximately 1.5 million people in Pakistan living with the disease. Recent efforts by the government and partners to intensify TB control activities have substantially increased public sector DOTS coverage in the country. Despite this, case detection still remains at 39 percent; well below the global target of 70 percent.

The National TB Programme (NTP) in Pakistan has therefore intensified its efforts through several innovative approaches, including the development of public-private partnerships, which has been identified as a priority area by the TB control programme. This aims to ensure that TB patients that attend a large and diverse private sector access appropriate diagnosis and treatment. The NTP has allocated a substantial amount of resources for public-private partnership (PPP) DOTS (39 percent of total budget) in its next five year development plan (PC-1, 2005-2010).

To implement the PPP DOTS component of the PC-1, the NTP needed viable partnership models. TAMA has provided technical assistance for the development of these models. A situation analysis was initially conducted, to assess NTP preparedness and the potential for private providers to be involved in PPP DOTS. Based on the findings of the situation analysis, a range of models have been developed for public-private partnership DOTS. The first part of the report presents an overview of the situation analysis while the second part presents the models.

The situation analysis was based on a review of published and grey literature, programme documents, reviews of existing partnership projects, interviews with public and private sector stakeholders, consultative workshops, assistance from WHO guidelines for development of public-private partnerships and consultations with experts through email. It revealed that the NTP has sufficient resources (financial and technical) and management capacity to implement its PPP plan and has experience in working with private partners through GFATM and FIDELIS funding. The NTP's existing partners are primarily non-governmental health providers, community mobilisation organisations and a social marketing/franchising organisation. These partnerships have provided the NTP with an opportunity to understand the complexity of the private sector, which has broadened its vision for involving them.

The private sector in Pakistan is large and diverse, with wide variations in the type and quality of care provided. It comprises not-for-profit NGOs and for-profit private practitioners, both formal and informal. The majority of for-profit private providers are involved exclusively in the health care delivery, while many of the not-for-profit NGOs have a range of focal areas including the provision of medical and other health services, behaviour change communication and advocacy programmes, social services and other, non-health related services.

Both private and public sector actors recognise that partnership brings both opportunities and threats because of the relative strengths and weaknesses of the different parties. The opportunities are clearly for increased case detection and improved treatment outcomes because of the physical proximity and quality of relationships that the private providers have with their communities. Indeed, existing partners already significantly contribute to TB services; in Sindh province, for example, 11 percent of all cases in one quarter were detected by private partners. The threats relate to the potential duplication of patients and issues of sustainability of NGOs resulting from the lack of trust between the two sectors and the current lack of DOTS experience on the part of private providers.

The second part of this report presents the models for PPP DOTS that have been developed from the findings of the situation analysis. They aim to harness the potential of the opportunities and prevent the threats from being realised. Different models have been developed for the different private sector actors from who patients seek care and are set in frameworks for urban/peri-urban and rural areas. These comprise models for:-

1. NGO clinics with and without laboratories
2. Solo general practitioners
3. General practitioners grouped in geographic clusters or those working with a social franchising NGOs
4. Private clinic and hospitals
5. Informal providers with biomedical beliefs (medical stores etc.)
6. Informal provider who do not hold biomedical beliefs (hakims, homeopaths)

Each model is followed by a description of its specific objectives; a summary of the model; an outline of the roles and relationships of the different partners; a suggested coordination mechanism; training requirements; any enablers and incentives that need to be provided by the public sector, based on the motivations of the stakeholders; the monitoring and evaluation mechanism; and challenges to implementation.

Operational guidelines for PPP DOTS implementation have also been elaborated in this report. The guidelines highlight the importance of ensuring that the NTP and provincial TB control programmes (PTPs) are prepared for implementation and for the key role that they will play in coordination. The PC-1 indicates that the NTP has recognised this; it has provided for seven new posts at national and provincial level. Additionally a national steering committee for PPP DOTS (or National Partnership Coordination Committee) will be established with representation from all stakeholders. This will guide strategy and will support any necessary adjustments to regulatory measures. This group will ensure that principles of good governance operate throughout the partnerships.

The operational guidelines also address practical considerations for implementation. These include establishing agreement with district level decision makers to engage in PPP DOTS and creating PPP coordination committees at provincial and district levels. These will be structured like the national steering committee, but will focus on operational rather than strategic issues. The guidelines then address the processes of identifying, selecting and approaching private partners; establishing memoranda of understanding; training and certifying providers and providing them with the resources they require; mechanisms for recording, reporting and supervision; and finally ensuring that the general public is adequately informed.

A strong integrated monitoring mechanism based on provision of technical support to the partners will also be required. This encompasses coordination and administration functions; recording, reporting, dissemination and feedback mechanisms; and the technical support and supervision of programme activities at operational site. Guidelines for conducting these activities at national, provincial and district level have been provided. Evaluation of PPP DOTS will also be required, in addition to routine NTP surveillance (analysing quarterly reports for case detection, sputum conversion, and treatment success rate). It is recommended that this occurs through national annual reviews with the support of the National Partnership Coordination Committee has been planned and recommended in this report.

In addition to the implementation models, public-private partnership models for strengthening the enabling environment for DOTS have also been developed. These provide guidelines for involving the private sector in advocacy and community mobilisation and research to strengthen DOTS implementation.

The report concludes that the NTP's commitment and allocation of substantial resources for the implementation of PPP, along with its technical expertise in implementing DOTS means that it can be confidently envisaged that NTP will achieve the objectives of PPP DOTS. It is hoped that the implementation of PPP by using these models will benefit both public sector and private providers and will contribute to achieving the targeted 70 percent case detection and 85 percent treatment success rates.

SECTION 1: INTRODUCTION

1 BACKGROUND

(TB) is a global public health issue which has particularly devastating effects on low-income countries. These comprise the majority of the 22 countries that bear 80 percent of the global TB disease burden: 20 are in sub-Saharan Africa and Asia. There were an estimated 9 million new TB cases in 2004, 4.9 million of which were detected, and an estimated 2 million TB deaths. The number of TB cases is growing most quickly in Africa where the TB epidemic is driven by the spread of HIV (WHO 2006a).

The global targets for TB control, contributing to the Millennium Development Goals (MDGs), were to detect 70 percent of the estimated TB cases and to cure 85 percent of those detected by 2005 (WHO 2006b). Despite much progress, the time has elapsed for the meeting these objectives. The high burden and other high incidence countries, however, are still aiming to achieve those targets in the short to medium term.

Pakistan is among the 22 high burden countries; TB is responsible for 5.1 percent of the total national burden of disease. At present it is estimated that the prevalence of TB in Pakistan is more than 177/100,000 population, resulting in 1.5 million people living with the disease. Despite improved case registration under DOTS since 2000 and rapid progress over the past five years, it still lags behind the desired targets for case detection and treatment success. One of the reasons for this is that the DOTS programme in Pakistan is implemented exclusively through public sector health services. A large proportion of patients, however, are detected by diverse, private health care providers; many of these cases are neither notified nor are their treatment outcomes recorded (WHO 2006b).

The STOP TB partnership has recognised that private health care providers can contribute significantly to TB control if they are integrated into the DOTS strategy. To support the inclusion of private partners, a subgroup of the DOTS Expansion Working Group was established in 2002 to focus on Public-Private Mix DOTS (PPM DOTS). The second meeting of this subgroup, held in New Delhi in February 2004, recommended widening the scope of PPM to engage a wide range of providers to collaborate with the common purpose of providing of standardised TB care in their communities. The comprehensive approach encompasses all the forms of public-private (between NTP and private sector), public-public (between NTP and other public sector providers) and private-private (e.g. between an NGO or a private hospital and the neighbourhood private providers) partnerships.

The Pakistan National TB Control Programme (NTP), with its public DOTS programme now well-established, is drawing lessons from this subgroup and has included public-private partnership (PPP) development as a priority strategy in its next five year development plan. In order to implement this strategy, the NTP requires a viable model of public-private partnership. TAMA[a], in line with the findings of its 2005 technical assistance (TA) needs assessment (Mann and Ramsay, 2005), has provided TA for the development of Public-Private Partnership (PPP) models and operational plans. Two consultants (national and international) have conducted the assignment. This TA has focused on public-private partnerships and excludes public-public partnerships with parastatals and corporates (e.g. prisons, social security, WAPDA, railways); these are covered through a separate PC-1 of the NTP; a PPM Coordinator is currently assisting in the management of these.

[a] The Technical Assistance Management Agency (TAMA) to the National Health and Population Welfare Facility Pakistan

The first task was to compile a situation analysis through documentary review, interviews and consultation with the stakeholders. This paper presents the analysis of the current situation regarding private and public providers and the linkages between them.

The next stages in the development of PPP models and their implementation and monitoring guidelines were comprised of focus group discussions, key informant interviews and consultative workshops. Participants were the highly skilled and experienced professionals who are involved, or have a policy planning role, in the public-private partnership activities. They included the NTP and its existing partners and professionals from different advocacy groups. Later reports will reflect the outcomes of such meetings.

2 AIM OF THE SITUATION ANALYSIS

The aim of the situation analysis is to collect, collate and report information concerning all aspects of TB service provision that are relevant to the development of a viable public-private partnership model and the protocols, implementation and monitoring plans to support it.

3 METHODOLOGY

The methodology used for this situation analysis is primarily based on the guidelines of WHO/STOP TB (2006) Engaging all Health Care Providers in TB Control: Guidance on Implementing Public-Private Mix Approaches.

The situation analysis has been conducted through a participatory process. Representatives of all sectors (public and private) have been involved through interviews, consultations and the provision of grey literature. Secondary data from relevant research findings; Global Fund (GFATM) & FIDELIS project proposals; reports; surveillance data; and NTP documents were reviewed and have been incorporated in this report. The following activities were conducted:

- Initial consultations with NTP stakeholders and consultants involved in the implementation of existing partnership programmes (funded by GFATM and FIDELIS) to agree on the activity plan, tools and methodology.
- Review of national NTP documents including the PC-1, the NTP strategic plan; and other relevant documents such as training modules, National Guidelines and NTP surveillance data
- Review of other national documents including the 10th Five Year Development Plan (health chapter),
- Review of documents on PPM developed by other partnership programmes (e.g. GFATM and FIDELIS, Green Star, PATA, TAF, MC), project proposals and progress reports of existing public-private initiatives
- Field visits to NTP partnership projects
- Further consultation and information sharing with experts through e-mail
- Individual interviews and consultations with the NTP and other stakeholders
- Identification and mapping of private providers
- Assessment of the capacity and potential contribution of private providers to TB services
- Assessment of inputs required to optimize private sector contribution.
- Definition of roles and responsibilities of potential partners (clinical or public health functions)
- Consultative workshops with public and private sector participants to access further information and incorporate feedback, to ensure the final situation analysis is comprehensive and realistic.

SECTION 2: RATIONALE FOR PPP DOTS IN PAKISTAN

1 TB IN PAKISTAN

Pakistan is the ninth most populous country in the world. The census of 1998 reported a population of 130.6 million (Census 1998); thus, with a population growth rate of 2.5 percent, recent estimates are calculated to be 154.8 million. The average literacy rate is 50 percent (male literacy is now about 60 percent, female literacy is only 36 percent). and per capita income is US$492; 13 percent of the population lives on less than US$1 per day (UNICEF Pakistan) .Public sector health expenditure is 0.9 GDP while total health sector investment is 3.9 percent GDP (NTP, 2006).

Pakistan ranks 7th among the 22 high burden countries in the world. It harbours 43 percent total TB cases in the Eastern Mediterranean Region of WHO (NTP, Pakistan 2003). According to Dolin's estimate, the incidence of sputum positive tuberculosis in Pakistan is 85-100 per 100,000 population, about two thirds of which is found in the productive age group, resulting in serious socioeconomic implications.

In Pakistan, a battle has been instituted through substantial efforts by the government and assisting partners. TB was declared a national emergency by the government in the year 2000. The NTP initiated DOTS under the guidelines of WHO and regular and systematic recording and reporting for TB started in 2000 (NTP reports).

Pakistan has not yet met the global targets mentioned in section 1 above. In 2005 the smear positive case detection rate (CDR) was 38 percent and Treatment Success Rate (TSR) for the quarter 1 was 83 percent (NTP surveillance report for year 2005). The most recent NTP data indicate a continued improvement, with a CDR of 39 percent for the first quarter of 2006 (NTP quarter 1 Surveillance report, 2006); however the NTP still has some way to go to meet the CDR target of 70 percent.

The NTP has achieved nearly 100 percent DOTS coverage (by district) in the public-sector and has made commendable improvements to the provision of TB services with the support of its partners. The activities have been focussed on the development of a viable infrastructure through which to provide services and on improved supervision to service providers. The induction of National Programme Officers has helped to build capacity and aided the supervision of services within the provinces. The establishment of National and Provincial reference laboratories has improved the quality of diagnostic services; and operations research has contributed to an evidence-based implementation of the programme (NTP 2003).

Having achieved the target of 100 percent DOTS coverage in the public sector the NTP is now concentrating on the global targets:

- Case detection rate: 70 percent of estimated incidence
- Treatment success rate: 85 percent of detected cases
- 50 percent reduction in TB burden by year 2015

To achieve these targets, the NTP recognises that it needs to consolidate and scale up DOTS activities through the identification and closure of gaps in service provision, including linkages with the private sector.

2 PRIVATE PUBLIC PARTNERSHIPS

Many studies have shown that, in low-income countries, the majority of the patients initially attend a private provider before TB is suspected[b]; Pakistan is no exception. There are some 42,700 private, registered facilities involved in the provision of healthcare to the population; the largest number of these is clinics and chemist shops (69 percent) and medical stores (27 percent), there are also 550 private hospitals. There are doctors who work in the public and private sectors simultaneously (Planning Commission GoP, Pakistan 2005). It is generally believed that about 70 percent of the population visits the private sector practitioners.

PPP development is recognised as an essential strategy by the Government of Pakistan, which has included it as a priority activity in the 10th Five Year Development Plan (health chapter) and in the allocation of public sector funds for the NTP (NTP, PC-1 2005-2009). Indeed some PPPs are already operational within the health sector. The Government of Punjab, for example, has contracted out the management of all 104 Basic Health Units (BHUs) in one district (Rahim Yar Khan) to an NGO: the Punjab Rural Support Programme. Nearly two years after the transfer of management, a household survey was conducted to evaluate the outcome of partnership. The results showed that utilisation of a BHU, among respondents reporting an illness in the last month, was 54 percent higher in NGO managed district as compared with an adjacent government managed district (World Bank 2006).

In Pakistan, many of the private facilities mentioned above, including private hospitals/clinics, solo private practitioners, NGOs and pharmacies as well as informal non-qualified practitioners are involved in the management of TB. A high proportion of patients use private-for-profit providers because of their acceptability; greater ease of access; shorter waiting periods; longer or more flexible opening hours; better availability of staff and drugs; more sensitive health workers; and greater confidentiality in dealing with diseases such as TB and sexually transmitted diseases (STDs) which carry social stigma (Aljunid 1995; Swan and Zwi 1997 quoted by Brugha and Zwi 1998). However, the TB cases managed by private providers are neither recorded nor reported and so are not consolidated into national data.

Currently, it is almost exclusively the public sector which follows the NTP guidelines/ WHO Strategies. A KAP study conducted by the NTP in two cities of Pakistan revealed that only one of 245 physicians was aware that cough for longer than three weeks is the main symptom suggesting pulmonary TB and less than 1 percent of doctors relied on sputum smear microscopy for diagnosing pulmonary Tuberculosis (Shah et al 2003). Thus TB patients attending General Practitioners are deprived of standardised management under DOTS. This not only effects their proper management but also poses risks to the patient and society through continued infectivity and drug resistance because of inappropriate prescription of anti-TB drugs and interruptions in the treatment.

International studies corroborate this:

> "*Without engaging private providers, poor quality and sometimes harmful care will continue; they show that private providers can help expand access in rural as well as urban areas; and they point to the need for careful institutional design. Other analyses have found — and this is a critical point — some evidence that well-managed networks of private providers can offer a service that has a positive impact on the quality of the public sector"* (Travis & Cassels).

[b] Studies include those from Pakistan (Sadiq and Demuynck 1999; Marsh and Hashim 1999); from India (Uplekar and Juvekar 1998; Uplekar et al 1998); and from Indonesia (Pathania 1998)

International evidence concerning TB services has demonstrated this last point; that is, PPP can result in high treatment success rates and can contribute to case detection. An evaluation of 25 PPM projects in 14 countries, based on treatment outcomes for over 20,000 TB patients, revealed that treatment success rates in the projects that provided drugs free of charge to patients were between 75 percent and 90 percent. Several projects also showed an increase of case detection ranging between 10 percent to 60 percent (WHO 2006).

A study conducted in Nepal showed that establishment of PPP increased the case notification of sputum-positive patients in the study area from a pre-implementation level of 54 per 100,000 to 102 per 100,000 post-implementation (Newell et al 2004). Similarly an evaluation of PPM projects in a variety of settings consistently demonstrated increments in TB case detection while maintaining high treatment success rates (Table 1).

Table 1: Case detection of new smear-positive cases from eight evaluated PPM DOTS projects

PPM sites	Baseline rate per 100,000	Increase in case Detection rate (percent)	Evaluation approach
Hyderabad, India	50	23	Compared with neighbouring area
Kannur, India	25	15	Change in project area
Mumbai, India	55	19	Change in project area
New Delhi, India	60	36	Change controlled for change in control Area
Punalur, India	25	50	Change in project area
Thane, India	50	14	Change in project area
Lalitpur, Nepal	54	61	Change in project area
Ho Chi Minh City, Viet Nam	100	18	Change controlled for change in control Districts

Source: WHO 2004

The Pakistan NTP also is already involved in some PPPs (NTP informal communications). Many of the initiatives are area-specific and are narrowly focused, targeting a particular aspect of TB control. They can, however, serve as pilots for learning lessons regarding implementation, for replication in scaling up such activities, or for the development of collaborative approaches. They have shown, for example that PPP activities need to be carried out at the operational levels (that is, districts in Pakistan) and that networks with the district, provincial and national levels of TB control are essential.

One intervention study on the development of a viable model of PPP conducted in a city in Pakistan, Rawalpindi, had very encouraging results. After the intervention, there was a significant positive change in the practices of General Practitioners for the management of pulmonary Tuberculosis. However they had a number of concerns, firstly, the reporting requirements because of their weak administrative capacity, and secondly losing patients when they are sent to public facilities for sputum smear examination. Patients also showed concerns which included long queues to avail themselves of diagnostic services and the attitude of staff in the public facility (Sadiq et al 2004).

SECTION 3: THE NATIONAL TB CONTROL PROGRAMME

An NTP requires a well established DOTS programme prior to engaging in partnership arrangements. It needs to be capable of providing the support required (technical and logistic) for the implementation of partnership programmes.

The NTP in Pakistan has now achieved 100 percent DOTS coverage (by district) and has had favourable WHO reviews in recent years. The programme has a large number of highly qualified professionals working for the efficient implementation of TB control programme at national and provincial levels. It also has a well established network of health care providers at district and grass root levels.

1 ADMINISTRATIVE AND TECHNICAL CAPACITY OF PROGRAMME

The NTP has made tremendous efforts to strengthen its human resources through public sector funds and with the assistance of partners. For example it has recently established the posts of Finance Officer, Research Coordinator, Sociologist, Technical Officer and National Programme Officers with funding from WHO/USAID and WHO/CIDA. It has also established a well-organized infrastructure and has enhanced its capacity in major technical areas such as Research, Finance, Information Technology and Reference Laboratories; these are shown in Figure 1.

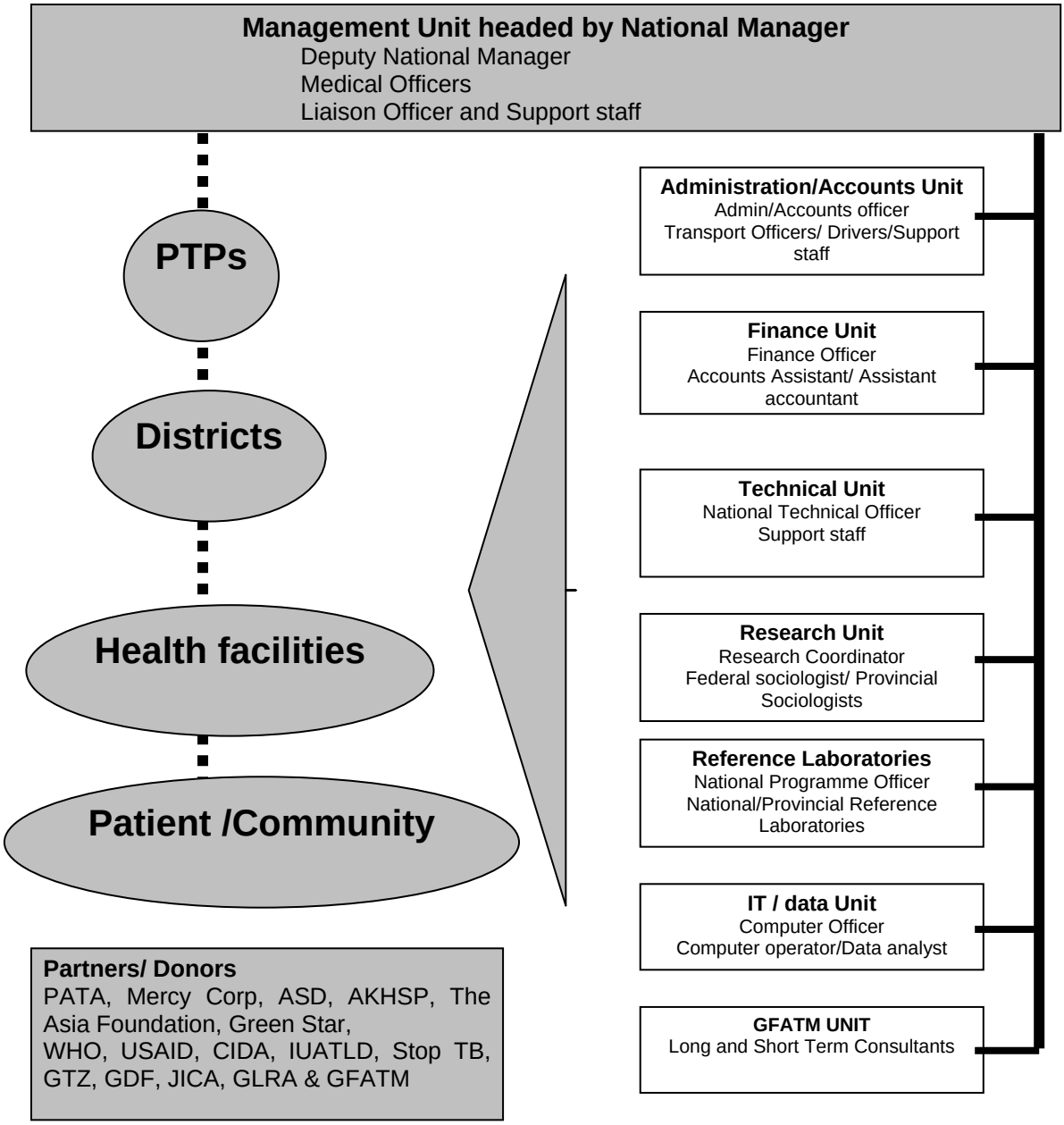
The NTP has very strong management capacity evidenced by its success in DOTS expansion and recognition at national and international fora. Its role is to provide overall management of the programme including policy planning, decision making and coordination with the Ministry of Health, line Ministries, Provincial TB Programmes (PTPs) and national and international partners. The NTP also has good capacity in financial management for public sector and partner assisted funds. The major sources of finance overseen by the unit are public sector funds, USAID, GFATM, FIDELIS, CIDA and JPRM.

The technical unit, of the NTP plays an important role in providing technical inputs to the national programme on developmental activities. It arranges and conducts quarterly inter-provincial meetings and participates in the inter-district meetings in the provinces to provide technical inputs. In addition, it is responsible for monitoring and supervision through 25 National Programme Officers working at regional levels in the provinces. They coordinate, provide technical support and monitor programme activities in a cluster of districts in their region. They also physically verify TB-DOTS activities by visiting a number of randomly and/or needs selected Diagnostic Centres.

The recording and reporting system is comprehensive and efficient. The reports are compiled at district, provincial and at national level and are analysed for case detection rates and treatment outcomes. At national level a cell with the support of GLRA is responsible for compiling, analysing and disseminating national reports.

The NTP has strong operational research capacity, has conducted several studies and has established partnership with national and international research institutions. It also played an important role in building the research capacity of provincial programmes and in promoting locally-based research on TB-related issues.

Figure 1: Organogram National TB Control Programme Pakistan



Source: NTP 2006

The Reference Laboratories Unit is headed by the National Programme Officer, Reference Laboratories. The national laboratory is at the apex of the laboratory network for the NTP. There are four provincial reference laboratories and two regional reference laboratories, one in Azad Jammu & Kashmir (AJK) and the other in the Northern Areas (NA). The activities of the unit include training laboratory technicians, working in Diagnostic Centres and implementing quality assurance mechanisms including the standardisation of training, procurements and services. The unit monitors the quality of services of Diagnostic Centres working for TB Control Programme in the peripheral health facilities. The unit is also in the process of strengthening the linkages at intermediate level between Diagnostic Centres and Reference laboratories.

The programme has strong capacity in training and has modules for different categories of staff such as Doctors, Paramedics, Laboratory Technicians, Supervisors and Lady Health Workers (LHWs).

Programme training modules and guidelines:

1. Manager's planning module for implementation plan (DIP, PIP and HIP)
2. Doctor's training module
3. Doctor's desk guide
4. Paramedic's training module
5. Paramedic's desk guide
6. Laboratory training module for Microscopist
7. Training module for District Lab Supervisor
8. LHW's Training module
9. Training module for Lady Supervisors
10. Guidelines for diagnosis and management of TB in children
11. Supervisory Training module
12. National Guideline for TB Control Programme
13. Guidelines for difficult to diagnose TB cases
14. Facilitators guide
15. Supervisory check list for Diagnostic Centre
16. Supervisory check list for Treatment Centre

In addition, the programme has a capable network of trainers in the provinces and districts.

The programme has a regular health education activity which includes developing, printing and disseminating print material to provinces, districts and facilities/ Health Houses.

2 OPERATIONAL CAPACITY

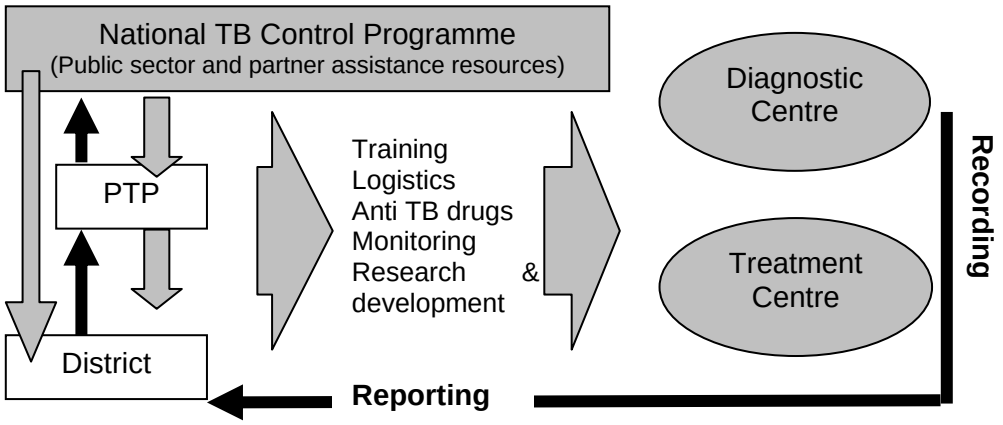
The NTP ensures the effectiveness of its operations through a clear division of roles and responsibilities at all levels (Table 2).

Table 2: Division of Roles and responsibilities of the TB control Programme

National	Provincial	District
• Policy planning • Guidelines • Technical Assistance • Resource generation • Coordination/Advocacy • Monitoring evaluation • Research and development	• Planning • Securing funds • TA to districts in implementing DOTS • Monitoring & Supervision	• Planning and implementing unit of DOTS • Securing funds • Data management (recording/ reporting) • Ensuring community participation in DOTS implementation • Supervision at district level

The process through which the NTP provides technical and monitoring support to the provincial programmes and districts and supplements logistic and anti TB drugs to the districts through the PTPs is shown in Figure 2.

Figure 2: Flow of National support to TB Control Programme in public sector



2.1 Provincial TB Control Programmes

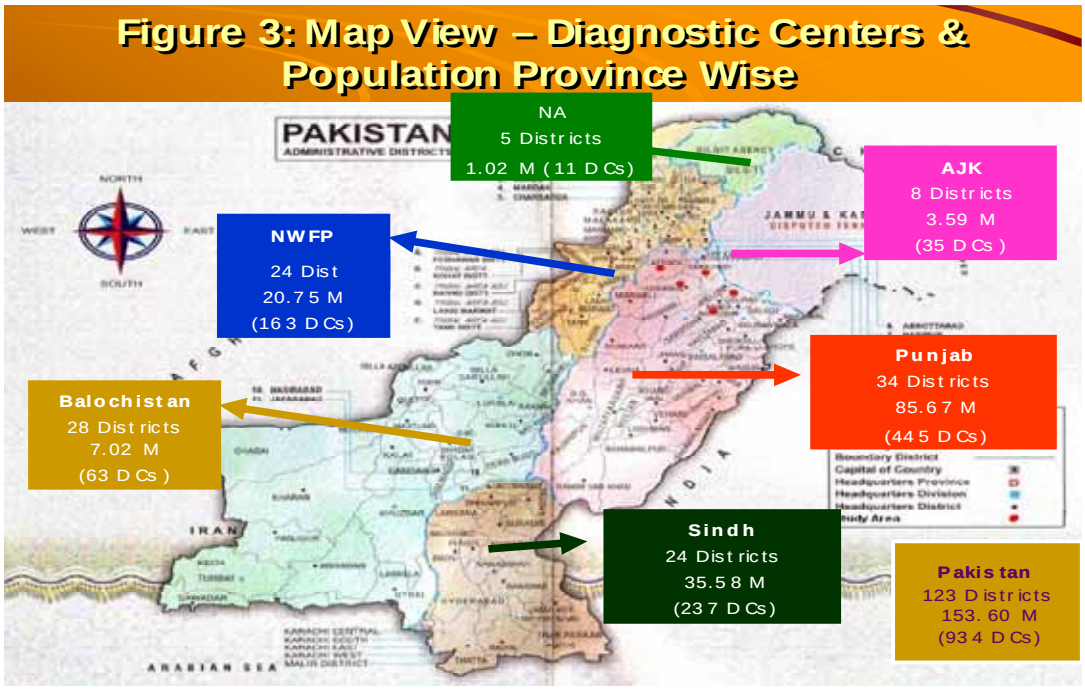
For administrative purposes, Pakistan is divided into four provinces plus the Islamabad Capital Territory (ICT), Federally Administered Northern Areas (FANA) and Federally Administered Tribal Areas (FATA). Each province has an independent Health Department with curative and preventive networks. The Provincial TB Control programme headed by a Provincial Manager (or Director in Sindh) is one of the priority programmes in the provinces.

The major role of provincial programmes is to support districts in the implementation of TB-DOTS. Its main role encompasses the implementation of policies and guidelines, coordination with the national programme and with line departments in the province, supplementation of supplies and ensuring effective programme monitoring.

2.2 TB Control Programme at district level

The districts have a crucial role in the implementation of the TB programme. The district is headed by an Executive District Officer Health (EDOH), who's role is to plan and implement health sector programmes (preventive and curative) and to coordinate with district governments. The District TB control team comprises the EDOH, a doctor assigned as a District Coordinator from the pool of doctors in the district, a DOTS facilitator and a laboratory technician. In NWFP however, the District TB Officer, who manages TB cases at the DHQ hospital, fulfils the role of district coordinator.

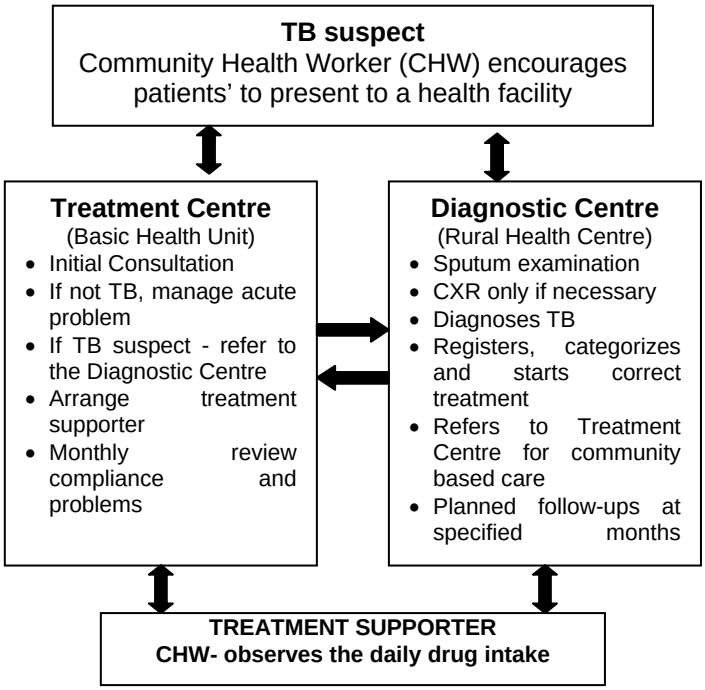
Two types of health facility are involved in the management of TB patients: Treatment Centres and Diagnostic Centres. For TB patients, the programme has established 934 Diagnostic Centres (locations shown in figure 3) and 4612 Treatment Centres in all districts across the country.



Source: National Reference Laboratory, NTP Pakistan

Patients can approach their nearest Treatment Centre or Diagnostic Centre. Treatment Centres provides treatment services only; Diagnostic Centres provide both treatment and diagnostic services to patients, who may approach the centre directly or be referred from a Treatment Centre for sputum smear microscopy. The referred patients, if diagnosed as a TB case will be sent back to the Treatment Centre for further management (see Figure 4). The Diagnostic Centre also assesses the progress of treatment by sputum smear microscopy at the completion of 2 months, 5 months and 7 months of treatment).

Figure 4: TB care services at facility level (public sector)



Treatment centres receive patients who either approach the centre directly or are referred there through LHWs or community volunteers. After clinical examination the suspected TB patient is sent to the Diagnostic Centre for sputum smear examination and after confirmation of diagnosis, the patient comes back to have his/her case managed under the TB-DOTS strategy in the Treatment Centre. The patient records kept at this stage are:

- TB01 – the patient treatment card, which contains the patient's personal, diagnostic & treatment history and follow-up records, kept by the Treatment Centre; and
- TB02 – the patient card, indicating all relevant records regarding diagnosis & treatment and follow-up, kept by the patient

The Diagnostic Centre maintains the patients' records on forms:

- TB03 – the laboratory register which contains patient identification information, name of treatment centre , disease classification, sputum smear examination status and date treatment stopped (Outcome)
- TB04 – laboratory register which shows entries of all the TB suspects with their sputum smear microscopy results.
- TB05 – laboratory form which is used for referring patient to diagnostic centre and the results of sputum smear microscopy are communicated to treatment centre through this form

and on copies of District quarterly reports

- TB06 – a form used for culture and sensitivity, at this stage it is not being used in Pakistan
- TB07- quarterly report on new cases and relapses of Tuberculosis
- TB08 – sputum conversion form showing results from 3-6 months treatment course
- TB09) – a form which shows treatment outcomes particularly treatment success rate

Figure 5 provides a diagram of patient and information flow within the diagnostic and treatment centres.

3 NTP MONITORING MECHANISM

The NTP has a strong and efficient monitoring system. Its surveillance system is analysed quarterly and annually for to provide national information on the Case Detection Rate and Treatment Outcomes. There is a regular physical verification of the quality of services through regular programme reviews and visits by National Programme Officers (NPOs). Further, quarterly meetings are held at district, provincial and national levels.

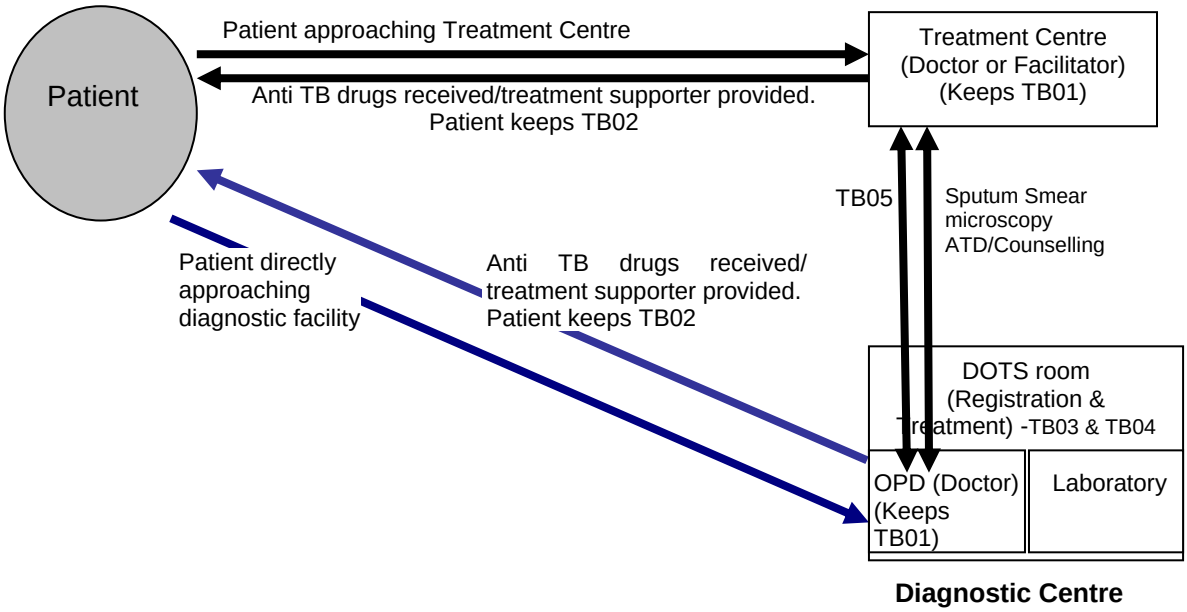
At national level, quarterly inter-provincial meetings are conducted for programme review, validation of provincial surveillance reports, planning, and consultations on various new issues or initiatives. All the Provincial Managers, National Programme Officers (NPOs) and NTP partners attend the meeting.

At provincial level, quarterly inter-district meeting are held for the review and validation of district data and consultations on various issues. All EDOH, District Coordinators, NPOs of the respective province and partners attend the meeting. A senior technical person from the national programme also attends the meeting.

At district level, quarterly intra-district meetings are conducted to discuss issues and compile and analyse district data. The EDOH, District Coordinator, Medical Officers, DOTS facilitators and Laboratory Assistants of all Diagnostic Centres attend the meeting. In districts where the private partners are involved in the implementation of DOTS, they also attend the meeting and present their data and discuss issues. The National Programme Officer of the respective district is responsible for facilitating these meetings and disseminating their quarterly reports to the provinces and the NTP. These are

regularly analysed and feedback is provided by a National Technical Officer based at the NTP.

Figure 5: Flow sheet -TB Patient management in public sector



The District Coordinators regularly visit the Diagnostic and Treatment Centres within their district to supervise TB-DOTS activities. In addition to supervision at facility level, they are responsible for collecting reports from Diagnostic and Treatment Centres and for the compilation of a district report for dissemination to the PTP.

SECTION 4: NTP PLANS AND STRATEGIES FOR PUBLIC-PRIVATE PARTNERSHIP

The NTP has a clear vision for achieving the target of 70 percent case detection rate through supplementing the TB control activities by involving private sector. Its strategic plan states that public sector efforts to increase case detection will bring about a CDR of 45 percent by the year 2010; at the same time there will be an additional increase of 25 percent in CDR through PPP by private sector (15 percent) and public non-health service providers (10 percent). The NTP has coordinated a nationwide consultation process to formulate a national strategic framework for PPP development in TB control.

In order to initiate public-private partnership activities, the NTP has included PPP as a major component of its PC-1, comprising 39 percent of the total five year budget. The PPP strategy as reflected in this document focuses on the for-profit formal sector and not-for-profit NGOs; partnerships with informal providers are not included. It underscores the need for partnership with private sector institutions (clinics/hospital), NGOs (such as PATA/Family Planning Association of Pakistan and similar organisations) and other NGOs capable of healthcare programme implementation. It also realises the need for partnership with solo General Practitioners.

The NTP in its PC-1 proposes a phased implementation of PPP, starting with 20 districts in first instance and gradually covering all districts by the year 2005-2010. To implement the activities under the PPP component of PC-1, it is essential that NTP has an effective implementation plan and has all the resources required to implement and monitor it.

1 PROPOSED PUBLIC ACTIVITIES FOR PUBLIC-PRIVATE PARTNERSHIP

The NTP and PTPs will have leading roles in enabling and supporting district health offices (EDO-H) to develop, plan and make PPPs operational in a systematic way. District health offices will make their plans in accordance with local needs and priorities. These will initially be implemented in a manageable number of districts and with a limited number of partners. The partners will be selected on an agreed criterion and two parties will sign a MOU. PPP activities will be gradually expanded after learning lessons from the evaluation processes.

The major PPP activities to be undertaken by districts, the PTPs and the NTP, currently reflected in the PC-1 include:

1) Strengthening the National, four Provincial and AJK/FANA programs by assigning Public-private partnership development coordinators. Coordinators will receive office and mobility support.

2) Enhancing the district capacity by strengthening the District TB Coordinator and Field Officer. Both officers will come from existing staff and will have their current roles expanded to incorporate PPP. Mobility will be made available to both officers and they will receive an additional financial allowance for the role.

3) Providing free drugs (preferably fixed dose combinations (FDCs)) for patients attending private sector facilities.

4) Arranging training for private sector providers (including, providing trainers, training materials and logistics). Training will be provided to doctors (4 days), paramedics (3 days) and laboratory personnel (10 days). NTP training modules will be adapted in the light of training needs assessments.

5) Arranging subsidized, or free, quality controlled microscopy services for patients attending private sector providers. This will be done either through public sector facilities or private sector (NGO) laboratories. The private sector laboratories will be strengthened by supplementing equipment, reagents and recording/reporting materials and through supervision in addition to the training noted above.

   The number of private sector providers and diagnostic laboratories to be strengthened will be determined by the size of the district: large districts are those with provincial capitals and/or a population of more than 3 million; regular districts are those with a population of 1-3 million; and smaller districts are those with a population of less than 1 million. Diagnostic laboratories in 104 districts will be strengthened under the public-private partnership (excluding NWFP province, since these are supported through German assistance).

6) Conducting quarterly review meetings with participation from the EDHO, DTC and participating private sector partners to review progress, discuss problems and take collective decisions. The Provincial Coordinator for PPP development will also participate in the quarterly programme monitoring meetings in their province. Supervision to the facilities on case management, record keeping and reporting will be provided by a paramedic in the district (motor bikes will be provided). Monitoring at national level will take place through an annual review by a team comprising experts from the programme and international partners including WHO, IUALTD and KNCV.

Non-government partners will also be involved in other areas of programme interest including behaviour change communication, operational research, training capacity building, technical assistance and community mobilization. This will be encouraged by a) developing joint projects/interventions, b) contracting out a subset of programme activities to non-government partners, and c) assisting private partners to access potential sources of funding (public and donor) for their defined set of related activities.

2 NTP RESOURCE ALLOCATION

The public sector has allocated funds to cover the cost of technical support, supply logistics and medicines and provide human resources (salaries, allowances and trainings).

The total allocation for the activity is PAKRs 465 million (spread over 5 years for the phase wise implementation of programme). The funds will cover the cost of:

- Salaries of Operations Officers (Grade: BPS 17, New induction: 6)
- Project allowances for designated staff (Provincial Coordinators (5), District Coordinator 128, Field Officers (128) and drivers (5))
- Salaries of Drivers for District Coordinators (128 new inductions)
- Training
- Logistics
- Vehicles (cars and motor bikes), which will be used by District Coordinators and Field Officers, and the associated costs of mobility.
- Cost of Medicines
- Establishment and improvement of laboratories

3 POLICY AND REGULATORY ENVIRONMENT FOR PPP IN PAKISTAN

At present the Government of Pakistan has a policy of industry privatisation. There were several mega industries and corporates which have been privatised or are in the process of privatisation. Similarly private sector involvement in health care has been a priority area in the recommendations of 9th and recently 10th five year country development plan. The country presents a very conducive environment for the implementation PPP.

There is little regulation on the provision of private health care in Pakistan, thus the legal restrictions on the provision of DOTS in the private sector are very limited. Medical practice in Pakistan is regulated by the Pakistan Medical and Dental Council (PMDC), which is responsible for the registration and regulation of medical practitioners. Similarly there are other councils which are responsible for regulating the health practices of homeopath doctors and qualified Hakims (National Council for Homeopathy, Rawalpindi and National Council for Tibb, Islamabad).

PPP, as a major component of the PC-1 (2005-2010), has legal backing provided the NTP seeks approval for detailed activities from time to time during the implementation process. The NTP has plans to formulate a "regulatory framework" in consultation with PTPs and other partners for PPP development in TB control (first draft: during first two years of implementation, to be further evaluated and refined in the next three years).

There are some regulatory issues that need to be addressed urgently. For example the NTP needs to identify and implement modalities for providing government owned logistics to the private sector: the NTP needs to obtain a ruling on the procedures for logistic support from Ministry of Finance. A precedent for such a ruling rests with the National AIDS Control Programme. Alternatively, a surety bond for the use and custody of public property will have to be signed by the private provider. In case of breach of partnership the government owned materials will be returned.

The policies for the financial and procurement management in the public sector are standardised and any modification in the procedure involves long and difficult efforts. In comparison, procurement in the private sector is flexible and has provisions for adjustment in accordance with the day to day needs. While formulating such policies, therefore, the public sector needs to consider the concerns and expectations of the private sector.

4 NTP PROPOSED MECHANISM FOR PUBLIC-PRIVATE PARTNERSHIP

Public-Private Partnership is a collaboration between private and public parties working together to achieve joint objectives through a coordinated approach to a clearly defined goal. Public-private partnership needs to be based on a clear and well-researched mechanism of implementation incorporating an agreement based on a clear division of responsibilities, tasks and authority. A degree of mutual trust must exist at the outset of the partnership and must be nurtured throughout it to ensure its success.

If PPP is to be effective, both partners must develop and implement mechanisms for good practices. The Government must take the lead. It will have to supervise, manage and facilitate the collaboration process, and will have to guarantee that the (joint) objectives are in the interests of the public and will increase equity in access to services.

The NTP is very clear about its strategic framework and possible means of partnership (Table 3). It has allocated public funds and committed to implement PPP activities through viable models. Based on its existing experience it has recommended various modes of partnership such as government financing, franchising services, contracting out services, community involvement and through joint ventures. The NTP believes that the selection

of partners should be based on programme priorities and the needs and availability of potential private partners in a particular geographical setting and area of intervention. As the priorities and needs of NTP vary from area to area, so the models of partnership need to be flexible under a broad policy.

Table 3: Summary of NTP's proposed strategic framework and possible means of partnership

Formulation of a national strategic framework for public-private partnership	Possible modes of partnership
• Development of a public-private partnership model (feasibility, legislation, accountability, roles and responsibilities, monitoring, division of financing and staffing etc.) • Inclusion criteria for the partnership and identification of potential partners • Selection of services • Piloting at smaller scale • Evaluation • Designing interventions • Implementation on a larger scale	• Government financing and stewardship • Franchising services • Contracting out services • Community involvement (Community co-financing) • Joint ventures • Action oriented communication sharing information

It is important to assess partners on the basis of their functional characteristics and their experience and capabilities (strengths and weaknesses) in relation to the programme priorities. The NTP requires clear selection criteria for choosing potential partners to work at various levels (i.e. at district, provincial or national) and in specific areas intervention in the DOTS package), such as service provision (diagnostic and treatment) or other intervention area such as development assistance or awareness campaigns. The NTP emphasizes a viable model, indicating clear roles responsibilities of both the partners and an efficient mechanism of accountability. There should be a clear understanding and legal bond through a MOU, outlining these issues and stating modalities of partnership.

It is not only the private sector that needs assessing. The national programme should also reflect on its capacity for implementing PPP and identify where gaps in capacity need to be addressed. Table 4 overleaf highlights the available resources and required actions to implement public-private partnership.

Table 4: Summary of Preparedness of NTP for PPP

Action	Available resources	Required actions
Management of PPP	Strong management capacity. Further strength through new inductions from PPP in proposed plan	None
Steering Committee	Does not exist	NTP needs to make early efforts for the formation of a steering committee at national level and coordination committees at provincial and district levels
Experience in PPP	Several ongoing projects under GFATM, FIDELIS	Needs to learn from lessons through periodic reviews/ evaluations of PPP projects
PPP models, operational plan	Under development	Initial implementation in a manageable number of districts, regular evaluation and refinement
Financial resources	Sufficient allocation in PC-1 to cover the cost of PPP package	Initially sufficient. To expand and sustain PPP activities, public sector funds & assistance from donors is required.
Trainings	Trainers available Funds for training available National guidelines for TB-DOTS available Modules for all the categories of staff in public sector and a few for private sector are available	Adaptation/or development of training modules for private sector
Infrastructure for laboratory	Public sector facilities available all over the country If required, NTP has capacity to establish/or support private laboratories for PPP	None
Print material	Health education material available	Development of further printing and dissemination materials
ACS Campaigns	Provision in PC-1 and under GFATM funds	None
Monitoring	Staff available at national, provincial and districts levels Mobility: Provision of supervisory Vehicles and POL available	None
Medicine	Provision from GDF and public sector funds	None
Laboratory supplies	Provision of microscopes, Lab reagents and other refills available	None
Regulatory framework	NTP can start without one through its PC-1 and have provision to achieve government approval for the activities	Early efforts by NTP are needed for regulatory framework

SECTION 5: NTP - EXISTING PPP INITIATIVES

The NTP has established various activity based partnerships with NGOs, largely with the support of GFATM and FIDELIS. These activity based partnerships have involved a variety of models and areas of collaboration. Additionally, GTZ is actively supporting the PTP of NWFP in the public-private partnership initiatives and the NTP conducted an intervention research in a mega city (Rawalpindi) of Pakistan to develop a viable model of partnership with GPs. Since PPPs are not yet routinely implemented, national data concerning new smear positive cases is not available; however one example from Sindh province in table 5 provides an example of the contribution of the private sector to case detection, based on one quarter (April to June 2006)

Table 5: New smear positive cases detected by the private and public sector in Sindh Province, Quarter 2, 2006

	New smear positive cases							
	Cases detected by the private sector			Cases detected by the public sector			Total new smear positives	percent detected by private sector
District	**Males**	**Females**	**Total**	**Males**	**Females**	**Total**		
Badin	4	6	10	108	51	159	**169**	6%
Dadu	19	25	44	107	59	166	**210**	21%
Hyderabad	45	51	96	87	78	165	**261**	37%
Karachi	113	107	220	403	419	822	**1,042**	21%
Mirpurkhas	34	25	59	103	58	161	**220**	27%
Sanghar	12	4	16	124	124	248	**264**	6%
Therparkar	19	12	31	130	87	217	**248**	13%
Thatta	9	8	17	100	65	165	**182**	9%
Tando Allahyar	6	8	14	28	26	54	**68**	21%
Umerkot	33	20	53	71	52	123	**176**	30%
Rest of the 15 districts	0	0	0	1198	841	2030	**2030**	0%
Total	**290**	**260**	**560**	**2,459**	**1,860**	**4310**	**4870**	**11%**

In Sindh province, the involvement of private sector in TB DOTS is in ten districts. The private provider's contribution to new smear positive case detection is 25 percent in these districts. Among these districts, those showing high contribution in new smear positive case detection, two districts Karachi and Hyderabad are mainly urban and Dadu and Mipurkhas are mostly rural. It shows that the high CDR by private sector is not related with the urban and rural setups. The two cities however do provide some of the larger contributions to case detection (with 21 percent and 37 percent respectively), which is largely due to involvement of a number of community based hospitals and two NGOs with established health outlets (AKHSP and PATA). Analysing overall provincial report (i.e. 25 districts), the percentage of private provider contribution is 11 percent.

The different PPP arrangements the currently exist are described below.

1 PUBLIC-PRIVATE PARTNERSHIP PROJECTS UNDER FIDELIS

The International Union Against TB and Lung Disease introduced *FIDELIS* (the Fund for Innovative DOTS Expansion through Local Initiatives to Stop TB) in 2003. The major objective of the programme is to enhance case detection through innovative approaches. The NTP encouraged and supported the private sector to bid for funding. The Association for Community Development (ACD), the Association for Social Development (ASD) and Mercy Corps (MC) were among the successful bidders. ASD was already an NTP

partner in various development and research areas and had been a successful bidder in various FIDELIS rounds; MC and ACD became new partners under FIDELIS. The NTP itself also applied for funding and was successful in round 1 and 6.

The major support under the project included:

- Human resource development (recruitment, training)
- Transport and logistics (Supervisory vehicles, microscopes, computers and office supplies)
- Monitoring and evaluation

1.1 NTP and ASD (Association for Social Development) partnership

ASD is an Islamabad based not-for-profit NGO. It has a strong capacity in research and development. Initially the ASD and NTP partnership was to support policy and strategic development, research and capacity building. With the introduction of FIDELIS funding ASD emerged as a DOTS implementing partner.

ASD support in policy and strategic development included the preparation of four provincial strategic plans and the revision of a national strategic plan for countrywide DOTS implementation; development of a revised national and two provincial TB control programme PC-1s; preliminary strategic planning exercises in four provinces of Pakistan; a national strategic framework; and a project formulated for developing public-private partnerships in TB control in Pakistan.

In capacity building, the support included the development of guidelines and of a training package for all categories of staff; supervisory and monitoring tools; and the development and evaluation of public-private partnership approach for tertiary and secondary level government hospitals.

ASD in collaboration with the NTP, conducted and published several operational research studies comprising control trials on treatment supporters; factors affecting the compliance of TB patients; an economic study to assess cost implications of DOTS to the health service and to the patients and their families; an evaluation of the National TB training material and guidelines; a study on the experiences of introducing fixed-dose-combination drug (FDCs); analyzing the context and developing the process for public-private partnership development in TB control; and a study on the molecular epidemiology of Mycobacterium tuberculosis in Pakistan.

ASD as an implementer is working in partnership with the NTP under various FIDELIS projects. In the FIDELIS first round, ASD was a technical partner of NTP. There was a delay in the implementation of project due to the government financial procedures. This was resolved through the development of a PC-1 that covered JICA funds and FIDELIS round 1 & 6 funding. The project is in the implementation phase; an agreement among the NTP, FIDELIS and JICA was signed for DOTS expansion in parastatal organisations and corporate hospitals in three metropolitan cities i.e. Karachi, Quetta and Rawalpindi. The procurements under the project were completed by June 2006; parastatal and corporate hospitals have been selected; and a model of public-public partnership is under development by a Public Health professional designated as the PPM Coordinator. Additionally interventions were also planned to strengthen PHC (FIDELIS round 4) for DOTS implementation in five districts (Sargoda, Khoshab, Mianwali, Pakpatan and Lodheran).

In the FIDELIS round 2, ASD appeared as an implementing partner. The project was implemented in one teaching hospital and Tehsil Head Quarters (THQ) and District Head Quarters (DHQ) hospitals in 12 districts of Punjab. In this partnership ASD was

responsible for technical facilitation to improve TB case detection rates through regular visits to health facilities, material support, coordination with the district for report generation, compiling and analysing data. In addition ASD was involved in the organising and conducting community mobilisation events.

As a partner, NTP provided support in the implementation of policies, use of its infrastructure, anti TB drugs and supervision and monitoring support through its NPOs, and DTCs. Programme monitoring was also done through joint visits organised by TB control Programme and ASD. In round 4, ASD as an implementing partner assisted NTP in achieving 100 percent DOTS coverage in Pakistan in 2005. It introduced and strengthened TB-DOTS in four new districts in Punjab province.

In round 5, ASD introduced DOTS in tertiary and parastatal hospitals in 2 districts of Punjab and 2 in NWFP in collaboration with TB control programme.

1.2 NTP and Mercy Corp (MC) partnership

The NTP and MC partnership is funded through FIDELIS and ECTB (European Commission TB Programme) assistance. The aim of the partnership is to reduce the prevalence of TB in the provinces of Balochistan and Sindh through mobilising communities to access TB services in 12 districts.

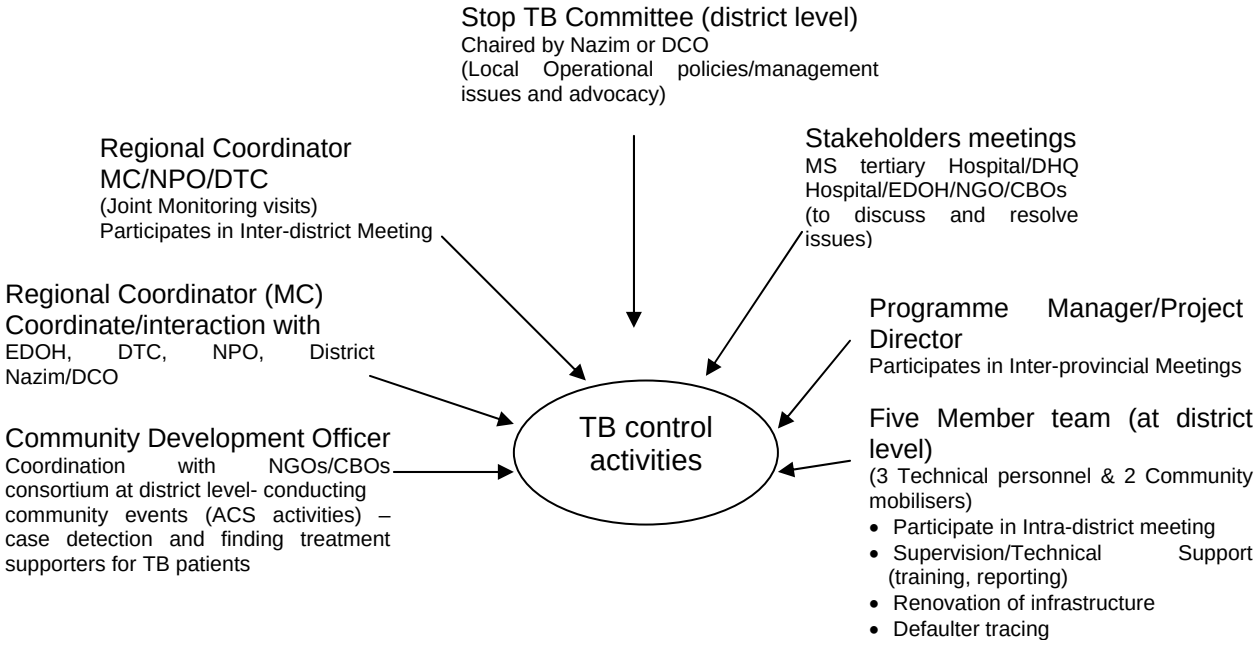
MC support is aimed at filling technical and logistic gaps in public sector facilities, such as arranging and funding trainings, provision of medicines, lab supplies and renovation of public sector facilities. The TB control programme provides technical support to MC to carry out these activities.

The MC project organisation comprises a Program Manager for Health, one Project director, two Regional Coordinators, two Community Development Officers and five members of district team, in nine districts. Two Regional Offices are established at Larkana for Sindh and at Loralai for Balochistan. The regional offices are headed by a Regional Coordinator supported by a data entry officer, an administration/finance assistant and other support staff. The regional offices have been provided with all the necessary equipment and logistics as required and both offices are now functioning well. All the project organization is supervised by the Mercy Corps Country Director (Mercy Corp 2006).

MC has very strong coordination with the TB control programme at district, provincial and national levels through its organisational network. It has established a Stop TB Committee at district level in two districts which is responsible for the local operational policies, resolution of management issues and advocacy. The Programme Manager and/or Project Director participate(s) in the quarterly inter-provincial meetings to discuss programme issues and to present quarterly TB reports. The regional coordinator arranges and conducts joint monitoring visits with NPOs and DTCs within the districts. In addition to participating in inter-district meetings he/she arranges and coordinates stakeholders meeting, participated by the MS of tertiary/DHQ hospitals and the EDOH.

At district level MC has a five member team comprised of three technical personnel and two community mobilisers to support TB control activities at operational levels. The technical members of the team are responsible for programme supervision, training and data reporting and presenting in quarterly intra-district meetings. The community mobilisers are responsible for case detection and defaulter tracing. MC Community Development Officers are responsible for coordination with the NGO/CBO consortium (formed by MC) at district level, arranging and conducting community events to enhance case detection rate and finding treatment supporters for the TB patients (Figure 6).

Figure 6: Coordination and Monitoring mechanism (NTP &MC)



2 GTZ ASSISTED PUBLIC-PRIVATE PARTNERSHIP

GTZ under Pak-German Cooperation is assisting the PTP, NWFP in:

(1) the improvement of TB diagnostic and treatment services;
(2) strengthening management skills of PTP and DTCs;
(3) enhancement of TB awareness; and
(4) involvement of private sector (GPs and NGOs) in TB-DOTS activities.

Under the objective "*involvement of private sector (GPs and NGOs) in TB-DOTS activities"* the main activities are:

- A situation analysis in NWFP province through a series of consultations and focus group discussions with GPs and their representative bodies (College of Family Medicine NWFP chapter) and academicians from various academic institutions
- Development of Guidelines on how to involve the private sector
- Training GPs
- Preparation and funding of a public-private partnership project proposal
- Signing of MOU with College of Family Medicine NWFP chapter

The modalities of partnership are based on a viable coordination among GPs and DTOs. GPs will refer TB suspects to the public sector laboratories or designated four private sector laboratories in a district. GPs will report cases to the DTOs quarterly. DTO-led monitoring support will be provided to the GPs. A Project Coordinator has already been appointed to liaise with the public sector and GPs. A contract has been signed by two parties and micro-planning is in process.

In order to expand private sector involvement in TB control activities, private hospitals will be involved, they will be provided with training, medicine and monitoring/supervision support. To enhance awareness about TB, an NGO, the Aurat Foundation, has been selected and councillors will be sensitised to support TB control activities.

3 PUBLIC-PRIVATE PARTNERSHIP PROJECTS UNDER GFATM

The NTP has established partnership with two NGOs under GFATM Round-2 to provide TB-DOTS coverage to an additional 20 million people through public-private partnerships. Partners include the Pakistan Anti TB Association (PATA) and Aga Khan Health Service Pakistan (AKHSP).

In GFATM Round-3, the NTP established partnership with two NGOs (The Asia Foundation and GreenStar) and a community based programme (BDN). This partnership was based on the objective *"to create greater knowledge and provide increased access to high quality TB-DOTS information and treatment through a private sector clinic franchise network in five urban areas".*

The major activities under the different objectives of GFATM funded projects include:

- Adaptation of national guidelines and training materials, already developed by the National TB Control Program (NTP) and implemented in the public health facilities, to the context of two participating NGOs i.e. Anti-TB Association (provincial and district chapters) and AKHSP
- Strengthening and upgrading 105 sputum smear microscopy centres of two NGOs by provision of binocular microscopes with supporting equipment and financing of incremental operating costs.
- Making functional 105 diagnostic and 200 Treatment Centres. This would entail hiring and financing of additional staff and training of 120 doctors and paramedics,
- Routine supervision, monitoring and evaluation.
- Development of standard guidelines to manage referred TB cases.
- Training at least ten persons comprising chest specialists, paediatricians, medical officers and TB program coordinators to conceptualize the guidelines for phased implementation in 90 districts
- Evaluating guidelines and management protocols after a little over one year's trial
- Designing and implementing a behaviour change communication (BCC) strategy through the public sector.
- Audience research
- BCC messages aimed at the general adult population through electronic media.
- BCC messages aimed at the general adult population through print media.
- BCC messages aimed at the general adult population through interpersonal communication.
- Evaluating the effectiveness of the BBC strategy in year two and four by a third party.

3.1 NTP and PATA (Pakistan Anti TB Association) partnership

PATA is a national NGO working exclusively for the eradication of TB from Pakistan. It has four provincial branches, branches in most districts and branches in a few Tehsils (sub districts). This organization is an active member of IUATLD Eastern Region. It has three hospitals and about 100 health facilities for the management of TB patients. PATA is a strong implementing partner of the NTP. Under GFATM support, PATA is involved in TB management under DOTS in its 84 outlets.

The following are the main activities being performed by PATA;

- Establishment of TB Centres and TB Hospitals to diagnose and treat TB patients
- Printing posters and banners for TB awareness
- Rehabilitation of TB patients and families
- Arranging conferences, workshops and seminars on TB

PATA is funded from the following sources

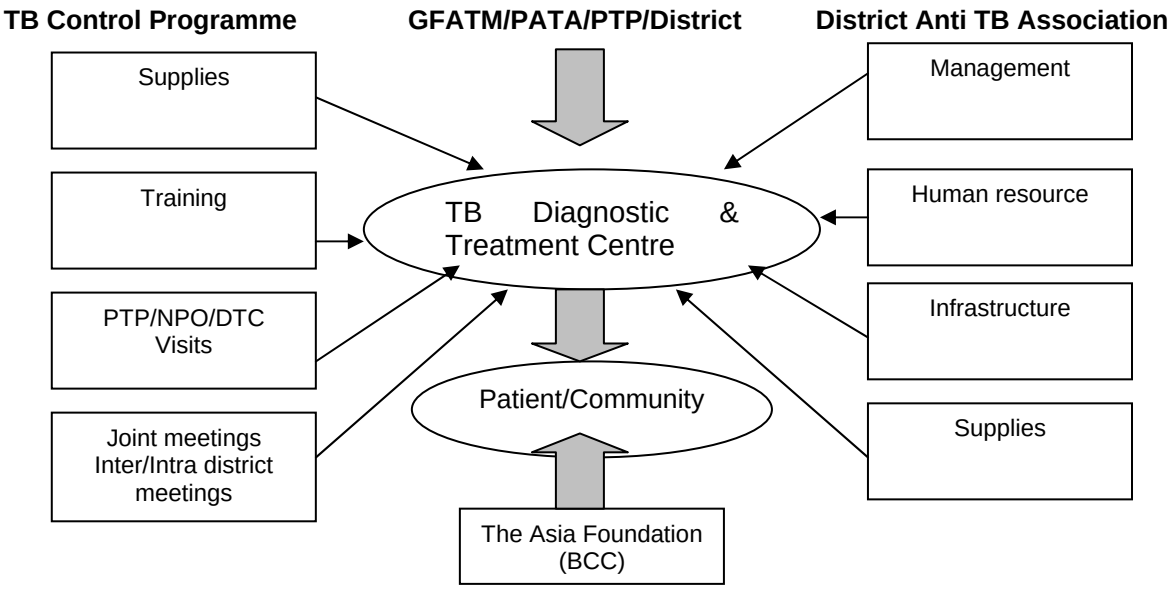
- Donations from organizations and different philanthropists
- Selling of seals and tickets

- Arranging advocacy dinners and sporting matches
- Government support through *Zakat* and other funds
- ATT medicines from Government budget and Global Fund
- Support through Global Fund round-4

A project implementation centre, the District Anti TB Association Hyderabad (PATA), has been visited. The centre has started working in partnership with the TB control programme under GFATM support. The centre, in addition to TB diagnostic and treatment services, provides clinical services to asthmatic patients and patients with other chest diseases. The centre team is lead by a qualified chest specialist.

Technical support is provided to the centre by the Provincial TB Control Programme, including training all cadres of staff (doctors, paramedics and laboratory technicians). Logistics support includes microscopes, reagents and anti TB drugs to the centre. The Asia Foundation (TAF) provides BCC support to the centre through the activities under GFATM project. This model is particularly interesting because it is based on a multiple approach to the partnership i.e. public-private and private-private partnership (see figure 7).

Figure 7: Coordination model of Partnership (PTP/District/PATA)



The TB control activities are supervised by both the Anti TB association and the TB control programme. The PTP, NPO and DTCs regularly visit the centre and provide technical assistance. They also arrange joint meetings to discuss and resolve issues. The Centre in-charge regularly attends quarterly inter-district and intra-district meetings and has the opportunity to discuss project issues and present reports from the centre.

3.2 NTP and AKHSP (Aga Khan Health Services Pakistan)

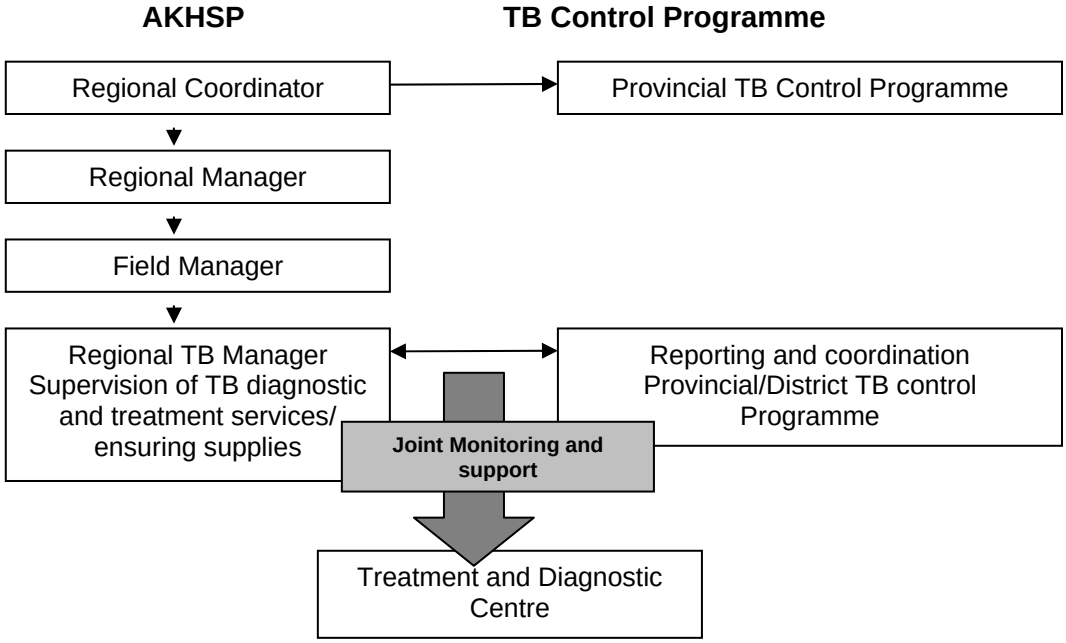
Aga Khan Health Services, Pakistan (AKHSP) is sub branch of the Aga Khan Foundation, an international NGO working in health services provision to the communities in Pakistan. The organization runs many preventive and curative programs. It has established health centres and community centres throughout Pakistan. Its main focus is the northern area.

AKHSP was given a grant in the Global Fund (round 4) to launch the DOTS strategy in their health facilities. Under this project they have established Diagnostic and Treatment

Centres all over the country in their outlets, where they provide TB care under DOTS through a public-private partnership. They are piloting electronic TB registers in their facilities.

The Prince Ali Road TB Diagnostic Unit AKHSP- Sindh Community Programme Centre in Hyderabad, Sindh Province was visited. The centre provides MCH services to the communities in addition to TB diagnostic and treatment services. The programme activities are supervised through an efficient hierarchy within the AKHSP (Sindh Community Programme). A Regional Coordinator assisted by a Field Manager manages all the activities in the region including TB control activities. The TB Regional Manager is responsible for supervision and monitoring, coordination with TB control programme and reporting from the 18 centres providing TB services. Each TB centre is managed by a doctor (figure 8).

Figure 8: Partnership model at operational level



AKHSP participates in inter-district and intra-district meetings organised by the Provincial and District TB Control Programmes, providing a forum to resolve issues and present TB reports. Regular monitoring from the public sector has enhanced the performance and technical capacity of staff implementing TB-DOTS.

The National TB Control Programme provides BCC support thorough its national campaign. AKHSP has also developed and disseminated BCC material through its own resources.

3.3 The GreenStar/GoodLife TB DOTS partnership

Population Services International (PSI) and Social Marketing Pakistan (SMP) in collaboration with Government of Pakistan created GreenStar in Pakistan. They support a network of family planning franchises, working through privately owned and managed clinics and pharmacies in low-income urban areas that offer reliable family planning services and quality contraceptives under the GreenStar logo.

Initially under the same logo (recently changed to GoodLife to avoid stigma attached to the family planning services) GreenStar as an NTP partner, became involved in TB control activities through the clusters of its network. GreenStar is actively involved in TB control

activities with the objective *"to create greater knowledge and provide increased access to high quality TB/DOTS information, testing and treatment through a private sector clinic franchise network (GreenStar) in five urban areas".* The activities under this partnership are focussed on case identification, TB screening through sputum smear microscopy, TB patient management and contact management.

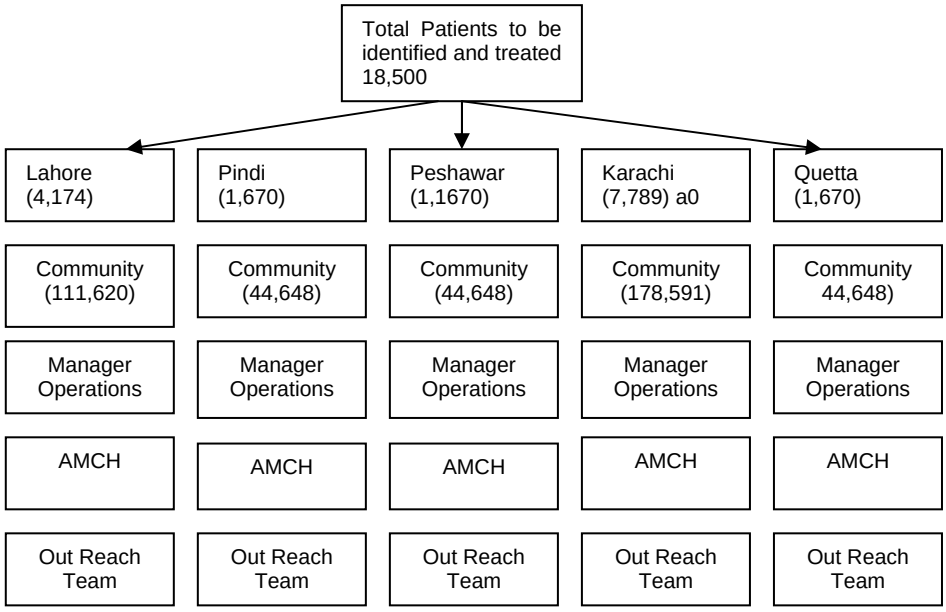
To review the project operations one consultant visited a Treatment Centre and a Diagnostic Centre under GreenStar/GoodLife TB DOTS. The Treatment Centre was a privately owned clinic within the network of GreenStar in a low-income area of Karachi. It serves patients who approach the clinic directly or are brought by the outreach team of GreenStar. A qualified doctor is responsible for examining the TB suspects and referring them to the laboratory for sputum smear microscopy. After establishing diagnosis, the patient receives medicines and a treatment supporter is selected to do DOT.

Suspected TB patients are referred to the nearest GreenStar affiliated private laboratory for sputum smear microscopy. GreenStar pays for the laboratory charges. The patient records are maintained in the laboratory in accordance with the NTP guidelines.

The management of the patient and programme supervision is through an efficient organisational structure and TB case flow system at operational level (Figure 9). GreenStar/GoodLife has outreach teams (Community Health Officers) responsible for case identification and referral to doctors. Their activities are supervised by an Assistant Manager Community Health (AMCH). In addition the AMCH is responsible for recruiting doctors, providing technical support to the operations team and coordinate project activities. The project is administratively supported by a Manager-Operations in each city. At regional level a Manager-Special Projects oversees the project activities.

The project team participates in the quarterly inter-provincial meetings to discuss issues and present compiled data of project.

Figure 9: Operation structure 2006 (GreenStar)



Source: GreenStar

3.4 Basic Development Needs (BDN) Program, Pakistan

BDN is a WHO initiative for poverty alleviation through community empowerment and participation. BDN is assisting the NTP under GFATM objective *"to implement the community mobilization strategy in partnership with NGO/CBO Networks and public sector facilities working at the grass-roots level in twenty one BDN supported districts for achieving 70 percent case detection and 85 percent cure rates".* The project is being implemented in partnership with the NTP and Primary Health Care. The activities are:

- To implement a community based Behavioural Change Communication strategy of NTP with partnership of NGO/CBO network of BDN
- To scale up the skills of doctors, (public & private), paramedics, laboratory technician on TB DOTS management.
- To scale up the socio-economic status of TB patient and their families through social rehabilitation
- To scale up recording and reporting and to ensure all inputs related to DOTS treatment by effective supervision, monitoring and evaluation.
- To establish the Project Management team at district level

4 OTHER PARTNERSHIPS

4.1 NTP and General Practitioners (GP) partnership

Realizing the role of General Practitioners (GPs), by the technical and financial assistance of Small Grant Scheme, TDR, EMRO/WHO .National TB Control programme conducted two research studies to develop a model of partnership with the GPs.

The first study was a knowledge, attitudes and practices (KAP) study conducted in 2003 in two major cities of Pakistan. A sample of 245 out of 884 private medical practitioners in two cities were interviewed using a semi structured study tool to assess the KAPs of GPs regarding national TB guidelines for the diagnosis and treatment of pulmonary TB.

The second was an intervention study designed in the light of findings of the previous study. The aim was to develop a viable model for PPP to involve the private practitioners in the DOTS delivery system. A total 60 private practitioners from a slot of 100 involved in the previous KAP study were selected. Of these, 40 private practitioners showed their interest in the study; finally 35 private practitioners remained and started managing TB patients in accordance with agreed protocols. Through consultations and meetings with GPs a model of partnership was developed and implemented (Figure 10). NTP support included training of GPs on national guidelines; provision of recording & reporting tools; anti TB drugs; and access to laboratory services for sputum smear microscopy in a public sector facility (TB Centre). In addition they were provided with technical support through regular monitoring visits of the research team.

In order to test the partnership model, the performance of GPs was assessed on the basis of case detection and treatment outcomes under NTP guidelines. The results of the study were very encouraging, they showed a significant change in the knowledge and practices of GPs after the interventions.

In addition, a qualitative assessment was also carried out through interviews of GPs and patients. The important findings were related to the mercantile interests of GPs, their administrative capacity and patient confidence. GPs concerns were difficulty in the recording and reporting of the patient data and missing patients referred for the sputum smear microscopy.

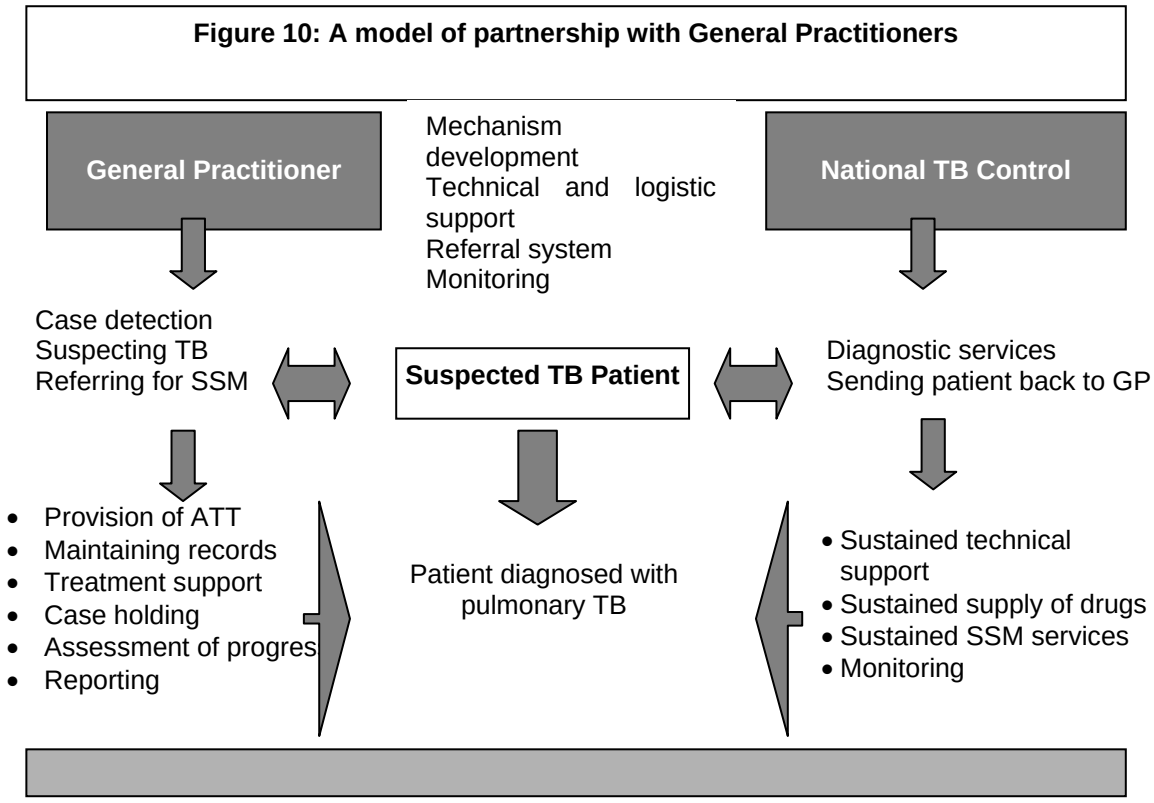
In this study the patient's concerns were facing difficulty in finding out the service points, and lack of interest and care by the service providers during their visit for sputum smear microscopy.

Similarly, it was observed by the GPs that most of their patients were reluctant to go to public sector facilities which are usually over burdened with the work and there are long queues and long waiting hours.

GPs emphasised on the need of provision of laboratory services in their clinics or in a private laboratory.

However, despite many concerns and difficulties, the GPs have been satisfied with the partnership and they liked to be involved in the management of TB patients in partnership with the public sector.

Figure 10: A model of partnership with General Practitioners



SECTION 6: CHARACTERISTICS AND GEOGRAPHICAL DISTRIBUTION OF EXISTING PARTNERSHIP PROGRAMMES

It can be seen therefore that existing NTP partners are involved in the TB control activities in many districts in all provinces of Pakistan. Their partnership includes a range of interventions such as implementation, ACS activities and research development and capacity building. Most of the partners have some affiliation with other programmes in the Ministry of Health and some work beyond the health sector. For example, TAF is a partner of Malaria Control Programme in a GFATM-funded project, but is primarily involved in Maternal and Child health activities in Pakistan. In addition it works with local governments for democratic reforms and has an important role in the capacity building of local governments.

Table 6 overleaf describes the different characteristics of current PPPs in Pakistan, outlining for each provider its area of intervention; available resources; its sources of income; and the provinces and number of districts in which it works.

1 CATEGORISATION OF THE PRIVATE SECTOR IN PAKISTAN

As has been indicated in previous sections, the private sector in Pakistan is large, with wide variations in the type and quality of care provided.

Figure 11 demonstrates that private sector providers in Pakistan can be divided into not-for-profit NGOs and for-profit private practitioners. Each group is further divided on the basis of their characteristics and kind of service provision. Most of the for-profit private providers are involved exclusively in the health care delivery. Most of the not-for-profit NGOs have variety of services to the society e.g. environmental, health and social services.

1.1 For-profit providers

The for-profit providers are shown on the left hand side of the Figure 11 and are described in more detail here.

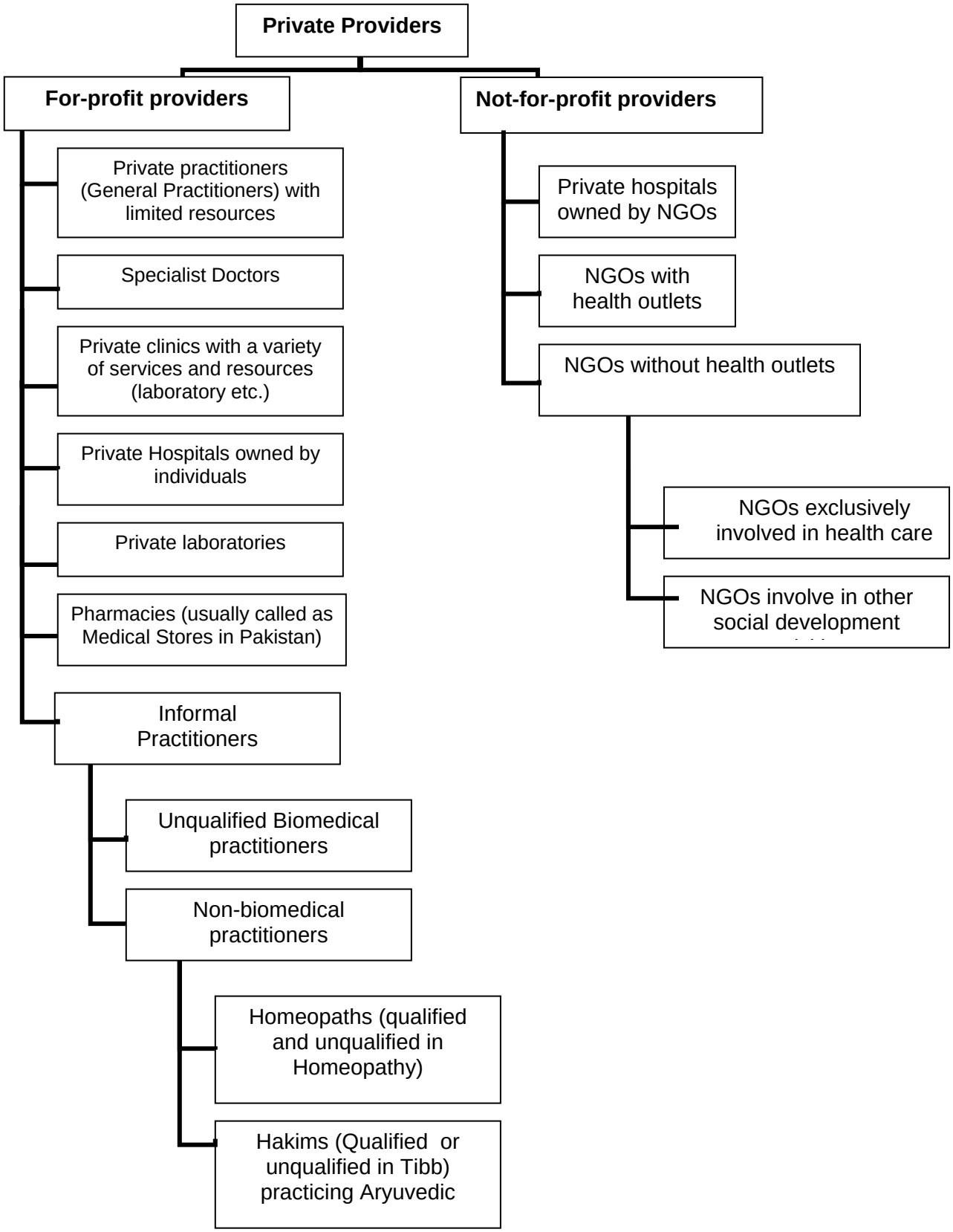
A large number of doctors in Pakistan serve as GPs mostly in urban areas. Among the GPs the majority are qualified at graduate level (MBBS) and are registered with the Pakistan Medical and Dental Council (PMDC). Usually they are the first line health care providers to the patients in urban areas. Most of the clinics run by GPs are in one or two rooms and they provide OPD services only. In addition to consultation, they provide some medicines (analgesics/antipyretics, vitamins etc.) from their own clinics and prescribe others (antibiotics) for the patient to buy from a pharmacy. The charges for a patient range between Pak Rs.50 to 100 which includes the consultation fee and the cost of some medicine. General Practitioners work full- or part-time. Most of the part-time GPs work in the evenings and have jobs either in the public sector or in private hospitals.

Specialist doctors have postgraduate degrees in a specific area and have selective areas of practice such as skin diseases, general surgery, medicine, gynaecology & obstetrics etc. They prescribe medicines from pharmacies. Most of them have an affiliation with private hospitals. If a patient needs hospitalization or surgical intervention, he/she is referred to that hospital for further management. These patients are usually managed by the referring doctor in the hospital. The consultation fee of specialist GP for a patient ranges between Rs300 to 500.

Table 6: Characteristic of existing partnership programmes

Name of NGO	Area of intervention	Available resources	Source of income	Presence	
				Provinces	Number of districts
Mercy Corp	Tuberculosis management Health education Community organisation Primary Health Care Mother & New Born Health Disaster related activities	Offices in all province Human resource (technical & support) Transport	Funding by International Donors Funding through Private sources Core Mercy Corps funds	Balochistan Sindh NWFP AJK	25 districts
PATA (Pakistan Anti TB Association)	Management and rehabilitation of TB patients	Hospitals Health Facilities Trained staff (doctors, Paramedics Funds	Philanthropists donations Fund raising through events, raffle ticket Rent from assets Philanthropist support Grant from government in the form of Medicines Project oriented funds (GFATM)	Countrywide through provincial and district branches	Total 104 health outlets in all provinces of Pakistan
TAF (The Asia Foundation)	TB and Malaria control Maternal & Child Health Local government capacity building Awareness through Text books	Programme Implementation Units Financial Human (technical & logistic Support) Transport	35 percent funds come through own resources i.e. US government grants Assets Project oriented funds	Punjab Sindh NWFP Balochistan	20 districts
BDN (Basic Development Needs)	Community mobilization strategy in partnership with NGO/CBO Networks	Well organised community Public sector support WHO support	WHO grants Government funds Community contribution (25 percent) Project oriented funds (GFATM)	Punjab Sindh NWFP Balochistan AJ K	Total presence in 26 Districts TBC partnership in 7 district
AKHSP (Aga Khan Health Services Pakistan)	TB management PHC MCHC Other social services	A well organised NGO with health outlets Human resource Financial resources	Foundation money Project oriented funds	Punjab Sindh NWFP Balochistan FANA	
ASD (Association for Social Development)	Research & Development and Capacity building TB management	Programme Implementation Units Human resource (qualified public health professional with expertise in research and development and monitoring Transport	Project oriented funds	Punjab NWFP	3 Metropolitan cities 6 districts
ACD (Association for Community Development)	Laboratory capacity building	Equipped Laboratory Reference laboratory for training, quality assurance and AFB culture and susceptibility testing Human resource (technical and support)	Project oriented funds	NWFP	

Figure 11: Categorisation of the Private Sector



General Practitioner polyclinics are run by a number of doctors specialising in different areas of practice. These clinics are owned by a group of doctors or an individual who charges practitioners for the rent and services. Many of these clinics have inpatient facilities or an operating theatre for minor surgical interventions and laboratories.

There is a large network of private laboratories dealing with a variety of diagnostic services. These can be elite laboratories, dealing with all tests such as haematology, chemistry, microbiology, serology, and histopathology. These laboratories receive patients from different hospitals and clinics. Laboratories attached to hospitals conduct routine tests such as blood CP and routine biochemistry usually required for the management of inpatients. These laboratories usually deal with cases referred by the attached hospitals.

There are also small laboratories attached to the clinics which provide a few tests such as pregnancy tests, blood sugar, haemoglobins and ESR). These laboratories receive patients from nearby GPs. The charges vary with the type of laboratory and the particular service. Additionally there are community based laboratories. These kinds of laboratories have been seen to operate mostly in Karachi and Hyderabad. They provide basic laboratory services to the patients in their catchment areas.

Homeopath doctors and Hakims are other popular healers operating as private providers. They may be qualified (with a certificate) or unqualified (without a certificate). Hakims use herbs to heal patients; they have small clinics called Matibbs. These Matibbs are available in both rural and urban areas. Homeopaths practice in homeopathy. The have small clinics mostly in urban or peri-urban areas.

Pharmacies (Medical Stores) supply medicines to patients on the presentation of a prescription by a registered medical practitioner. These medical stores have a counter sale practice; that is, they sell medicines requested by the patients or to someone on behalf of patients. They also prescribe medicines for minor ailments if requested by the patient, typically without referral from a GP.

Informal unqualified practitioners are those who do not have any qualification or certification to practice medicines. Their presence is high in rural areas but they are also found in peri-urban slums.

1.2 Not-for-profit private providers

The not for profit providers are shown on the right hand side of Figure 11. They are not described in further detail here, as the characteristics of the NGOs who already work in partnership with the NTP, shown in Figure 11, provide a range of examples of the types of services offered.

1.3 The Different Characteristics of Private Sector Actors

As has been indicated in the sections above, the private sector in Pakistan has diverse characteristics; these are outlined in Table 7. The private-for-profit providers have different career goals and motivations: in addition providing health care services to large proportion of population; they rely on the income generated through these services for their living. With the exception of the hospitals with multiple services, the private-for-profit providers have less resources and capacity. In order to achieve the objectives of PPP DOTS, the NTP will need to provide significant technical and logistic support to this section of private providers.

Table 7: Contextual information about the characteristics of the private sector

Characteristics	Private providers for-profit	NGOs not-for-profit
Career goals/ motivations	Health delivery and source of income	Health and other social services Achieving health through improving over all quality of life (BDN)
Source of income	User charges	Donor support through project resources
Attitude towards public health sector	Not certain	Positive attitude
Needs from a partnership	Capacity enhancement (training, supplies and support in recording and reporting	Capacity enhancement (training, supplies and support in recording and reporting)
Existing practices in diagnosing and treating TB patients	Not in line with the NTP guidelines	Existing partners following NTP guidelines
Available resources for TB case management	Not enough	Resources available for the TB case management only with existing NTP partners
Prior partnership experience with NTP	No	Existing partners have experience of previous partnership with NTP
Resources for supervision	No	Existing partners have resources for supervision

Not-for-profit NGOs are involved in the provision of health and social services to the society. There services may extend beyond the health sector to other social services such as poverty alleviation, the environment, gender, equity etc. With the exception of the existing NTP partners, most of the NGOs lack public health experience and have few resources for the implementation of TB DOTS projects. Before involving them, NTP needs to enhance their capacity technically and logistically.

2 STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT) OF POTENTIAL PARTNERSHIPS

The NTP is involved in PPP through various donor funded projects and has experience and good links with those NGOs that have functional networks in the country and experience of carrying out TB control activities. In addition, the NTP has assisted partners to enhance their technical capacity and has promoted the adoption of National Guidelines in the management of Tuberculosis. These strengths that NGOs have acquired through these partnership projects will be of benefit for building on future partnership ventures. One problem is, however, that all the interventions are not sustainable. When funding ends the partners will be left with several gaps, particularly in manpower, logistics and medicines.

There are other issues which need to be considered and addressed before entering into partnership particularly with the GPs. For example, most of the solo GPs do not have the time or manpower to manage recording and reporting in accordance with the NTP guidelines. Because of the complexities of the TB-DOTS package, they may refrain from following NTP guidelines.

These and other challenges are outlined in Table 8 overleaf, which depicts the strengths, weaknesses, opportunities and threats of engaging in PPP from the perspectives of the different actors. It is clear that despite the NTP's experience in PPP through donor assisted projects, the implementation of public-private partnership activities using public sector funds will be a new experience and challenge.

Table 8: SWOT analysis of private providers in Pakistan

SWOT	NTP	NGO not-for-profit	For-profit providers
Strengths	Countrywide Infrastructure Capacity - Technical Finance Logistics Supported by public sector and partner assistance funds Experience in partnership Partnership strategies Partnership models Management capacity	Close contact with communities Located close to communities Enjoy high confidence of communities Good patient relationships Experience in partnership, Capacity -technical and logistic, infrastructure (existing partners only) Experience in BCC Acceptability More flexibility over use of funding	First line of approach for the patients Close contact with the communities Enjoy patient confidence and acceptability Contact with a section of patients who only attend private providers More flexibility over use of funding
Weaknesses	Inexperienced in implementing PPP through public sector funds Lack of regulatory framework for private providers Maintaining confidence of partners How to sustain PPP support? Lack of trust in private sector	Weak capacity (technical, financial, logistic and human resource) Currently poor prescribing and monitoring may lead to MDR TB	Lack of coherence or organisation among private providers Lack of Capacity (Human resource for recording & reporting) inability to find treatment supporter and trace default cases Lack of Public Health Experience particularly TB Lack of trust in public sector Currently poor prescribing and monitoring may lead to MDR TB
Opportunities	Achievement of global targets in the light of MDGs Implementation of DOTS in all sectors Access to all patient Confidence building with civil society Prevent and reduce MDR by implementing DOTS in private sector Can recommend that all anti TB drugs are visually the same	To serve TB patients Enhance their capacity through resources provided by NTP Recognition Increase support by and for communities to achieve NGO's objectives Able to identify and catch defaulters Greater patient acceptance of DOTS as they can access it through their provider of choice	Opportunity to access public sector support Capacity enhancement Access to new information Recognition Greater patient acceptance of DOTS as they can access it through their provider of choice
Threats	Finding right partners Maintaining implementation of standardised treatment regimen (DOTS)	May loose public sector support The NGO or its TB programme may not be sustainable Risk of duplicating patients across public and private sector Discrepancies between salaries and benefits of NGO staff and public staff– may lead to dissatisfaction of public sector Private sector requires a timely disbursement of funds to operate efficiently and remain in the PPP	Lack of confidence of public sector May not follow NTP Guidelines May not be willing to come up as partners due to additional workload Ethical issues Mercantile interest Conflict of interest, Professional prestige among qualified practitioners and informal unqualified providers Risk of duplicating patients across public and private sector Private sector requires a timely disbursement of funds to operate efficiently and remain in the PPP

SECTION 7: CONCLUSION

This situation analysis was carried out to establish an evidence-base for the development of viable models of PPP. It involved both assessments of National TB Control Programme and private providers in Pakistan.

The assessment of not-for-profit NGOs was focussed on the review of performance of existing partners and their capacity as they represent the diverse not-for profit private sector in Pakistan. Their inclusion in the situation analysis was based on the following:-

1. As a sample they represent majority of not-for-profit NGOs in the country.
2. Their interests and expertise lie in a variety of areas such as research & development, capacity building, TB patient management, ACS and health service provision.
3. Experience in public health, particularly TB
4. Availability of evidence on their PPP performance

For the for-profit assessment, results of two NTP studies for the development of a viable model of PPM for GPs were reviewed. These two researches provided much information regarding the knowledge, practices and attitudes of GPs with respect to TB control. Additionally an, evaluation of other for-for-profit providers was conducted to define their role in the PPP activities.

The NTP has made substantial arrangements to implement the PPP component of its PC-1. These include:

1. Allocated funds (technical and logistic support)
2. Models of PPP and operational plans
3. Experience in PPP through donor assistance
4. Lessons learned so far – existing partnerships
5. Commitment

The NTP is already involved in PPPs through partner assistance funding. This provides a basis for the NTP to implement this new initiative and identify and involve a number of partners with varied interests and capacities to implement different interventions. The partnerships have strengthened the confidence of the partners and provided an opportunity to understand complexities of the situations.

The NTP needs to develop partnership networks. These networks can be set up in a number of different ways; they can be organized at district level or they can be initiated from a central point. The most important prerequisite for success are that the specific local needs have been examined, that investments are made and that NTP is clear about its priorities and choices. Investment inspires confidence, which is an important precondition for success that will encourage parties to cooperate.

National support and coordination is equally important; it is essential therefore that the PPP programme creates a formal national partnership in which the national coordinating bodies of central government; private organisations; representatives of regulatory bodies; pressure groups (professional and advocacy associations); and people living/or who have been living with the disease work together on any adjustments to working methods or regulatory measures that may prove necessary. The same has been recommended in the Report on engaging all Health Care Providers in TB Control (WHO 2006).

Monitoring and evaluation is essential for measuring the effects of the Public-Private Partnership projects. The NTP has an important role to play in this respect as do external evaluations of established PPP projects. Lonnroth et al 2004, while comparing processes and outcomes of four public-private mix projects on DOTS implementation on TB in New

Delhi (India), Ho Chi Minh City (Vietnam), Nairobi (Kenya) and Pun (India), concluded that NTPs must be strongly committed to supporting, supervising and evaluating PPM projects.

Given the strength of the NTP in Pakistan and its success in ensuring that all districts in the country are providing DOTS, there is reason to be confident that if the above measures are implemented then PPM DOTS will be successful in increasing case detection rates and improving treatment outcomes. Part 2 of this report outlines how this might be done.

Part 2: Public-Private Partnership Models, operational plans and monitoring supervision mechanism

INTRODUCTION

The National Tuberculosis Control Programme (NTP) of Pakistan has not yet met its target of achieving 70% case detection rates for tuberculosis (TB). It has recognised that many TB suspects do not access public health facilities, and consequently that it must involve private providers in the provision of TB DOTS services if case detection is to improve.

In 2005 the need for technical assistance (TA) to support the development of public-private partnership (PPP) models was recognised. This has subsequently led to this assignment: to conduct a situation analysis and develop models and protocols for Public-Private Partnerships for the NTP, Pakistan; the Terms of Reference are provided in Appendix 1. The TA has been coordinated by TAMA (Technical Assistance Management Agency) and has been provided by one local and one international consultant, with the latter being sourced by the Liverpool Associates of Tropical Health (LATH).

The situation analysis was compiled through a review of relevant literature and through discussions with NTP and Provincial TB programme (PTP) personnel and with private providers already in partnership with the TB control programme. The models were developed from the findings of the situation analysis, with the support of WHO PPP guidelines. The first draft of the models was shared with the NTP who provided some valuable feedback. The next draft was presented to public and private providers at a workshop in which they had the opportunity to critique the models and the protocols. The final draft incorporated feedback from the workshop and was presented to stakeholders at a consensus building workshop.

This report forms the second part of a two-part report. Part 1 (sections 1-7) presents the situation analysis while this, Part 2 (sections 8-14), presents the models and their protocols and guidelines. Section 8 provides a very brief outline of the key findings from the situation analysis and presents the objectives of the PPP programme. Section 9 presents the frameworks for implementation models and for enabling environment models; throughout the report the focus is on the former as these form the greater share of the PC-1 funding. Section 10 provides the protocols for the implementation models, while sections 11 and 12 respectively describe their operational guidelines and monitoring and evaluation guidelines. Section 13 presents models for strengthening the enabling environment. Section 14 provides a brief conclusion.

SECTION 8: RATIONALE AND OBJECTIVES

The situation analysis, which comprises Part 1 of this report, found that there is not only a great need for PPPs in Pakistan, but also there is capacity in the public sector to engage in and coordinate them. The NTP has now achieved DOTS coverage in all districts and has engaged in some PPPs in different provinces and with a range of partners, with funding primarily from the Global Fund for AIDS, TB and Malaria (GFATM) and from FIDELIS. The partners include non-governmental organisations (NGOs) that provide clinical and/or laboratory services and/or have behaviour change communication programmes. They also include private GPs that are in partnership independently or through a social franchising organisation.

The success of these partnerships led the NTP to include a provision for PPP activities in its current PC-1, the planning and budget document. This represents a significant commitment, since the budget for PPP accounts for 39% of the total NTP funding from the government for the years 2005-2010. This funding will be used to strengthen the public sector's monitoring and supervision capacity and also to provide drugs, reagents and microscopes to private sector partners. It also allows for training of both public and private sector providers to ensure they have the technical and managerial capacity to enable PPP DOTS to function effectively.

The primary objectives of PPP DOTS in Pakistan are:

1) To increase case detection by enhancing the ability of private health providers to identify and diagnose pulmonary TB cases
2) To increase treatment success rate by improving the quality of TB care received by patients attending private facilities

These incorporate the process objectives of improving referral, diagnostic and treatment practices and of involving providers who work with poor populations. These should increase the accessibility of TB DOTS and so result in the desired outcomes of increased case detection and higher treatment success rates. This will lower TB mortality rates and will lead to reduced incidence and, in time, reduced prevalence of TB.

It is further hoped that the process will contribute to poverty alleviation since the partnerships will result in providers reducing their costs and improving their quality of care. Consequently patients will face lower user-charges and will also reduce their 'shopping-around', hence reduce their total costs of accessing care.

This report will provide an overview of the range of models for PPP DOTS in Pakistan, based on the providers accessed by urban, peri-urban and rural patients. It will also present models for strengthening the PPP DOTS enabling environment.

SECTION 9: OVERVIEW OF PUBLIC PRIVATE PARTNERSHIP MODELS

Two different categories of models are described in this report: models for DOTS implementation and models for strengthening the enabling environment for DOTS. The former provide protocols and operational and monitoring guidelines for working with private sector TB service providers. The latter provide guidelines for involving the private sector in advocacy and community mobilisation; and research to strengthen DOTS implementation. The resources currently available to implement these are also described.

1 DOTS IMPLEMENTATION MODELS

Figures 1 and 2 provide PPP frameworks for urban/peri-urban and rural areas respectively. They describe the providers from whom patients seek care and a model for their potential involvement in DOTS.

Currently no data is available that describes patients' pathways to care analysed by socio-economic group, nor quantifying the proportions of patients from these groups who access care from different provider types; it is estimated, however, that around 50% of rural populations visit informal providers and that private formal providers can contribute to around 20% of TB care. The urban/peri-urban model describes services sought by patients living in the higher density areas. Urban populations have a greater proportion of people who seek care from private for-profit providers than either peri-urban or rural populations; peri-urban populations, who often live in slums, are typically the focus of city-based NGO activity; rural populations have far fewer private for profit qualified allopathic practitioner working close to them, but are served by NGOs as well as the public sector.

The top half of each model depicts patient contact. That is, the provider with whom the TB suspect has his/her initial contact, who provides the diagnosis, treatment, directly observation of treatment (DOT) and defaulter tracing. Key relationships are described here, but it is acknowledged that over time, as confidence increases between the public and private sectors that there may be additional points of referral between them that are not shown here. Below the line the models indicate support required from NTP or PTP. Each individual model has been given a number in the diagrams below to facilitate linkage to its description in section 10.

2 MODELS FOR STRENGTHENING THE ENABLING ENVIRONMENT FOR DOTS

The implementation of DOTS operates more effectively in environments in which patients are sensitised to key concepts. For example that TB is curable; that biomedical approaches to, and providers of, treatment are required; that drugs are provided free of charge; and that treatment lasts for 6 or 8 months (depending on the regimen – currently 8 months in Pakistan). Behaviour change communication is essential for this, and needs to involve strategies for communicating with individuals and households at community levels. The involvement of NGOs and CBOs, who work closely with their communities can improve the dissemination of messages and support the process of behaviour change.

DOTS also requires political will. In Pakistan, where services are decentralised, this means political will at district as well as provincial and central levels. *Nazim*s and other leaders in the districts need to be made aware that the people in their constituencies are concerned about TB service provision. They need to be sensitised to TB DOTS and to understand that it requires an effective processes of diagnosis and treatment involving a chain of providers, as opposed to infrastructure and other fixed assets. NGOs and CBOs working in the districts can support this sensitisation and can advocate on behalf of service providers.

Figure 1: Urban and Peri-urban PPP Framework

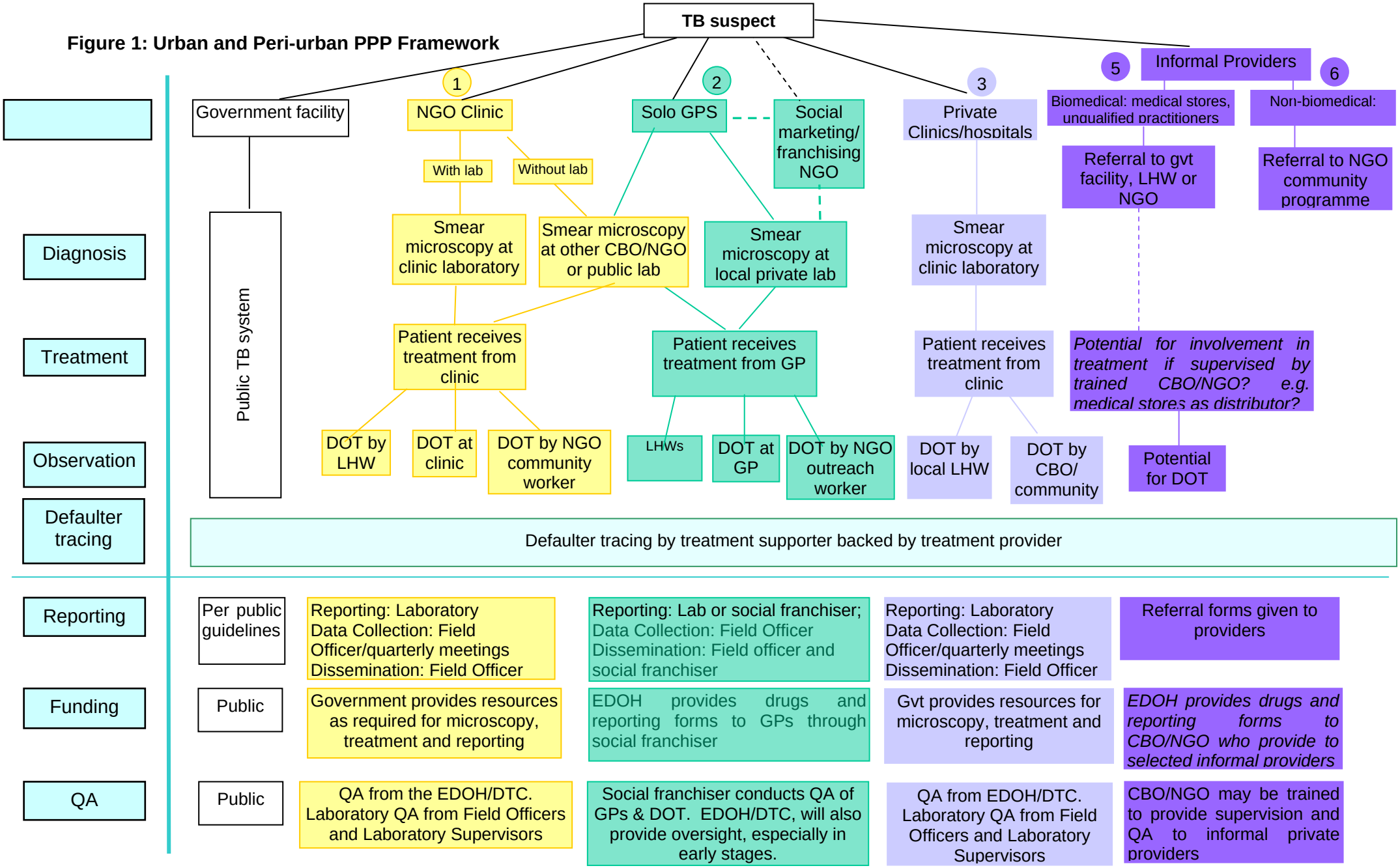
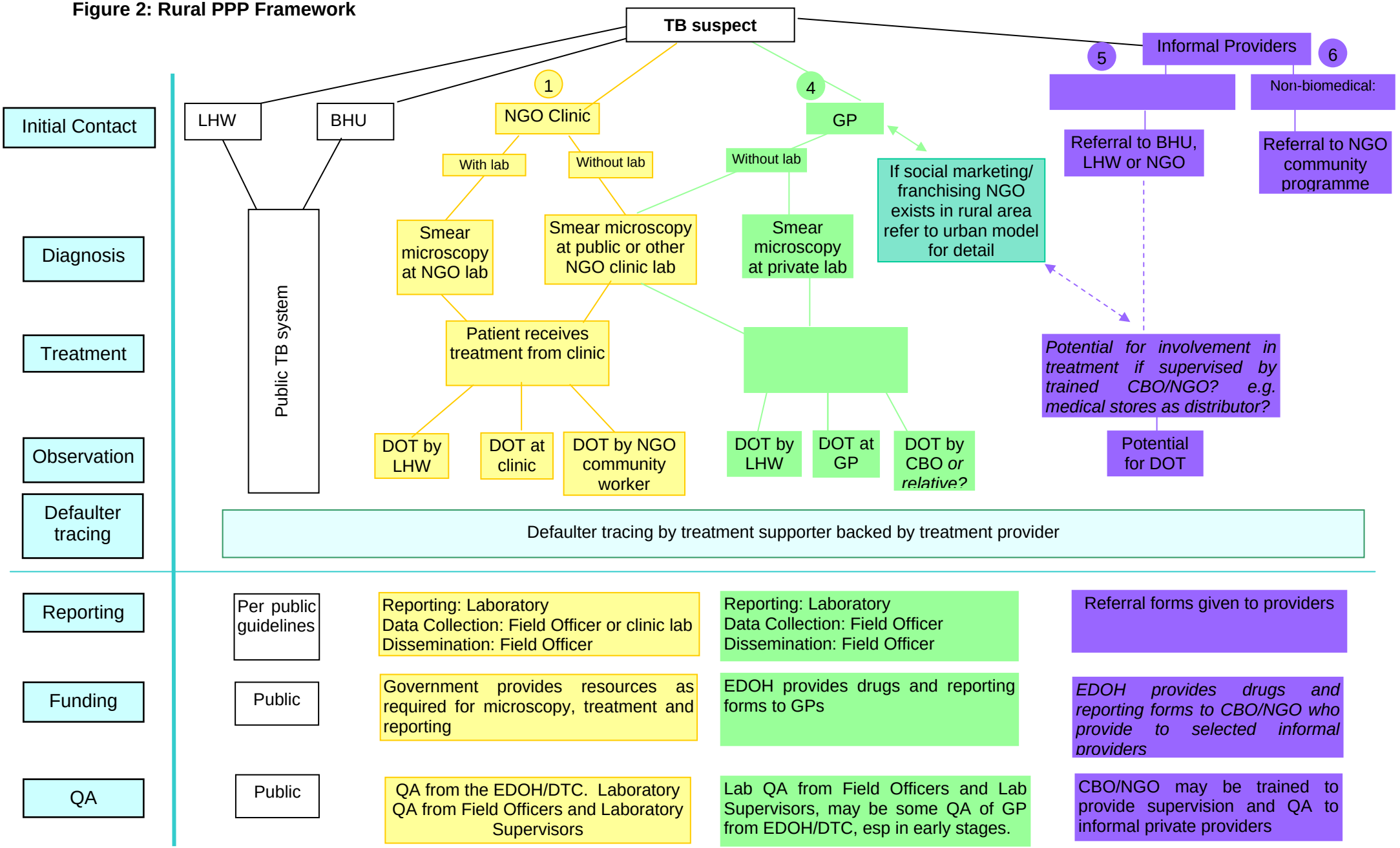


Figure 2: Rural PPP Framework



DOTS implementation is complex and periodic refinements to protocols can result in increased case detection and/or improvements in treatment success. Such refinements should be evidence-based; there is therefore a need for operational, social and medical research to be conducted on an ongoing basis, particularly at national and provincial levels. The NTP has already made significant progress in this regard and also has experience of partnering with the private sector to increase research capacity. Research PPPs are articulated in the form of a model here, to provide protocols for future research relationships.

These models are described further in section 13.

3 RESOURCES

The National Tuberculosis Programme has established DOTS through the public sector in all districts in Pakistan and in so doing has laid a foundation upon which PPP DOTS can be built; indeed some districts have already started to engage with the private sector. It has planned for resources (financial, human and material) to be provided for a range of PPP activities through public sector funds. The PC-1 planning and budgeting document allows for a number of new posts and for additional allowances for existing posts to support PPP operations. It also provides funds for transport and logistics, drugs and laboratory supplies and training of public and private sector staff. The total budget over 5 years is PAKRs 465 million, accounting for 39% of the total NTP public sector funds (this excludes the PTPs' PC-1s for implementing public sector DOTS).

At national level, a PPP Coordinator post has been established and the successful candidate will be inducted. He/she will be responsible for implementing the strategies and operational guidelines outlined through this document, so providing a more comprehensive PPP programme. He needs to be situated within the NTP organogram, possibly with a PPP unit being established and placed between the Laboratory Network Unit and Monitoring/Supervision Unit as shown in the organogram in Annex II-A of the 2005-10 NTP PC-1.

He/she would benefit from having a steering, or PPP coordination, committee to support him/her in this area, which would meet two to three times per year (perhaps more frequently in the early stages) and comprise a Ministry of Health and/or NTP Manager; PPP funding partners, WHO, the chairs of provincial partnership committees; representatives of regulatory bodies; general medical and specialist, associations; representatives of some of the larger NGOs (e.g. PATA, GreenStar/GoodLife, AKHSP, MC, TAF); advocacy bodies; people who have lived with the disease; and funding partners involved in PPP. This would ensure that private sector and public sector concerns about the programme are shared and resolved at national level. The committee will be responsible for providing strategic rather than operational direction.

At provincial level and for AJK/NA, PPP coordinators will be designated from the existing personnel pool and will be responsible for overseeing the public-private partnerships in their provinces, and for identifying partners. They will be supported by a Provincial TB partnership committee, comprising relevant stakeholders, including the provincial secretary for Health or Provincial Director General of Health Services, the provincial TB Manager and implementing partners with provincial representation. This committee will be responsible for resolving provincial level operational and strategic issues.

Additionally the PC-1, under the laboratories component, provides for 128 laboratory supervisors to receive additional allowances for expanded activities; it would significantly strengthen the laboratories in the private clinics engaged in PPP if these officers could provide supervision on technical laboratory issues.

At district level, the PC-1 has provided for a PPP coordinator. The programme would benefit most, if this role was established through strengthening the role of the district TB coordinators to include responsibility for the management of PPP DOTS in their district. Their role will be to identify and develop alliances with new partners, manage the partnerships and supervise private as well as public treatment sites. They will be supported by field officers who's primary role will be to ensure that all monitoring requirements are being met. This will involve providing administrative supervision to private laboratories involved in PPP DOTS, particularly on data collection and reporting.

At all levels orientation to the PPP DOTS programme will be required, prior to implementation. This should start at national level, with all national programme managers and officers being involved, to ensure cohesion and promote coordination between programmes. At provincial level all PTP managers, officers and NPOs should receive orientation to ensure they are able to support the districts in implementation; at this level it should include criteria for partner selection as well as orientation to the models. At district level the EDOHs, DTCs, field officers, laboratory staff, LHW supervisors and LHWs should receive orientation, with a focus on partner selection and operational guidelines.

The NTP recognises that some districts are currently performing better than others; the stronger districts will be the first to establish partnerships with the private sector, the others will follow once their core, public DOTS programme has been strengthened.

4 LIMITATIONS

As noted above, the detailed models that follow reflect the resources currently available and consequently focus on relationships with formal providers of care. Informal providers, however, are the first choice of provider for a large proportion of the population, particularly those living in rural areas and for many of the urban poor. The public-private mix in Pakistan, will, in time, have to involve these cadres to further increase case detection and to improve outcomes for patients who require TB treatment.

SECTION 10: MODELS OF PUBLIC-PRIVATE PARTNERSHIPS FOR DOTS IMPLEMENTATION

The following presents the detailed models that have been depicted in the urban/peri-urban and rural frameworks above. The protocol diagrams show the different providers from whom TB suspects access care and the means through which private providers can be engaged to provide quality care through DOTS to their patients. The models are described in the order of the numbers indicated on Figures 1 and 2 above. Those models that are relevant for both rural and urban areas are described together and have the same colour code in the diagrams, the others have distinct differences between urban and rural models and are described separately.

Each model is followed by a description of:

- Its specific objectives
- A summary of the model
- An outline of the roles and relationships of the different partners
- The coordination mechanism
- Training requirements
- The inherent incentives for the private partner and enables provided by NTP
- The monitoring and evaluation mechanism
- Challenges

It should be noted that where models have common features under these headings there will be repetition in their descriptions. This has been done to ensure that a provider wishing to implement one of these can review all of these elements without referring to the descriptions of other models; it is hoped that this will aid the implementation process.

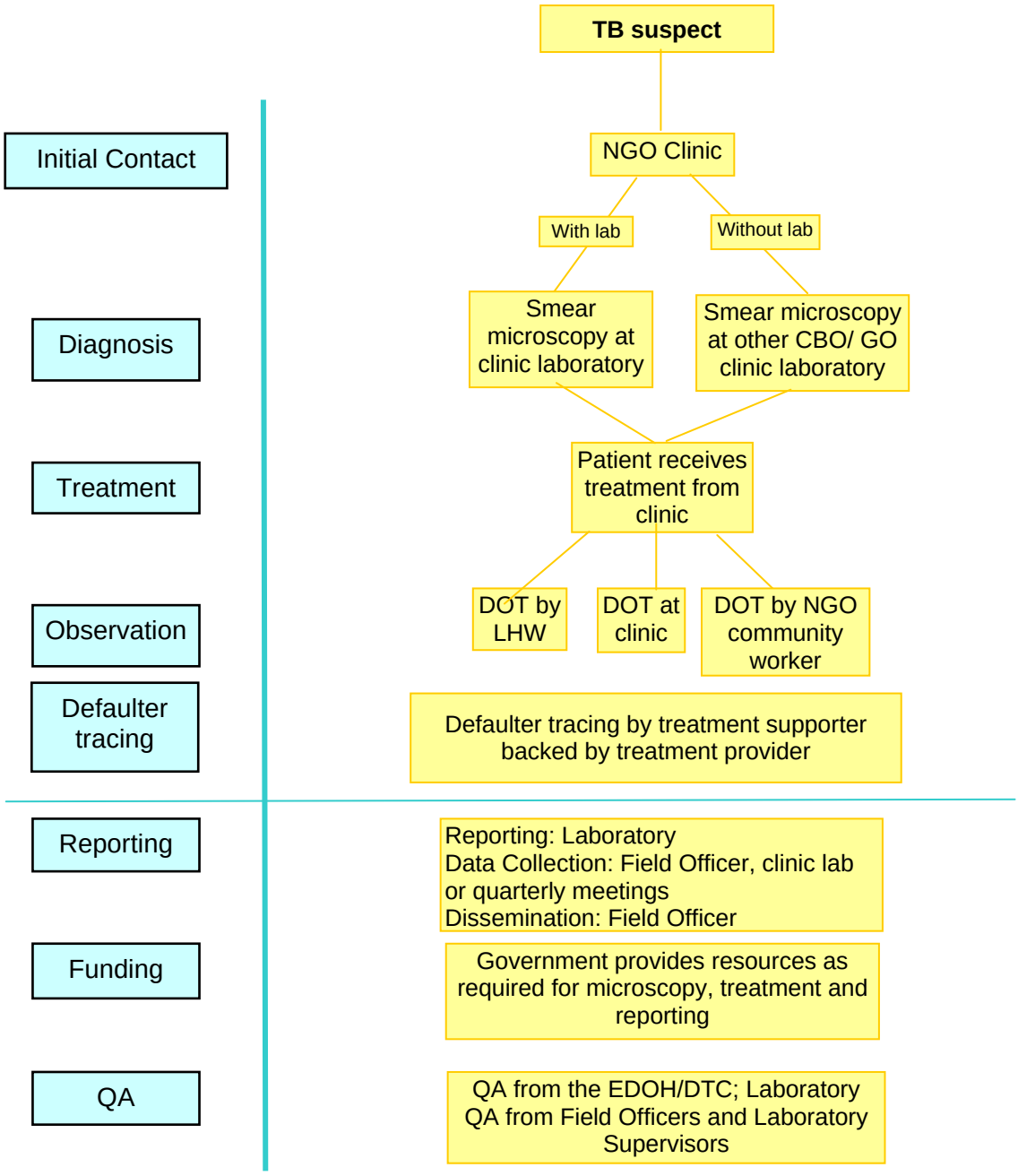
The model protocols, and the operational guidelines to support them that follow in Section 11, have drawn extensively from the following documents:

- WHO/STOP TB (2006) Engaging all Health Care Providers in TB Control: Guidance on Implementing Public-Private Mix Approaches; and
- WHO/STOP TB (2003) Public-Private Mix for DOTS: Practical tools to help implementation

1 MODEL 1: NGO CLINIC – URBAN AND RURAL

1.1 Objectives of the Model

1) To increase case detection by enhancing the ability of NGO health facilities to identify and diagnose pulmonary TB cases
2) To improve the quality of NGO/CBO laboratory services
3) To increase treatment success rate by improving the quality of TB care received by patients attending NGO facilities



1.2 Summary of the model

NGOs that have clinics may or may not have their own laboratories. The aim of this model is to ensure that TB suspects who attend either of these types of clinic gain access to TB treatment through DOTS, if they are found to have pulmonary TB.

Where a clinic has a laboratory, smear microscopy will be conducted at that clinic. Where it does not, the patient will be referred to obtain diagnosis either from a public laboratory or from a laboratory at another NGO clinic; the laboratory attended will maintain the laboratory register. Diagnosis may be provided free of charge or will be highly subsidised. The patient will return, with the smear microscopy result, to the NGO clinic, where the clinician will explain the treatment process to the patient and he/she will start treatment. If the patient chooses to stay at the diagnosing clinic a back-referral form will be sent to the originating clinic to inform them of the patient's choice. Treatment will be free of charge to the patient.

Treatment support will be conducted by an LHW, if there is one in the patient's community, by clinic staff if the patient is able and willing to visit the clinic regularly, or by a community based worker from an NGO (either the clinic's NGO, or from another related NGO working in the patient's area). Where none of these are possible, other DOT options need to be explored such as using school teachers, or a reliable household member if the patients so demands. Defaulting patients will be followed-up by their treatment supporter and, if that does not result in resumption of treatment, by an LHW supervisor or by clinic staff.

Where LHWs, NGOs/CBOs or other institutions are involved, the clinic should contact the LHW supervisor or the NGO/institution manager (henceforth called the DOT liaison) and provide them with the patient's contact details. The DOT liaison will then assign one of their staff or volunteers to support the patient and will inform the clinic of the treatment supporter's name and contact details. The name of the treatment supervisor will also be noted on the patient's treatment card. Where a patient selects a family member as treatment supporter, that person's contact details will be noted by the clinic.

Sputum positive patients will asked to return to the laboratory for the 2, 5 and 7 month sputum conversion tests and the laboratory will record the results.

Reporting will be completed on government forms (TB01 to TB09). The field officers will work with the laboratories and the treatment centres to ensure that the forms are completed correctly and that monitoring information is fed to the EDOH in a timely manner. In the short term this will be a mentoring arrangement. In the longer term verification of data quality with the laboratories will be the responsibility of the field officers while verification of the quality of other forms will lie with the DTC during regular monitoring visits and during the quarterly intra-district meetings.

Monitoring data will be consolidated into district statistics by clinic staff attending the quarterly district meetings and taking TB07, 08 and 09 with them to give to the EDOH. Alternatively, the district field officer will take the results from the laboratories and will report to the EDOH to ensure that case detection and treatment are registered and included in district data.

The NTP has capacity to provide some resources to the laboratories and clinics. Microscopes and reagents can be provided to those laboratories that require them. Where these are provided there should be a stipulation that fees paid by the patient for

such services should be significantly subsidised, preferably with 100% subsidy for the poorest. Where this is not feasible, patients may have to access *zakat*[3]. Drugs are also available from the government for use by the NGO clinics and should be provided by the district; treatment should be free.

The quality of the process will be assured by the DTC and Field officers. Laboratories will also be given technical oversight by a laboratory supervisor when he/she conducts district visits. Any poor performance, in any area, in the early stages of partnership needs to be addressed through a mentoring programme initiated by the public sector.

1.3 Roles and Responsibilities

Please see table overleaf

1.4 Coordination Mechanism

The EDOH and DTC will initially identify priorities for TB service provision and then where relevant will approach potential NGO partners with a view to establishing a partnership agreement. They will agree how the roles and responsibilities outlined above will be undertaken by the NGO and what support will be provided by the PTP. They will jointly estimate the number of expected cases to be treated by the NGO and hence the frequency of supervision required. When agreement has been reached an MoU will be signed.

Both the NGO and the public TB programme shall have a primary contact person. From the district this should be either the DTC or the field officer.

The NGO will keep patient records in accordance with NTP guidelines. The district field officer will verify reports concerning notification and outcomes of all cases from the laboratory and will ensure they are incorporated into district statistics.

A senior district representative of the NGO (either the NGO director or the TB programme manager) will attend quarterly district meetings to feedback progress, discuss issues arising and to hear from other partners.

1.5 Training

A training needs assessment of the NGO will be undertaken by the DTC supported by a laboratory supervisor where necessary. This will identify which areas of DOTS the NGO will become involved with and where the knowledge, skills and attitudes gaps are.

Training should be modular and delivered to meet the NGO's requirements. Personnel from different levels in the NGO will be trained in different modules, however the NGO TB manager should be exposed to all modules to ensure a thorough understanding of the operations. All training shall be followed with on-the-job supervision during the first few months of operation. Follow up training will take place on a needs basis.

[3] Religious fund collected from Muslim citizens of Pakistan to support poor (*mostaqueen*) people

Roles and Responsibilities

	Public Sector				Private Sector		
Tasks	**NTP or PTP**	**EDOH/DTC/ Field Officer**	**LHW/ LHW super-visor**	**Public Labora-tory**	**NGO Clinic**	**NGO Laboratory (May be independent of Clinic)**	**NGO Community Worker/ Volunteer**
Identification of suspects and referral							
Identify TB suspects							
Refer TB suspects							
Collect sputum samples							
Diagnosis							
Do smear Microscopy							
Diagnose TB							
Register/Record cases							
Treatment							
Prescribe treatment							
Identify and supervise treatment supporters							
Supervise treatment							
Inform patients about TB							
Follow up on Defaulters		**At request of NGO**					
Quality assurance							
Training care Providers							
Supervision							
Quality assurance for Laboratories	**Through reference labs**	**QA for NGO labs**					
Monitoring and Evaluation	**Of PPP DOTS outcomes**	**Of Facilities**					
Management							
Development of policies and guidelines							
Development of training material							
Drugs and supplies Management	**To Districts**	**To Facilities**					
Provide stewardship: financing and regulation							

1.6 Incentives/Enablers

It is anticipated that the primary motivation of NGOs wishing to enter into partnership with the public sector is to better serve their community and to provide appropriate care to its population. The key incentive for the NGO is that the PTP will help them meet this objective through technical support and integration with a national programme. Financial incentives are neither desirable nor available from the PTP/NTP

Other enablers in the form of drugs, reagents and microscopes may be provided as necessary.

1.7 Monitoring and Evaluation

Primary monitoring shall use the standard TB01 to 09 forms. Case detection and treatment success in the NGO clinic will be the main indicators. Default and transfer out rates will also be reviewed.

Secondary monitoring may also include use and storage of drugs, monitoring of laboratory and treatment process through observation and interview with NGO staff.

An evaluation of the PPP should be conducted by an external party after one year to ensure operational and strategic lessons are learnt and to improve practical aspects of the partnership. This should include interviews with both parties, analysis of the documentation available and interviews or focus group discussions with patients and treatment supporters.

1.8 Challenges

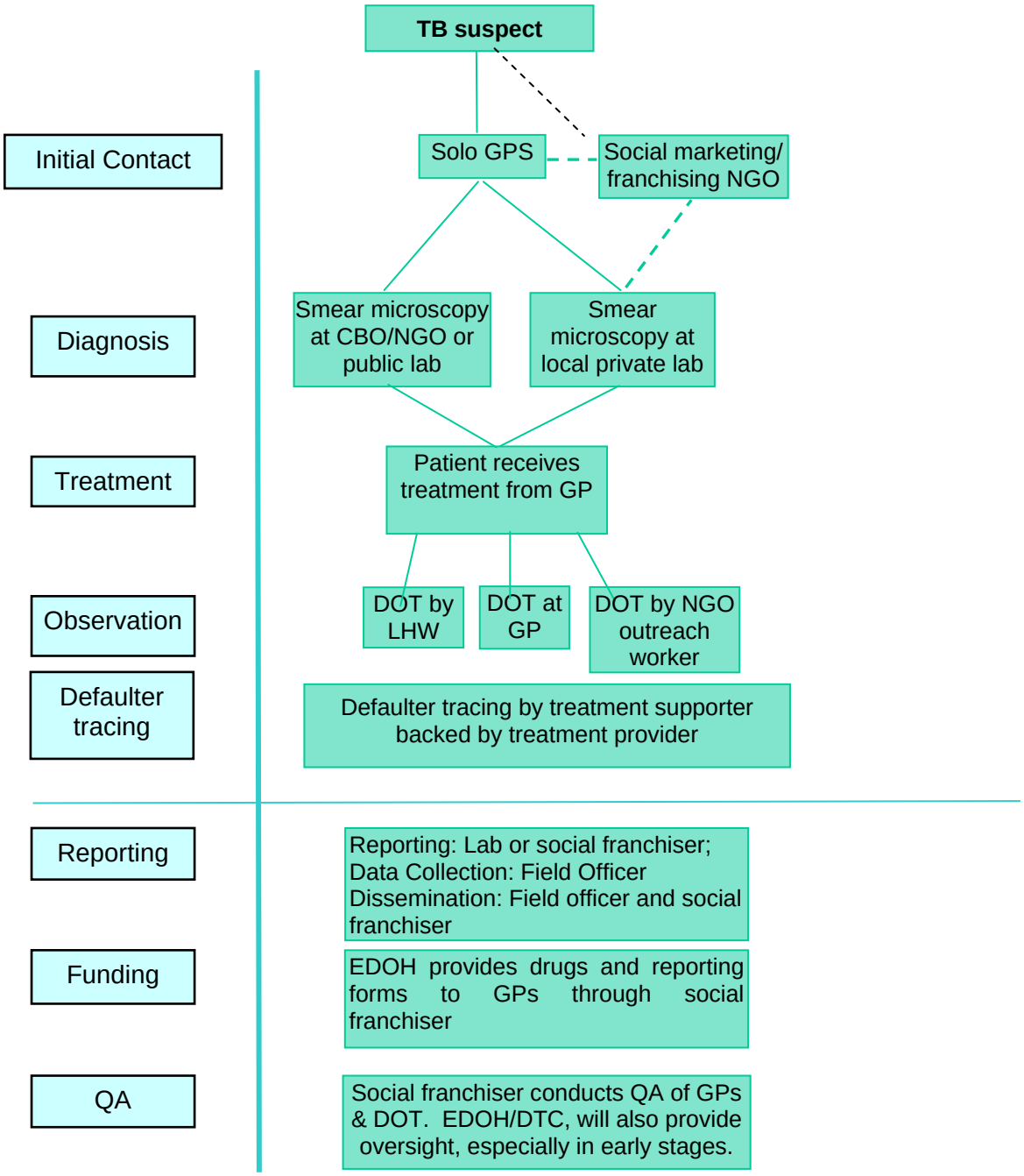
Difficulties in relationships between public and NGO service providers may arise because of differences in access to financial resources. The public sector providers may feel that resources provided by donors to the private sector would be better spent in the public sector, which has greater technical capacity. Differences in actual or perceive salaries for providers who effectively perform the same roles may also be problematic.

The sustainability of NGO providers is also a challenge, particularly for those that rely on external donor funding, rather than have funds generated within their communities (for example by private sector benefactors).

2 MODEL 2: SOLO GPS - URBAN

2.1 Objectives of the Model

1) To increase access to DOTS for TB suspects by involving GPs in the DOTS programme
2) To increase case detection by providing solo GPs with opportunities for accessing sputum smear microscopy services
3) To increase treatment success rate by improving the quality of TB care received by patients attending GPs



2.2 Summary of the model

Solo GPs are often the first choice of provider for patients who can afford them. They earn their income through fees charged to patients. Typically they do not have their own laboratories, thus diagnosis is made on the basis of a clinical judgement, or they ask the patient to visit an independent local laboratory, which does not provided clinical services. They are less likely to ask a patient to go to another facility, particularly not another private clinic, as they risk losing the patient to another doctor. GPs tend not to be regulated and they are not always able to keep up to date with the more recent medical advances and internationally recognised best practice. Those that work in the public sector by day and have evening private practices do not always follow standard public procedures, as they have to meet the expectations of their patients, which are not always in accordance with best practice. They are more concerned with the health of individual patients than with public health issues.

One aim of this model is to enable a cluster of solo GPs, working in the same geographic area, to provide better diagnosis by linking them with a local for-profit or CBO laboratory, which does not provide treatment and so poses no risk to the GPs through lost patients; an alternative is for them to send patients to a laboratory at a public health facility. Local NGO laboratories do not currently exist in Pakistan and so would have to be established, possibly with the support of an SFO. Another aim is to encourage them to provide appropriate treatment through direct training, and/or through the support of a social franchising organisation (SFO) that can assist in patient education and monitoring quality of care.

A GP will refer a TB suspect - who may come to him/her independently or as a result of an interaction with an NGO or SFO community outreach worker - to a local or public laboratory, which will perform smear microscopy. Diagnosis may be provided free of charge or be highly subsidised. The patient will return, with the microscopy result, to the GP, where the clinician will explain the treatment process to the patient and he/she will start treatment. The GP will register the patient. If the patient chooses to stay at the diagnosing clinic a back-referral form will be sent to the GP to inform them of the patient's choice; the patient will be encouraged to continue using the GP for all illnesses other than TB. Drugs will be free of charge to the patient, although there may still be a prescription fee charged by the GP.

Treatment support will be conducted by an LHW, if there is one in the patient's community, by a community based worker from the SFO or another NGO. Where none of these are possible, other DOT options need to be explored such as using school teachers, or a reliable household member if the patients so demands. Defaulting patients will be followed-up by their treatment supporter and, if that does not result in resumption of treatment, by an LHW supervisor or by staff of the SFO or other NGO. In the absence of these the GP will contact the field officer and provide them with the patient's contact details and they will be followed up by either the field officer or other designated public sector worker.

Where LHWs, NGOs/CBOs, SFOs or other institutions are involved, the GP should contact the LHW supervisor or the NGO/institution manager (henceforth called the DOT liaison) and provide them with the patient's contact details. The DOT liaison will then assign one of their staff or volunteers to support the patient and will inform the GP of the treatment supporter's name and contact details. The name of the treatment supervisor

will also be noted on the patient's treatment card. Where a patient selects a family member as treatment supporter, that person's contact details will be noted by the clinic.

Sputum positive patients will be asked to return to the laboratory for the 2, 5 and 7 month sputum conversion tests. The laboratory will send the patient with the results to the GP, who will record them. The district field officer will collect them and ensure that case detection, sputum conversion rates and treatment outcomes are included in district data.

Reporting will be completed on government forms (TB01 to TB09). The field officers will work with the laboratories and the GPs to ensure that the forms are completed correctly and that monitoring information is fed to the EDOH in a timely manner. In the short term this will be a mentoring arrangement. In the longer term verification of data quality with the laboratories will be the responsibility of the field officers while verification of the quality of other forms will lie with the DTC during regular monitoring visits. Where an SFO is operational, the primary supervision of GP reporting will remain with the franchiser, which in turn will receive supervisory visits from the DTC.

The PTPs through the NTP have capacity to provide some resources to the laboratories and GPs. Microscopes and reagents can be provided to those laboratories that require them. Where these are provided there should be a stipulation that fees paid by the patient for such services should be significantly subsidised. Drugs are also available from the government for use by the GPs and should be provided by the district via the SFO, if available. Treatment should be free to patients.

The quality of the process will be assured by the DTC and Field officers; where a social franchiser is operating some supervision of quality of treatment will be devolved. Laboratories will also be given technical oversight by a laboratory supervisor when he/she conducts district visits. Any poor performance, in any area, in the early stages of partnership needs to be addressed through a mentoring programme initiated by the public sector.

2.3 Roles and Responsibilities

Please see table overleaf

Roles and Responsibilities

	Public Sector				Private Sector			
Tasks	**NTP or PTP**	**EDOH/ DTC/ Field Officer**	**LHW/ LHW super-visor**	**Public Labora-tory**	**GP**	**Local Labora-tory**	**NGO/SFO Community Worker/ Volunteer**	**SFO officers**
Identification of suspects and referral								
Identify TB Suspects								
Refer TB suspects					TO LAB		TO GP	
Collect sputum samples								
Diagnosis								
Do smear Microscopy								
Diagnose TB								
Register/Record cases								
Treatment								
Prescribe treatment								
Identify and supervise treatment supporters					Identify only			
Supervise treatment					In clinic			
Inform patients about TB								
Follow up on Defaulters		**At request of GP**						
Quality assurance								
Training care Providers								
Supervision								
QA for Laboratories	Through ref labs	QA for NGO labs						
Monitoring and Evaluation	Of PPP DOTS outcomes	Of SFO and/or GPs						Of GPs
Management								
Development of policies and guidelines								
Development of training material								
Drugs and supplies Management	To Districts	To GPs (through SFOs)						
Provide stewardship: financing and regulation								

2.4 Coordination Mechanism

The EDOH and DTC will initially approach potential SFO and GP partners with a view to establishing a partnership agreement. Interested solo GPs will be formed into clusters based on geography and will select a local laboratory to which they will send patients for smear microscopy; the laboratory will also be approached to confirm that it is willing to become part of the partnership. Where the laboratories are unwilling or are otherwise deemed unsuitable, the DTC will approach a CBO and discuss its willingness to establish a local NGO smear microscopy lab with public support. All parties will agree how the roles and responsibilities outlined below will be undertaken and what support will be provided by the PTP. They will jointly estimate the number of expected cases to be treated by the GPs in the area and hence the frequency of supervision required. When agreement has been reached an MoU will be established.

Where no SFO is working in the area the DTC should also identify a community based organisation that may be willing to provide DOT to patients in the area, ideally the same one that establishes the community laboratory. Solo GPs who are unattached to an SFO should be given the contact details for this organisation in order to arrange treatment supervision.

The cluster of GPs and the SFO will have a primary contact at the district, who will be either the DTC or the field officer; associated local laboratories will have the district field officer as the primary contact. The GPs and associated laboratories will keep patient records in accordance with NTP guidelines. The district field officer will collect reports concerning notification of all cases and outcomes from the laboratory and will ensure they are included in district statistics.

A senior district representative of the SFO (either the SFO director or the TB programme manager) will attend quarterly district meetings to feed back progress, discuss issues arising and to hear from other partners; interested solo GPs may also attend, if they so choose.

2.5 Training

A training needs assessment of the GPs and SFO will be undertaken by the DTC. A needs assessment of the local laboratory will be undertaken by a district laboratory supervisor. This will identify the key knowledge, skills and attitudes gaps from the GPs and the laboratories and will also assess the capacity of the SFO to manage the GPs.

Training should be modular and delivered to meet the GPs requirements. This may involve restructuring the training timetable to minimise disruption to the GP's clinics. GPs will be trained in identification of suspects, referral processes, treatment practices, the need for DOT and reporting procedures. Personnel from the local laboratory will be trained on smear microscopy and reporting. Personnel from the SFO will be trained in all areas. All training shall be followed with on-the-job supervision during the first few months of operation. Follow up training will take place on a needs basis.

2.6 Incentives/Enablers

It is anticipated that the primary motivation of GPs wishing to enter into partnership with the public sector is to provide appropriate care to their patients and to increase the size of their patient base. The key incentive for the GPs is that the PTP will provide them

with the technical skills to improve quality of care and that linkage with a national programme will enhance their reputation and provide them with greater legitimacy in their constituency. Financial incentives are not available from the NTP/PTP, but GP costs will be reduced through the provision of free drugs. It is hoped, however, that increasing GP's market share through these other benefits will provide sufficient financial incentive for their involvement, particularly since TB care is unlikely to consume a large proportion of their time.

The primary motivation of local for-profit laboratories is likely to be to improve their profile with local GPs to generate more business. Improving the quality of their services through training, as well as being nominated as the key service provider for smear microscopy services will facilitate this. Financial incentives are not available from the NTP/PTP, but laboratory costs will be reduced through the provision of free reagents and possibly a new microscope. It is hoped, however, that increasing the laboratory's access to a defined group of local GPs will provide sufficient financial incentive for their involvement.

The motivation for an NGO to establish a laboratory is likely to be a desire to serve their community as effectively as possible. The key incentive for them is that they will receive material and technical support from the PTP. Additionally they may benefit from have their reputation enhanced through integration with a national programme, which may attract more clients to them for other, non-TB services, for which they may charge fees to contribute to their funding base. Financial incentives are neither desirable nor available from the PTP/NTP.

The primary motivations of the SFO are likely to be a desire to serve their community and to have increased coverage of their franchising services to enhance their reputation and value for money with their donors. The key incentive for the SFO is that the PTP will help them meet this objective through technical support in a new area (TB), and may enable them to attract additional funding from different donors. Financial incentives are neither desirable nor available from the PTP/NTP.

The primary motivation of a CBO willing to provide DOT is likely to be a desire to better serve their community. Where they already have staff or volunteers working in the area, they may increase their presence through the provision of such additional services. They may also be able to attract funding from donors for support with mobility to provide these services; such funding is not currently available through the current PC-1.

2.7 Monitoring and Evaluation

The main methods for monitoring process and outcomes shall be the standard TB01 to 09 forms and supervision will follow NTP supervisory guidelines. Case detection and treatment success in the GP clinic and associated laboratory will be the main indicators. Default and transfer out rates will also be reviewed.

Secondary monitoring may also include use and storage of drugs, monitoring of laboratory and treatment process through observation and interview with GP and laboratory staff. The SFO may be trained to conduct some monitoring.

An evaluation of the PPP should be conducted by an external party after one year to ensure operational and strategic lessons are learnt and to improve practical aspects of

the partnership. This should include interviews with all parties, analysis of the documentation available and interviews or focus group discussions with patients and treatment supporters.

2.8 Challenges

The solo GPs are a disparate group and the motivations as well as practices are likely to vary from GP to GP. Careful selection and monitoring will be required to ensure that the need for GPs to make a profit does not override their willingness to provide free treatment. Patient sensitisation will also be required, hence the desirability of involving an NGO.

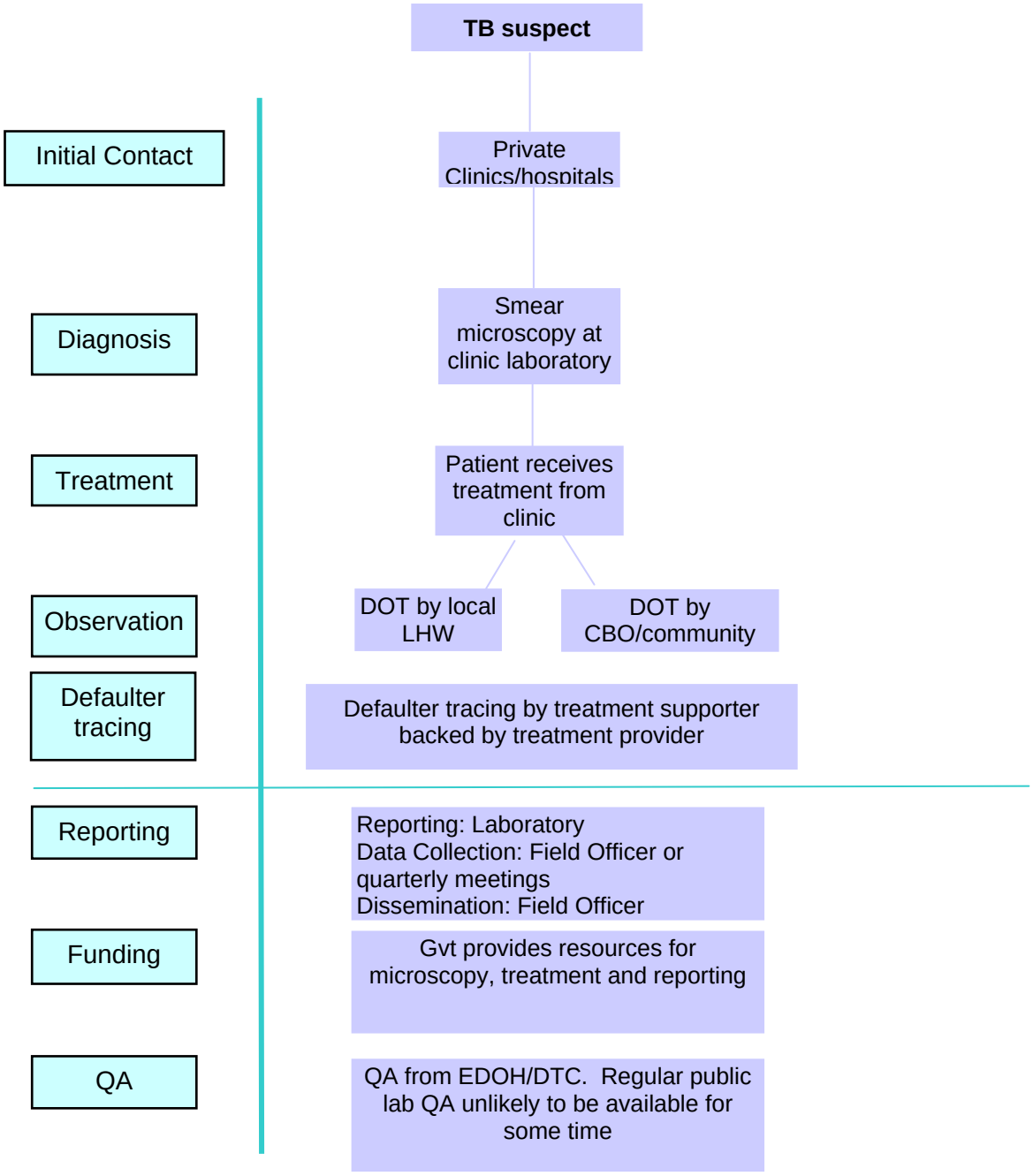
GPs may be unwilling to complete all forms, as this poses a significant administrative burden on them. This will pose a greater challenge for those practices seeing a large number of TB patients.

The model is relatively complex from a public sector perspective, if there is no SFO since it requires a four-way partnership; that is, between the public sector, a cluster of GPs, a local laboratory and a DOT NGO.

3 MODEL 3: PRIVATE CLINICS AND HOSPITALS – URBAN

3.1 Objectives of the Model

1) To increase case detection by enhancing the ability of private clinics to identify and diagnose pulmonary TB cases
2) To improve the quality of clinic laboratory services
3) To increase treatment success rate by improving the quality and affordability of TB care received by patients attending private clinics



3.2 Summary of the model

Private clinics or hospitals have their own laboratories (those without should be considered as a group of solo GPs and partnered as in model 2). The aim of this model is to ensure that TB suspects who attend a private clinic gain access to TB treatment through DOTS, if they are found to have pulmonary TB.

Smear microscopy conducted at the clinic will be free or subsidised. The clinician will explain the treatment process to the patient and he/she will start treatment. Treatment will be free of charge to the patient.

Treatment support will be conducted by an LHW, if there is one in the patient's community, or by a community based worker from an NGO working in the patient's area. Where none of these are possible, other DOT options need to be explored such as using school teachers, or a reliable household member if the patients so demands. Defaulting patients will be followed-up by their treatment supporter and, if that does not result in resumption of treatment, by an LHW supervisor or by clinic staff contacting the field officer and providing him/her with the patient's contact details and they will be followed up by either the field officer or other designated public sector worker.

Where LHWs, NGOs/CBOs or other institutions are involved, the clinic should contact the LHW supervisor or the NGO/institution manager (henceforth called the DOT liaison) and provide them with the patient's contact details. The DOT liaison will then assign one of their staff or volunteers to support the patient and will inform the clinic of the treatment supporter's name and contact details. The name of the treatment supervisor will also be noted on the patient's treatment card. Where a patient selects a family member as treatment supporter, that person's contact details will be noted by the clinic.

Sputum positive patients will be asked to return to the clinic for the 2, 5 and 7 month sputum conversion tests. The laboratory will record the results and the district field officer will take the results from the laboratories and will report to the EDOH to ensure that case detection and treatment are registered and included in district data.

Reporting will be completed on government forms (TB01 to TB09). The field officers will work with the clinics to ensure that the forms are completed correctly and that monitoring information is fed to the EDOH in a timely manner. In the short term this will be a mentoring arrangement. In the longer term verification of data quality with the laboratories will be the responsibility of the field officers while verification of the quality of other forms will lie with the DTC during regular monitoring visits.

The PTP through the NTP has capacity to provide some resources to the laboratories and clinics. Microscopes and reagents can be provided to those laboratories that require them. Where these are provided there should be a stipulation that fees paid by the patient for such services should be significantly subsidised. Drugs are also available from the government for use by the private clinics and should be provided by the district; treatment should be free.

The quality of the process will be assured by the DTC and Field officers. Laboratories will also be given technical oversight by a laboratory supervisor when he/she conducts district visits. Any poor performance, in any area, in the early stages of partnership needs to be addressed through a mentoring programme initiated by the public sector.

3.3 Roles and Responsibilities

Tasks	Public Sector			Private Sector	
	NTP or PTP	EDOH/DTC/ Field Officer	LHW/ LHW super-visor	Private Clinic	NGO Community Worker/ Volunteer
Identification of suspects and referral					
Identify TB Suspects					
Refer TB suspects					
Collect sputum samples					
Diagnosis					
Do smear Microscopy					
Diagnose TB					
Register/Record cases					
Treatment					
Prescribe treatment					
Identify and supervise treatment supporters					
Supervise treatment					
Inform patients about TB					
Follow up on Defaulters		At request of clinic			
Quality assurance					
Training care Providers					
Supervision					
Quality assurance for Laboratories	Through reference laboratories	QA for clinic labs			
Monitoring and Evaluation	Of PPP DOTS outcomes	Of Facilities			
Management					
Development of policies and guidelines					
Development of training material					
Drugs and supplies Management	To Districts	To Facilities			
Provide stewardship: financing and regulation					

3.4 Coordination Mechanism

The EDOH and DTC will initially approach potential private clinic partners with a view to establishing a partnership agreement. They will agree how the roles and responsibilities outlined above will be undertaken by the clinic and what support will be provided by the public sector. They will jointly estimate the number of expected cases to be treated by the clinic and hence the frequency of supervision required. When agreement has been reached an MoU will be established.

The DTC should also identify a community based organisation that may be willing to provide DOT to patients in the area. Clinics should be given the contact details for this organisation in order to arrange treatment supervision.

Both the clinic and the public TB programme shall have a primary contact person. From the district this should be either the DTC or the field officer.

The clinic will keep patient records in accordance with NTP guidelines. The district field officer will collect reports concerning notification of all cases and outcomes from the laboratory and will ensure they are included in district statistics.

A senior representative of the clinic (either the clinic director or the TB programme manager) will attend quarterly district meetings to feed back progress, discuss issues arising and to hear from other partners.

3.5 Training

A training needs assessment of the clinic will be undertaken by the DTC supported by a laboratory supervisor where necessary. This will identify which areas of DOTS the clinic will become involved with and where the knowledge, skills and attitudes gaps are.

Training should be modular and delivered to meet the clinics requirements. This may involve restructuring the training timetable to minimise disruption to the clinic's operations. Personnel from different levels in the clinic will be trained in different modules, however the clinic TB manager should be exposed to all modules to ensure a thorough understanding of the operations. All training shall be followed with on-the-job supervision during the first few months of operation. The associated CBO will be trained in DOT and defaulter tracing. Follow up training will take place on a needs basis.

3.6 Incentives/Enablers

It is anticipated that the primary motivation of clinics wishing to enter into partnership with the public sector is to provide appropriate care to their patients and to increase the size of their patient base. The key incentive for the clinics is that the PTP will provide them with the technical skills to improved quality of care and that linkage with a national programme will enhance their reputation and provide them with greater legitimacy in their constituency. Financial incentives are not available from the PTP/NTP, but clinic costs will be reduced through the provision of free drugs, reagents and microscopes where necessary. It is hoped, that increasing the clinic's market share through these other benefits will provide sufficient financial incentive for their involvement, particularly since TB care is unlikely to consume a large proportion of their time.

The primary motivation of a CBO willing to provide DOT is likely to be a desire to better serve their community. Where they already have staff or volunteers working in the area, they may increase their presence through the provision of such additional services.

They may also be able to attract funding from donors for support with mobility to provide these services; such funding is not currently available through the current PC-1.

3.7 Monitoring and Evaluation

Primary monitoring shall use the standard TB01 to 09 forms. Case detection and treatment success in the clinic will be the main indicators. Default and transfer out rates will also be reviewed.

Secondary monitoring may also include use and storage of drugs, monitoring of laboratory and treatment process through observation and interview with NGO staff.

An evaluation of the PPP should be conducted by an external party after one year to ensure operational and strategic lessons are learnt and to improve practical aspects of the partnership. This should include interviews with all parties, analysis of the documentation available and interviews or focus group discussions with patients and treatment supporters.

3.8 Challenges

Clinics vary in motivations and practices. Careful selection and monitoring will be required to ensure that the need for clinics to make a profit does not override their willingness to provide free treatment. Patient sensitisation will also be required, hence the desirability of involving a CBO.

Private clinics practices are less likely to reach large numbers of the poor, since they are associated with higher fees than GPs, NGOs or unqualified providers.

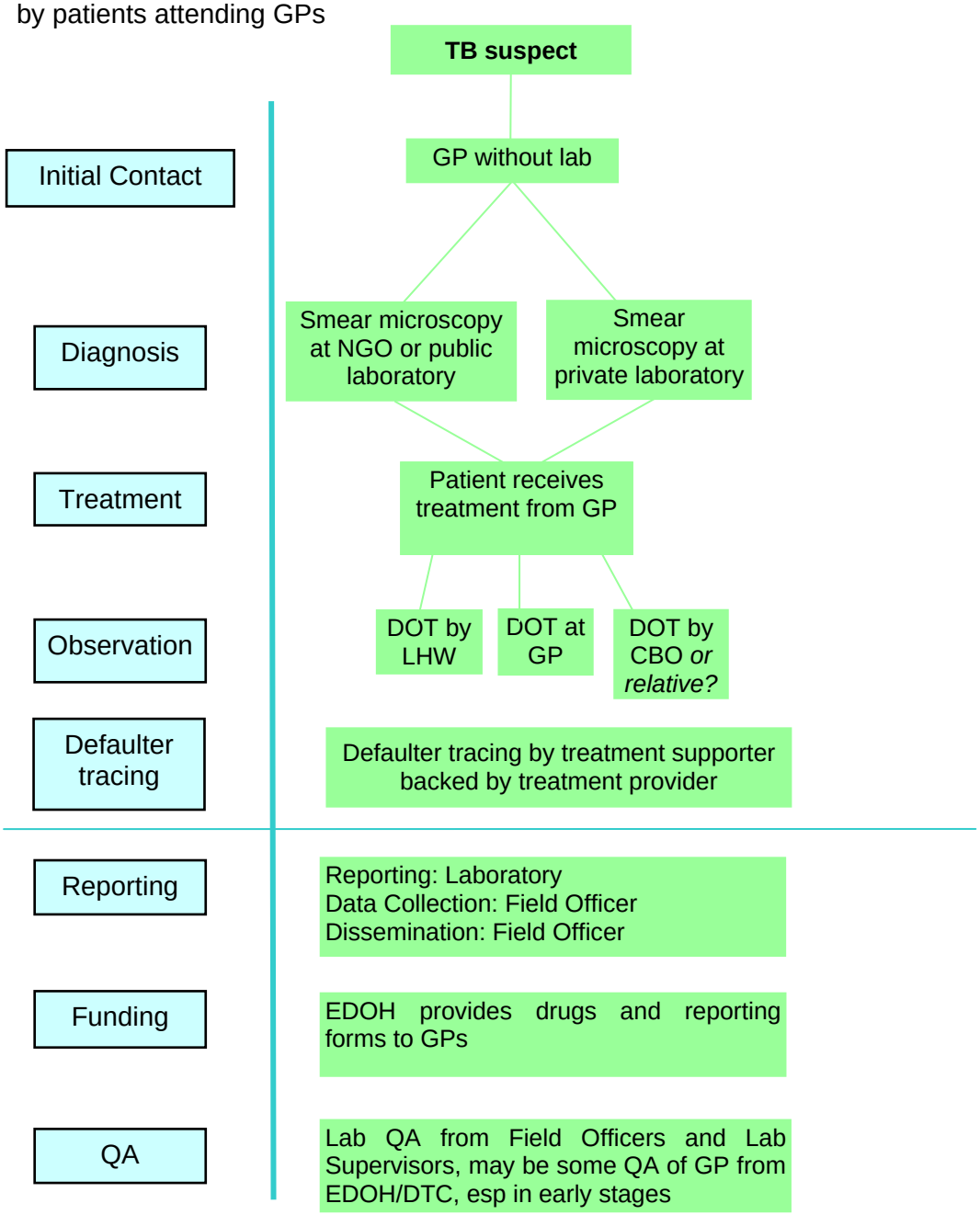
Many clinics will be owned and managed by specialists with post graduate qualifications. They may be reluctant to change their diagnostic and treatment practices, in particular providing standardised treatment regimens.

4 MODEL 4: GPS – RURAL

Note: If a social marketing/ franchising NGO exists in the rural area, please refer to urban model for detail

4.1 Objectives of the Model

1) To increase access to DOTS for TB suspects by involving GPs in the DOTS programme
2) To increase case detection by providing solo rural GPs with opportunities for accessing sputum smear microscopy services
3) To increase treatment success rate by improving the quality of TB care received by patients attending GPs



4.2 Summary of the model

Solo GPs are often the first choice of provider for patients who can afford them. Their income is earned through patient fees. Typically they do not have their own laboratories and diagnosis is made on the basis of clinical judgement. GPs tend not to be regulated and they are not always able to keep up to date with the more recent medical advances and internationally recognised best practice – this is particularly a problem for rural GPs who have fewer peers around them working in medicine. Those that work in the public sector by day and have evening private practices do not always follow standard public procedures, as they have to meet the expectations of their patients, which are not always in accordance with best practice. They are more concerned with the health of individual patients than with public health issues.

One aim of this model is to enable solo rural GPs to provide better diagnosis by linking them with NGO/CBO clinics' or private laboratories. Another is to encourage them to provide appropriate treatment through training.

A GP will refer a TB suspect to a laboratory at an NGO or public clinic or to a private laboratory, which will perform smear microscopy. If there is no laboratory with capacity to do microscopy the NTP may facilitate one associated with the clinic to provide it. Diagnosis will be provided free of charge or will be subsidised. The patient will return, with the smear microscopy result, to the GP, who will register the patient and explain the treatment process to the patient; he/she will start treatment. If the patient chooses to stay at the diagnosing clinic a back-referral form will be sent to the GP to inform them of the patient's choice; the patient will be encouraged to return to the GP for all non-TB illnesses. Medication will be free of charge to the patient.

Treatment support will be conducted by an LHW, if there is one in the patient's community or by a community based worker from a CBO. Where neither of these are possible, other DOT options need to be explored such as using school teachers, or a reliable household member if the patients so demands. Defaulting patients will be followed-up by their treatment supporter and, if that does not result in resumption of treatment, by an LHW supervisor or by staff of the CBO. In the absence of these the GP will contact the field officer and provide them with the patient's contact details and they will be followed up by either the field officer or other designated public sector worker.

Where LHWs, CBOs or other institutions are involved, the GP should contact the LHW supervisor or the CBO/institution manager (henceforth called the DOT liaison) and provide them with the patient's contact details. The DOT liaison will then assign one of their staff or volunteers to support the patient and will inform the GP of the treatment supporter's name and contact details. The name of the treatment supervisor will also be noted on the patient's treatment card. Where a patient selects a family member as treatment supporter, that person's contact details will be noted by the clinic.

Sputum positive patients will be asked to return to the laboratory for the 2, 5 and 7 month sputum conversion tests. The laboratory will send the patient with the results to the GP, who will record them. The district field officer will take the results from the GPs and will report to the EDOH to ensure that case detection and treatment are registered and included in district data.

Reporting will be completed on government forms (T01 to T09). The field officers will work with the laboratories and the GPs to ensure that the forms are completed correctly and that monitoring information is fed to the EDOH in a timely manner. In the short term

this will be a mentoring arrangement. In the longer term verification of data quality with the laboratories will be the responsibility of the field officers while verification of the quality of other forms will lie with the DTC during regular monitoring visits.

The PTPs through the NTP have capacity to provide some resources to the laboratories and GPs. Microscopes and reagents can be provided to those laboratories that require them. Drugs are also available from the government for use by the GPs and should be provided by the district. Treatment should be free to patients.

The quality of the process will be assured by the DTC and Field officers. Laboratories will be given technical oversight by a district laboratory supervisor when he/she conducts district visits. Any poor performance, in any area, in the early stages of partnership needs to be addressed through a mentoring programme initiated by the public sector.

4.3 Roles and Responsibilities

Please see table overleaf

4.4 Coordination Mechanism

The EDOH and DTC will initially approach potential GP partners and NGO laboratories in the vicinity with a view to establishing a partnership agreement. They will agree how the roles and responsibilities outlined above will be undertaken by the GP and laboratories and what support will be provided by the PTP. They will jointly estimate the number of expected cases to be treated by the GPs and hence the frequency of supervision required. When agreement has been reached an MoU will be established.

The DTC should also identify a community based organisation that may be willing to provide DOT to patients in the area. Rural GPs should be given the contact details for this organisation in order to arrange treatment supervision.

GPs will have a primary contact at the district, who will be either the DTC or the field officer; associated NGO laboratories will have the district field officer as the primary contact. The GPs and associated laboratories will keep patient records in accordance with NTP guidelines. The district field officer will collect reports concerning notification of all cases and outcomes from the NGO laboratory to which patients are referred and will ensure they are included in district statistics. If the clinic to which the NGO is attached is part of a PPP in its own right, then data may be taken to the district quarterly meetings by the clinic manager.

The GP, if he/she is able, will attend quarterly district meetings to feed back progress, discuss issues arising and to hear from other partners.

Roles and Responsibilities

	Public Sector				Private Sector		
Tasks	**NTP or PTP**	**EDOH/ DTC/ Field Officer**	**LHW/ LHW super-visor**	**Public Labora-tory**	**GP**	**NGO or private Labora-tory**	**NGO Community Worker/ Volunteer**
Identification of suspects and referral							
Identify TB Suspects							
Refer TB suspects			**To GP**		**To Lab**		**To GP**
Collect sputum samples							
Diagnosis							
Do smear Microscopy							
Diagnose TB							
Register/Record cases							
Treatment							
Prescribe treatment							
Identify and supervise treatment supporters					**Identify only**		
Supervise treatment							
Inform patients about TB							
Follow up on Defaulters		**At request of GP**					
Quality assurance							
Training care Providers							
Supervision							
QA for Laboratories	**Through ref labs**	**QA for NGO labs**					
Monitoring and Evaluation	**Of PPP DOTS outcomes**	**Of GPs**					
Management							
Development of policies and guidelines							
Development of training material							
Drugs and supplies Management	**To Districts**	**To GPs**					
Provide stewardship: financing and regulation							

4.5 Training

A training needs assessment of the GPs will be undertaken by the DTC. A needs assessment of the associated NGO laboratory will be undertaken by a district laboratory supervisor. This will identify the key knowledge, skills and attitudes gaps from the GPs and the Laboratories.

Training should be modular and delivered to meet the GPs requirements. This may involve restructuring the training timetable to minimise disruption to the GP's clinics. GPs will be trained in identification of symptomatics, referral processes, treatment practices, the need for DOT and reporting procedures. Personnel from the Lab will be trained on smear microscopy and reporting. All training shall be followed with on-the-job supervision during the first few months of operation. Follow up training will take place on a needs basis.

4.6 Incentives/Enablers

It is anticipated that the primary motivation of GPs wishing to enter into partnership with the public sector is to provide appropriate care to their patients and to increase the size of their patient base. The key incentive for the GPs is that the PTP will provide them with the technical skills to improved quality of care and that linkage with a national programme will enhance their reputation and provide them with greater legitimacy in their constituency. Financial incentives are not available from the PTP/NTP, but GP costs will be reduced through the provision of free drugs. It is hoped, however, that increasing GP's market share through these other benefits will provide sufficient financial incentive for their involvement, particularly since TB care is unlikely to consume a large proportion of their time.

The primary motivation of the NGO clinic laboratory is likely to be a desire to serve their community as effectively as possible. The key incentive for them is that they will receive material and technical support from the PTP and so be able to provide more effective services. Additionally they may benefit from have their reputation enhanced through integration with a national programme, which may attract more clients to them for other, non-TB services, for which they may charge fees to contribute to their funding base. Financial incentives are neither desirable nor available from the PTP/NTP.

The primary motivation of a CBO willing to provide DOT is likely to be a desire to better serve their community. Where they already have staff or volunteers working in the area, they may increase their presence through the provision of such additional services. They may also be able to attract funding from donors for support with mobility to provide these services; such funding is not currently available through the current PC-1.

4.7 Monitoring and Evaluation

The main methods for monitoring process and outcomes shall be the standard TB01 to 09 forms. Case detection and treatment success in the GP clinic and associated laboratory will be the main indicators. Default and transfer out rates will also be reviewed.

Secondary monitoring may also include use and storage of drugs, monitoring of laboratory and treatment process through observation and interview with GP and laboratory staff.

An evaluation of the PPP should be conducted by an external party after one year to ensure operational and strategic lessons are learnt and to improve practical aspects of the partnership. This should include interviews with all parties, analysis of the documentation available and interviews or focus group discussions with patients and treatment supporters.

4.8 Challenges

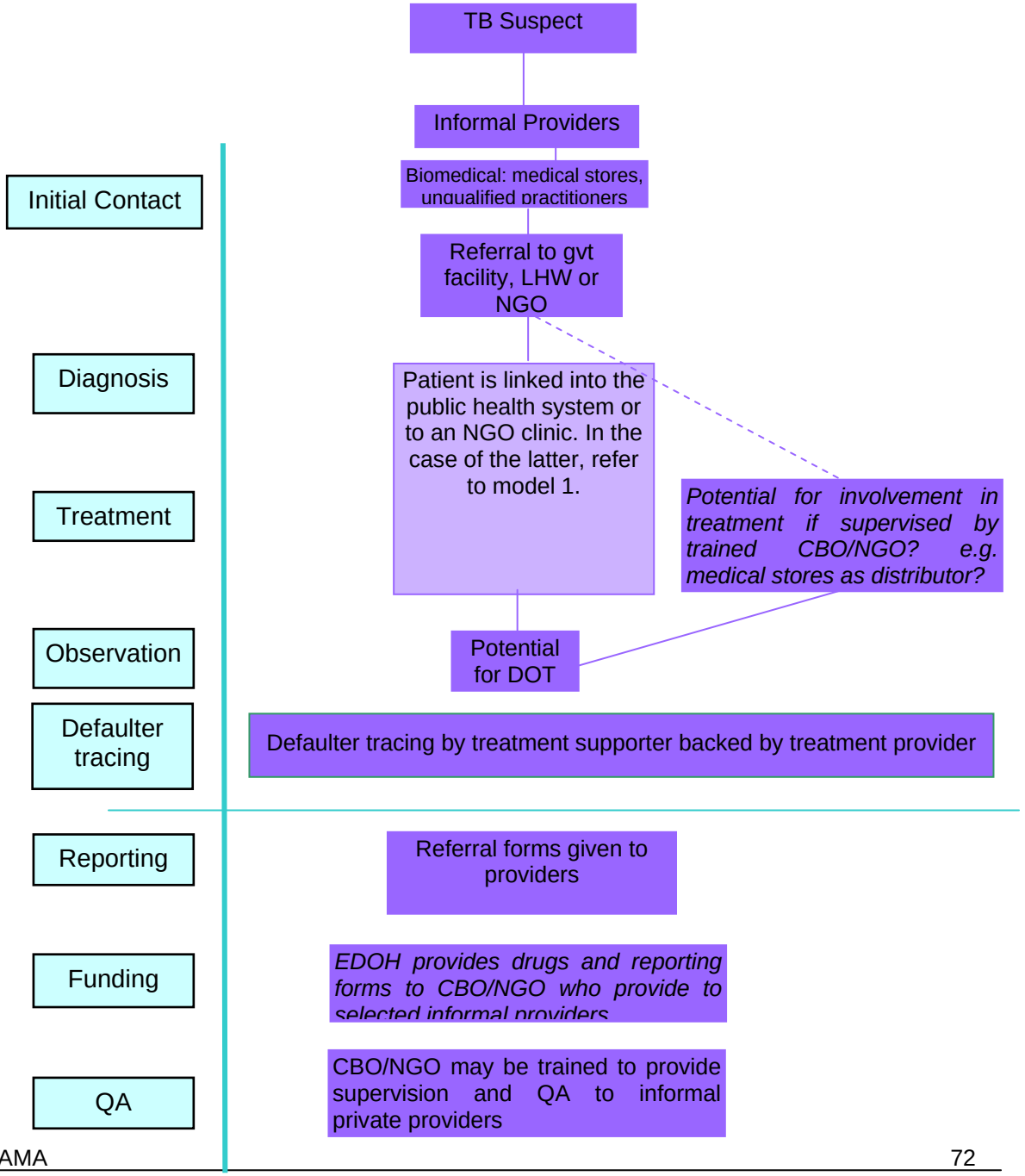
The solo GPs are a disparate group and the motivations as well as practices are likely to vary from GP to GP. Careful selection and monitoring will be required to ensure that the need for GPs to make a profit does not override their willingness to provide free treatment. Patient sensitisation will also be required, hence the desirability of involving an NGO.

GPs may be unwilling to send their patients to laboratories which are attached to clinics, as they may be concerned that they will lose their patient to the clinic.

5 MODEL 5: INFORMAL PROVIDERS – BIOMEDICAL UNQUALIFIED PRACTIONERS (URBAN AND RURAL)

5.1 Objectives of the Model

1) To increase access to DOTS for TB suspects by involving informal providers in the DOTS programme
2) To increase case detection by providing informal providers with opportunities for referring patients to public or NGO clinics
3) To increase the treatment success rate by ensuring that patients who attend informal providers get treated appropriately within the DOTS guidelines



5.2 Summary of the model

Informal biomedical providers are those that believe in the effectiveness of biomedicine and practice it but without having had sufficient, if any, formal medical training. They are the first choice of provider for at least 50% of the rural population and an unknown percentage of the urban population; the rural estimate may be conservative, as there is currently no research that has reviewed rural and urban patients' pathways to TB care in Pakistan. Their income is earned through patient fees. They do not have access to laboratories and are unlikely to ask their patients to visit an independent laboratory hence their diagnoses are made on the basis of their clinical judgement.

Informal biomedical providers are unregulated and do not have access to information or training regarding best practice. Additionally they have to meet the expectations of their patients and so may not provide treatment on the sole basis of any knowledge that they do have. They are more concerned with the health of individual patients than with public health issues.

One aim of this model is to enable informal biomedical providers to provide better diagnosis and treatment for their patients by providing them with a mechanism for referring patients to NGO/CBO or public clinics. They will have less reluctance in doing this than sending patients to a private GP as a) they will not feel that someone else is earning 'their' fee and b) they are unlikely to permanently lose the patient to another local provider, since the reasons the patient did not go to the public or NGO clinic in the first place (e.g. distance, cost of transport, perceived quality, acceptability, accessibility) will remain valid.

An informal provider will refer a TB suspect to an LHW, a government treatment or diagnostic centre, or an NGO clinic. This facility will either follow the public model, or PPM Model 1, outlined above for diagnosis and treatment. Treatment will be prescribed by a formal provider at the clinic, who will explain the treatment process to the patient, but may be distributed through the informal provider.

Treatment support will be conducted by an LHW, if there is one in the patient's community, by a community based worker from a CBO, or by the informal provider, if he/she is the treatment distributor. In the last case, supervision of the provider will be provided by an LHW supervisor operating near that area or by a trained NGO/CBO. Where none of these are feasible, other DOT options need to be explored such as using school teachers, or a reliable household member if the patients so demands. Defaulting patients will be followed-up by their treatment supporter and, if that does not result in resumption of treatment, by an LHW supervisor or by staff of the CBO. Treatment should be provided free to patients; if the informal provider insists on a fee, arrangements may be made with the public facilities to have this paid through *zakat.*

Sputum positive patients will asked to return to the laboratory for the 2, 5 and 7 month sputum conversion tests as in model 1. Reporting will also be conducted as per model 1, however where the informal provider is the treatment distributor, the patient's treatment card (TB02) will be verified against TB01, held by the informal provider, which will be verified against the drug stock provided.

The quality of the process will be assured by the DTC and Field officers. Any poor performance, in any area, in the early stages of partnership needs to be addressed through a mentoring programme initiated by the public sector.

5.3 Roles and Responsibilities

	Public Sector				Private Sector		
Tasks	**NTP or PTP**	**EDOH/ DTC/ Field Officer**	**LHW/ LHW super-visor**	**Public Clinic**	**Informal provider**	**NGO Clinic (Model 1)**	**NGO Community Worker/ Volunteer**
Identification of suspects and referral							
Identify TB Suspects							
Refer TB suspects							
Collect sputum samples							
Diagnosis							
Do smear Microscopy							
Diagnose TB							
Register/Record cases							
Treatment							
Prescribe treatment							
Identify and supervise treatment supporters							
Supervise treatment					**Possibly**		
Inform patients about TB							
Follow up on Defaulters				**At request of provider or clinic**			
Quality assurance							
Training care Providers							
Supervision							
QA for Laboratories	**Through ref labs**	**QA for NGO/ public labs**					
Monitoring and Evaluation	**Of PPP DOTS outcomes**	**Of Informal Providers**					
Management							
Development of policies and guidelines							
Development of training material							
Drugs and supplies Management	**To Districts**	**To distributors**					
Provide stewardship: financing and regulation							

5.4 Coordination Mechanism

The EDOH and DTC will initially approach potential informal partners; these may have been identified by LHWs or by NGO community staff. They will explain the DOTS strategy and the importance of correct diagnosis and treatment. They will agree how the roles and responsibilities outlined above will be undertaken by the informal provider and what support will be provided by the PTP. When agreement has been reached an MoU will be established.

The DTC should also identify a community based organisation who may be willing to provide DOT to patients in the area, or who may be willing to supervise the private providers in their distribution of treatment and role as treatment supporter.

Informal providers will have a primary contact at the district, who will be either the DTC or the field officer and at the clinics to which they refer patients. Records will be kept by the diagnostic and treatment centres, as in Model 1, however, and an additional treatment record may stay with the informal provider, signed or marked by the patient, to use as verification against drug stocks held.

If the process is being overseen by an NGO/CBO, a representative may attend district meetings.

5.5 Training

A training needs assessment of the informal providers will be undertaken by the DTC, to identify the key knowledge, skills and attitudes gaps from the informal providers.

Training should be modular and delivered to meet the provider's requirements. This may involve restructuring the training timetable to minimise disruption to his/her clinics. Informal providers will be trained in identification of suspects, referral processes, treatment practices, the need for DOT and reporting procedures. All training shall be followed with on-the-job supervision during the first few months of operation. Follow up training will take place on a needs basis.

5.6 Incentives/Enablers

It is anticipated that the primary motivation of informal providers wishing to enter into partnership with the public sector is to provide appropriate care to their patients and to increase the size of their patient base. The key incentive for the informal providers is that the public sector will provide them with the technical skills and referral mechanisms to improve the quality of their patients' care. Furthermore, linkages with a national programme will enhance their reputation and provide them with greater legitimacy in their constituency. Financial incentives are not available from the PTP/NTP, but provider costs will be reduced through the provision of free drugs. It is hoped, however, that increasing the provider's market share through these other benefits will provide sufficient financial incentive for their involvement, particularly since TB care is unlikely to consume a large proportion of their time.

The primary motivation of a CBO willing to provide DOT and/or supervision is likely to be a desire to better serve their community. Where they already have staff or volunteers working in the area, they may increase their presence through the provision of such additional services. They may also be able to attract funding from donors for support with mobility to provide these services; such funding is not currently available through the current PC-1.

5.7 Monitoring and Evaluation

The main methods for monitoring process and outcomes shall be the standard TB01 to 09 forms. Case detection and treatment success in the clinics and associated laboratory will be the main indicators. The referral mechanism will be designed to measure the number, and therefore proportion, of cases referred by informal providers.

Secondary monitoring will also include use and storage of drugs, particularly where these are being distributed through the informal providers.

An evaluation of the PPP should be conducted by an external party after one year to ensure operational and strategic lessons are learnt and to improve practical aspects of the partnership. This should include interviews with all parties, analysis of the documentation available and interviews or focus group discussions with patients and treatment supporters.

5.8 Challenges

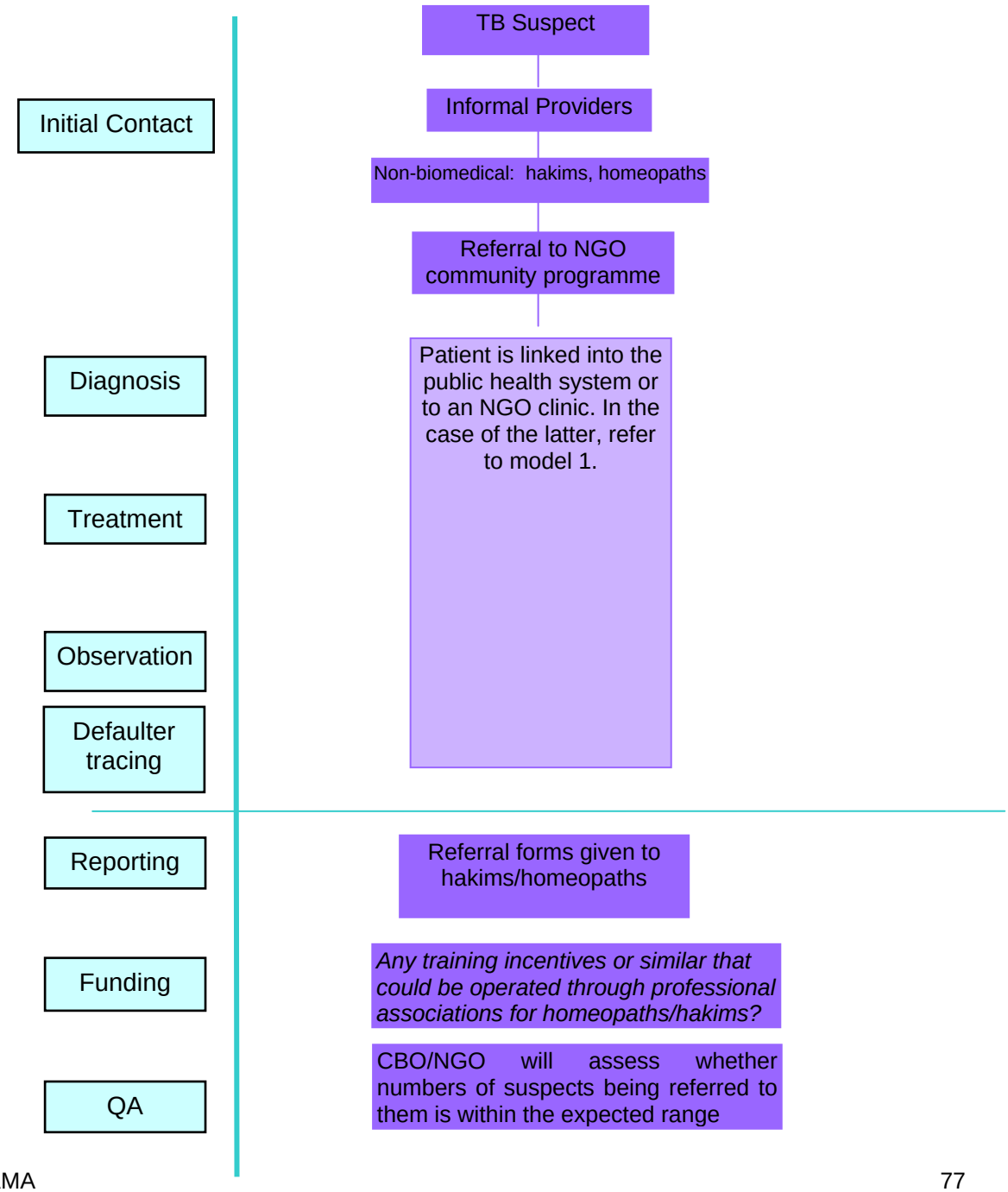
The informal providers are a disparate group and the motivations as well as practices are likely to vary from provider to provider. Careful selection and monitoring will be required to ensure that the need for providers to make a profit does not override their willingness to provide free treatment. Patient sensitisation will also be required, hence the desirability of involving an NGO or CBO.

Qualified providers may have concerns over the involvement of unqualified practitioners, as they may feel that the latter are being given too much legitimacy through involvement with a national programme. Where GP providers under Models 2 and 4 are engaged in PPP with the PTP, a carefully differentiated ‘marketing’ or patient information strategy will have to be designed, to ensure that patients are not further misled regarding the qualifications and skills of their provider.

6 MODEL 6: INFORMAL PROVIDERS – NON-BIOMEDICAL (URBAN AND RURAL)

6.1 Objectives of the Model

1) To increase access to DOTS for TB suspects by involving Informal providers, who do not practice biomedicine, in the DOTS programme
2) To increase case detection by providing hakims and homeopaths with opportunities for referring patients to smear microscopy services via a community based NGO



6.2 Summary of the model

Informal non-biomedical providers are those that do not believe in the effectiveness of biomedicine; they are therefore inherently different from the other PPPs outlined in Models 1-5. They are the first choice of provider for many patients (although proportions are unknown), who choose them for reasons associated with their own beliefs in healing processes, among others. Their income is earned through patient fees and their diagnostic and treatment practices are unrelated to biomedical practices.

Informal non-biomedical providers are unregulated, but some belong to professional associations. They are more concerned with the health of individual patients than with public health issues.

The aim of this model is to enable informal, non-biomedical providers to recognise TB symptoms and acknowledge them as something that cannot be effectively treated within their field and to encourage them to put patients in contact with an NGO that will, in turn, direct the patient to a formal public or NGO provider. The NGO performs the role of a go-between the provider and the formal sector since the hakim or homeopath is unlikely to be willing to directly refer patients to a biomedical provider. If the hakim or homeopath is willing to refer the patient directly to the formal public sector, this should be encouraged, in which case Model 5 may be followed.

Once this referral has taken place, diagnosis, treatment and treatment support will be conducted through the public sector or by an NGO clinic, as in Model 1.

The quality of the process will be assured by the DTC and Field officers. Any poor performance, in any area, in the early stages of partnership needs to be addressed through a mentoring programme initiated by the public sector.

6.3 Roles and Responsibilities

Please see table overleaf

6.4 Coordination Mechanism

The EDOH and DTC will initially approach potential informal partners; these may have been identified by LHWs or by NGO community staff. They will explain the DOTS strategy, the importance of correct diagnosis and treatment and why biomedicine is required to treat it: this will require some understanding of the informal provider's belief system if it is to be sensitively done – EDOH or DTC will require further training in this regard. The DTC should also identify an NGO or CBO that is willing to act as the intermediary between the provider and the formal health system.

They will agree how the roles and responsibilities outlined above will be undertaken by the informal provider and what support will be provided by the public sector. When agreement has been reached an MoU will be established.

Informal providers will have a primary contact at the district, who will be either the DTC or the field officer and at the NGO to which they refer patients.

All coordination of clinic activities will be as for Model 1. If the process is being overseen by an NGO/CBO, a representative may attend district meetings.

6.5 Roles and Responsibilities

	Public Sector				Private Sector		
Tasks	**NTP or PTP**	**EDOH/ DTC/ Field Officer**	**LHW/ LHW supervisor**	**Public Clinic**	**Hakim or homeo-path**	**NGO Clinic (Model 1)**	**NGO/ CBO Liaison**
Identification of suspects and referral							
Identify TB Suspects							
Refer TB suspects					**To NGO/CBO**		**To clinic**
Collect sputum samples							
Diagnosis							
Do smear Microscopy							
Diagnose TB							
Register/Record cases							
Treatment							
Prescribe treatment							
Identify and supervise treatment supporters							
Supervise treatment							**May perform**
Inform patients about TB							**May perform**
Follow up on Defaulters							**May perform**
Quality assurance							
Training care Providers							
Supervision							
QA for Laboratories	**Through ref labs**	**QA for NGO/ public labs**					
Monitoring and Evaluation	**Of PPP DOTS outcomes**	**Of Informal Providers and NGO/CBO**					
Management							
Development of policies and guidelines							
Development of training material							
Drugs and supplies Management	**To Districts**	**As Model 1**					
Provide stewardship: financing and regulation							

6.6 Training

A training needs assessment of the informal providers will be undertaken by the DTC, to identify the key knowledge, skills and attitudes gaps from the informal providers.

Training should be modular and delivered to meet the provider's requirements. This may involve restructuring the training timetable to minimise disruption to his/her clinics. Informal providers will be trained in identification of suspects and referral processes, for practical action; and be given an overview of diagnostic treatment practices, the need for DOT and reporting procedures for information to enable the understand the need for referral. All training shall be followed with on-the-job supervision during the first few months of operation. Follow up training will take place on a needs basis.

6.7 Incentives/Enablers

It is anticipated that the primary motivation of informal providers wishing to enter into partnership with the public sector is to achieve more treatment success among patients with TB, hence improving their reputation for appropriate care. The key incentive for the informal providers is that the public sector will provide them with the referral mechanisms to improve the quality of their patients' care, without insisting that they have direct links with formal providers.

Financial incentives are not available from the PTP/NTP. It is hoped, however, that improving the provider's reputation will provide sufficient financial incentive for their involvement, particularly since TB care is unlikely to consume a large proportion of their time or patient base.

The primary motivation of a CBO willing to act as a liaison between the informal and formal sector is likely to be a desire to better serve their community. Where they already have staff or volunteers working in the area, they may increase their presence through the provision of such additional services. They may also be able to attract funding from donors for support with mobility to provide these services; such funding is not currently available through the current PC-1.

6.8 Monitoring and Evaluation

Methods for monitoring process and outcomes shall be as in Model 1. The referral mechanism will be designed to measure the number, and therefore proportion, of cases referred by informal providers.

An evaluation of the PPP should be conducted by an external party after one year to ensure operational and strategic lessons are learnt and to improve practical aspects of the partnership. This should include interviews with all parties, analysis of the documentation available and interviews or focus group discussions with patients and treatment supporters.

6.9 Challenges

The informal providers are a disparate group and their motivations as well as practices are likely to vary from provider to provider. The key challenge is that, by definition, they do not believe that biomedicine is more effective than their own treatment practices. This model has been outlined to provide a concept for their involvement, but without a detailed understanding of their belief systems, motivations and concerns. More research - including discussions with the Marie Adelaide Leprosy Centre (MALC) in Sindh

Province, who have worked with them - is required before decisions regarding the appropriateness of such a model could be taken and before operational guidelines can be designed.

Careful selection and monitoring will be required to ensure that the providers are able to make an effective and cost-effective contribution. Patient sensitisation will also be required, hence the desirability of involving an NGO or CBO.

Qualified providers may have concerns over the involvement of unqualified practitioners, as they may feel that the latter are being given too much legitimacy through involvement with a national programme. Where GP providers under Models 2 and 4 are engaged in PPP with the PTP, a carefully differentiated 'marketing' or patient information strategy will have to be designed, to ensure that patients are not further misled regarding the qualifications and skills of their provider.

SECTION 11: OPERATIONAL GUIDELINES FOR PPP DOTS IMPLEMENTATION

The following provides the guidelines that are required for the PPM DOTS models. They highlight the activities that implementers must take and are therefore primarily, though not exclusively, focused on district level activities. Where PPPs are established at Provincial, as well as district level, for example with some of the larger NGOs, then action should be taken by the PTP rather than the district. The first paragraphs of each section give a generic description of activities that are required for all situations; model-specific activities are noted below these. The key steps involved are:

1) Preparation at National, Provincial and District Levels
2) Agreement to engage in PPP DOTS at District Level
3) Create PPP Coordination Committees
4) Identify and Select Private Providers
5) Approach Private Providers
6) Develop Memoranda of Understanding
7) Training Private Partners
8) Certification
9) Providing Resources to Private partners
10) Reporting
11) Supervision of Private Partners
12) Communication with Public

1 PREPARATION: NATIONAL, PROVINCIAL, DISTRICT

PPPs can only be successful when the public sector is providing TB services of a good quality. This is necessary to ensure firstly that private sector providers can be confident in referring cases to and receiving them from public providers; and secondly that any training provided by the public sector is credible. In Pakistan the NTP has ensured that DOTS is being provided through the public sector in all districts and has had independent reviews that verify that the quality of service provision is not only adequate but that it is continually improving.

There must also be a clear and public commitment toward the implementation of PPPs at national level. The Pakistan government has made its commitment clear through the inclusion of a budget for PPP in the PC-1; there is a need now to make it public. Firstly the Secretary for Health will need to approve the concepts and the models. Next, there should be written communication to all PTP managers and to Provincial PPM managers stating the NTPs reasons for undertaking a PPP strategy and outlining the support available for its implementation. The PTP managers in turn should write to the EDOHs and DTCs in their districts. There could also be a national launch announcing the NTP's desire and preparedness to work with private providers.

Workshops describing the need for a PPP policy and programme, explaining the models and allowing concerns to be discussed should be held firstly with national level staff, PTP managers and provincial TB coordinators. PTP managers should then hold similar workshops in their provinces with EDOHs and DTCs and field officers. The DTCs in turn should hold workshops with facility level staff. Some districts already have ad hoc PPPs in place; these will still require some sensitization to the broader concept since the types of the providers that they engage with may change over time.

Some training in how to manage PPPs, in addition to the general orientation, might also be required at district and provincial level. Senior NTP staff have recently attended a management training course that they would like to adapt for use with district managers; this adaptation could include a module on PPP management that focuses on the management issues inherent in the guidelines below. District managers could be trained in this module when they have taken the decision to implement PPPs in their district.

The PPP models and their operational and monitoring guidelines should be made available to PTP managers. Draft training and communication materials should be sent to the provinces and pro forma MoUs should be developed. The provinces and districts will need to adapt these to their specific circumstances, but the templates will provide them with a starting point, as well as promoting some consistency between districts. Supervision and monitoring tools should be also available, such as additional TB01 to TB09 forms and referral forms.

PTPs should be given budgets to purchase additional supplies of drugs, reagents and microscopes in preparation for distributing them to new partners.

2 AGREEMENT TO ENGAGE IN PPP DOTS AT DISTRICT LEVEL

Pakistan has very decentralised political and administrative systems. It is not, therefore, only the TB or health personnel who must agree to develop partnerships with the private sector, but also the district politicians (*nazim*s and counsellors) and administrative mangers (district coordination officers (DCOs). The EDOH will need to be the advocate for PPP DOTS at this level. It may also be that the NGOs and medical practitioners organisations, such as branches of the PMA, will have influence at this level and be able themselves to advocate for PPPs.

The district TB coordinator can support this process through information sharing at intra-district meetings, which are attended by the EDOH, by highlighting the achievements of existing private partners. He/she can be further strengthened by the PTP manager who can highlight the achievements of districts that have operational PPPs, at inter-district meetings. The PTP manager or deputy manager could also visit those districts whose EDOH's or *nazim*s are less favourably disposed to the concept, to have a more in depth discussion with them regarding their concerns. For example, explaining that PPPs can reduce diagnostic delay, since they are often a patient's first choice of provider; and that they can help to reduce the cost of care, such as transport costs for patients, since they are located closer to communities. Advocacy NGOs can also play a role here by raising the profile of TB and making it a topical, and therefore politically important, issue among communities.

PPPs should not initially be pushed in districts where there is no political commitment. In time it is hoped that the success of PPPs in other districts will provide sufficient motivation for the more reluctant districts to develop partnerships.

3 CREATE PPP COORDINATION COMMITTEES

PPP coordination committees, or 'partnership committees' should be formed at national, provincial and district levels, which private partners will join when their partnership

agreement is operational. At national and provisional levels these should be constituted as described above. At district level these should comprise the *nazim*, district counsellors, the EDOH, the DTC, the field officer any public-public mix partners (e.g. parastatals, the army, corporates) and private sector partners including social welfare organisations. As more partners begin implementing they will be invited to join the coordination committee.

At district level the discussions are likely to focus on operational issues concerning the partners, while at national level the focus will be on strategy and resources.

4 IDENTIFY AND SELECT PRIVATE PROVIDERS

The districts first need to identify patient provider preferences, categorised into NGO clinics, for-profit clinics, for-profit GPs, for-profit laboratories, other NGO/CBO/SFOs and informal providers. This can be done through patient or household surveys or through speaking to groups of private practitioners about their client base. Selection of private providers for PPP will be informed by this.

For the first PPP the DTC will decide which type of provider would be most suitable to go into partnership with. The initial selection of providers should be based on the following:

- Those working with populations that currently do not access public services, such as the poor
- Those with prior experience in delivering similar services (e.g. health care delivery, provision of TB services, community mobilisation, social franchising);
- Those that the district feels confident working with;
- Those that have demonstrated an interest in working with the public sector rather than those reluctant to collaborate.

Once the district has some experience in PPP, future partnerships may be based on other criteria, such as involving those providers that can offer a significant contribution to TB control, either individually or as a group, because of the number of patients that select them as first-line providers. Some general points to consider during selection are that:

- Increasing access for the poor will require partnerships with NGOs operating in poor areas including slums and rural areas, and with informal providers as shown in the models.
- Institutional providers, including private and NGO clinics, are likely to give a higher yield of cases
- Some private practitioners may handle more suspects and cases than others; for example chest physicians will see more cases than solo GPs
- Although solo GPs will not individually offer large numbers of cases, it may be possible to organize them into clusters, and work with them as a group; the same applies to informal providers.
- Involving female health service providers from the private sector may help to address gender differentials in case detection; the success of the public sector Lady Health Worker programme has demonstrated this.

Final selection of providers will depend on their willingness to engage with the public sector, which will be established once those they have been approached (see below). Thus identifying, selecting and approaching private providers may be an iterative process.

5 APPROACH PRIVATE PROVIDERS

Once a provider has been selected, it should be approached by the DTC to understand its current role in TB service provision and also its potential role in PPP DOTS. The DTC should explain DOTS to the provider and outline the public sector's need for private partners in order to reach more patients. He/she should also explain the benefits that can accrue to the private provider (based on the 'Incentives/Enablers' paragraphs in the models in section 10). The private provider should be given time to think about such engagement and to discuss it with colleagues, so an appointment for a return visit by the public provider should arranged.

During the return visit agreement should be reached as to whether the provider does or does not want to form a partnership. If he/she does, then an outline of how the partnership would be operated will be discussed, based on the models above, highlighting their adaptability to the needs of individual providers.

As more private providers become partners, the DTO should mark their locations on a map of the district, to help in the identification of gaps in service provision. These should be categorised and colour-coded into those that charge fees and those that don't, to assess not only geographical coverage but also equitable coverage. As existing partnerships become more established and require less input from the district to maintain them, providers working in the gaps should be approached. The DTCs may enlist the support of NGOs to identify such providers. The NGO may also be involved in approaching such providers to ascertain their interest in working in partnership with the public sector, which may yield a better response than the public sector approaching directly.

5.1 Specific guidelines for different models

Model 2

Where there is an NGO or SFO working in the district that is willing to work with the district TB officer the NGO/SFO should be approached. Its role will be to identify GPs and laboratories that wish to provide TB DOTS and to monitor them. Initial training and training of master trainers, who may be from the private or the public sector, will be provided by the public sector; thereafter master trainers will train others. The SFO will provide a coordinating function between the GPs and laboratories and will be the primary contact for the public sector.

Where there is no SFO, GPs will need to be grouped into clusters, as working with single GPs in highly densely populated populations is unlikely to be an efficient use of public resources. A meeting with all GPs working in a relatively small geographic location (e.g. around 30-50 GPs), to explain PPP DOTS, will enable the DTC to identify which are willing to become partners and which are not; there may be some follow up meetings with individual GPs. Those that are willing should identify one laboratory in their area which will be involved in the partnership and to which they will all refer TB cases for smear microscopy. The laboratory will also need to be approached to assess its willingness to be engaged in the partnership. The GPs need to commit to using that laboratory for smear microscopy and the laboratory and GPs need to commit to completing the monitoring forms.

If there is a requirement for an NGO laboratory, then NGOs working in the health sector in that area will be approached. They will need to provide a location and appropriately qualified staff; the PTP will provide microscopes, diagnostic materials (slides, reagents etc) and reporting forms as required.

Model 4

There are unlikely to be many GPs for a given rural community. If there is more than one GP, these should also be approached to work together, as for model 2, and identify the NGO or public facility to which they will send patients for smear microscopy.

Models 5 and 6

Informal providers may be approached individually, but monitoring will be more cost-effective if they are grouped and if they refer patients to one NGO or public health facility in their locality. If they refer patients to an NGO facility, that facility must have a PPP arrangement with the district, otherwise patients will still not have access to DOTS.

6 DEVELOP MEMORANDA OF UNDERSTANDING

A Memorandum of Understanding (MoU) is required to ensure that all parties have a clear and documented understanding of what the partnership is trying to achieve and what each party is expected to contribute. The key elements of the MoU are:

- The aim and specific objectives of the partnership, preferably with well-defined targets
- The roles and responsibilities of private and public providers with regards to diagnosis, referral, treatment, DOT, monitoring, supervision etc.
- The division of resources to be provided to the partnership, with regard to facilities, staff, fixed assets and recurrent supplies
- Potential areas of conflict of interest and agreed strategies to overcome them
- Mechanisms of monitoring and evaluation of the collaboration

Where multiple private partners are required the linkages between them need to be made clear in each partner's MoU. For example if one provider is providing treatment services, but requires the services of another for diagnosis or DOT, then this should be made explicit and the process through which they contact each other should be described. Forward and back referral forms should be designed and used to ensure all parties are aware of where a patient is being treated and by whom. Thus when a patient who goes to a GP is requested to go for smear microscopy to another clinic and chooses to stay there for treatment, the GP should be sent a back-referral form informing him/her of which clinic the patient is being treated at.

Appendix 2 provides a sample MoU for contracting between a district and a service provider. Pro forma MoUs will need to be adapted for the different models and final MoUs will need to be adapted for specific providers with varying levels of formality according to the needs of different providers.

6.1 Specific guidelines for different models

Models 2, 4, 5 and 6

MoUs should be established with individual providers; thus even if GPs or informal providers have been clustered, there should be one MoU per provider, including the associated laboratory. The rationale for this is that one GP cannot be held responsible

for the actions, or lack thereof, of another. If one GP in a cluster fails to perform, that individual MoU can be rescinded, thus relieving the public sector of the obligation of continuing to provide resources; this may be done in writing or de facto. An alternative is to develop an MoU for the cluster, with a separate attachment of GP names who are involved; the list of names then would have to be updated each time a GP joins or leaves the cluster.

If an SFO is involved, then the MoU should be with the SFO, which is responsible for the conduct of the GPs involved in its programme.

Where a separate NGO is providing DOT services they too should sign an MoU or contract. Furthermore they should countersign the section in the treatment provider's MoU that discusses DOT arrangements, to indicate the linkage between the parties.

Models 5 and 6

The MoU may need to be simplified and will need to be carefully explained to informal providers to ensure that they understand both their commitments (including services they commit *not* to provide, such as diagnosis and prescribing treatment) and the support they may expect.

7 TRAINING PRIVATE PARTNERS

The public sector is responsible for training master trainers who will then train private partners in PPM DOTS. Typically the training will be the first practical activity in the PPP, it is therefore important that the public sector demonstrates commitment to and respect for the participants at this time to establish a positive start to the relationship.

The trainers need to be people who have the respect of and relate well to the private participants. Thus for large NGOs, with services being provided across many districts, the training should be provided by the PTP manager, deputy manager (or medical officer in Balochistan) or an identified NTP master trainer. At district level training of GPs and clinics will be undertaken by the DTC, while laboratory staff will receive training from the laboratory supervisors on technical issues and the district field officers on administrative issues. Informal providers might, for example, receive training on referral from a Lady Health Worker Supervisor or from the medical officer in a BHU. Generally the more senior the trainee is (or perceives themselves to be) the higher the cadre of personnel required to train them.

NTP training materials and methods should be used as a basis for developing specifically tailored training programmes for the different groups; tools that have already been designed by NGOs can also be reviewed and incorporated. The training should equip the providers with skills to perform their roles well, but should not cover areas which they will not require. For example, informal providers will not be trained on smear microscopy; laboratory technicians will not be trained on providing patient support/supervision. A topic guide for medical professionals is provided in Appendix 3 while the LHWs training module with some modifications can be used to train other cadres of treatment supporter. Training will be monitored by the DTCs and/or NPOs.

The provision of training needs to be adapted to the needs of the private providers. For example, GPs will not be able to close their clinic for several days at a time, so training

sessions be given before their surgery opens, or after it closes, or be given in a series of half-day sessions. For all providers, some on-the-job training and a follow up mentorship will be required. The location of training is also important. Those providers who work alone, or with few other people, will require training closer to their place of work to minimise disruption to their business. Providers working in NGO or private clinics, where other staff can cover their role, might benefit from receiving training away from the workplace, where they will receive fewer distractions.

In all cases the training programme, timing and location should be agreed with the provider before he/she starts. Commitment to providing and receiving training at those times must be adhered to.

8 CERTIFICATION

Once a provider has completed training he or she may be 'certified' as a partner of the NTP. Certification demonstrates that the DTC and EDOH officially acknowledge that a provider, has met the appropriate criteria to provide the services outlined in the MoU. A demonstration of certification, such as the provision of a paper certificate, may be more important to some providers than others; for example GPs might choose to use it as a form of advertising. Certification should also lead to the partner being invited to quarterly intra-district meetings.

Certification could also be conducted in front of the local media, for example in a 'signing ceremony' to inform the general public of the services being provided. This provides the DTC and the local partner with the opportunity to announce the partnership; it also provides the DTC with an additional opportunity to give appropriate TB BCC messages to the general public.

9 PROVIDING RESOURCES TO PRIVATE PARTNERS

Once a provider has been trained and certified, he/she will need to receive the resources promised by the public sector. Formal arrangements for transferring assets to the private sector are yet to be agreed upon at national level, however the following principles should guide the provision of assets:

1) Microscopes:
   When a microscope is given to a private laboratory it must be signed for and declared the property of the public sector, with the private provider as custodian.

   An agreement needs to be signed concerning:
   - Who is responsible for maintenance and repairs to the microscope
   - What action is taken if the microscope is broken, stolen or is otherwise not available for inspection in its expected location during a supervisory visit
   - Who is responsible for its replacement at the end of its expected useful life (and the duration thereof)
   - What happens to the microscope if the PPP agreement is dissolved

2) Reagents and Drugs:
   - The volume of reagents and drugs required needs to be determined from a population-based estimate of new TB cases in the area.
   - The frequency and process of delivery needs to be agreed

- If the volume or frequency of supply is insufficient, the recipient should send a request form to the DTC. The new volume should be checked against the cases reported in the previous quarter, allowing for some increase as the provider becomes known for DOTS to the community
- A signature must be provided by the private sector recipient and the DTC to record the number of drugs or reagents delivered
- Evidence of used drugs and reagents needs to be provided; evidence may be based on the patient and clinic records
- Stock audits should be undertaken periodically by the DTC to ensure the supply is adequate, appropriately stored and being used in accordance with NTP guidelines.

3) Reporting forms:
   - A stock of monitoring forms and registers should be given to each provider. This could be equivalent to, for example, a year's expected number of patients, to provide sufficient in case mistakes are made and to ensure that if case detection is significantly greater than expected, that enough forms are available.
   - Referral forms for informal providers should be designed and could be based on the form used by the LHWs

9.1 Specific guidelines for different models

Models 1 and 3

Clinic managers should be invited to the quarterly intra-district meetings. An exchange of monitoring information and supplies could take place in that forum.

Models 2 and 4

The provision of drugs to GPs may require the DTC to travel to a location close to the cluster of GPs at an agreed time and on an agreed date. The GPs could meet the DTC there, provide evidence of drugs used (for example patient records and empty blister packs) and receive a new stock of drugs. Alternatively the DTC could visit each GP in the cluster and provide supervision at the same time. The choice of these will depend on the number of GPs per cluster and the number of clusters in the district.

10 RECORDING AND REPORTING

Reporting guidelines are discussed more extensively in the Monitoring and Evaluation section of this document (Section 12). In principle, the same forms should be used by private providers as by the public sector (referral forms and TB01 to TB09).

Referral forms should be used to monitor the contribution to TB control of the providers using them and should also be the basis for entering source of referral into laboratory, and possibly treatment, registers. This will be particularly relevant for informal providers, whose cases are otherwise not distinguishable from general public or NGO clinic cases. Reporting forms should be taken to the quarterly intra-district meetings by the private providers. Clinics should send the clinic or TB programme manager, while GPs may select one in their cluster to attend a meeting, however it is the field officers' responsibility to collect the forms from the GPs, in case of their inability to attend.

Private practitioners can be encouraged in appropriate recording and reporting by highlighting the benefits to them in terms of better patient care through good information

exchange, better continuity of care, better follow up, side effect monitoring and treatment adherence monitoring. The provision of supplies can further contribute to adequate recording and reporting. Once a provider is well established, the provision of supplies should be dependent on the provision of adequately reported data. This will ensure that private providers who are consistently, and deliberately, not complying with NTP reporting procedures do not remain partners and do not receive the benefits of partnership. Such measures should only be used after the provider has been extensive support on monitoring by the DTC; genuine mistakes should not be punished.

11 SUPERVISION OF PRIVATE PARTNERS

The detail of the supervisory process may be found in the Monitoring and Evaluation section of this document (Section 12). Supervision of the private sector will be based upon supervisory guidelines for the public sector and adapted to the roles of the different providers. The same records should be maintained for both sets of providers and the same physical checks should be performed by the laboratory supervisors, DTCs and field officers regarding the quality of microscopy, diagnosis, treatment and treatment supervision. The field officer should review the monitoring data provided; any indication of a problem should result in a supportive mentoring visit to the NGO.

Referral forms from formal and informal providers should be reviewed against laboratory registers to assess whether the provider is referring patients correctly and what contribution he/she is making to case detection. If a provider appears to be sending too few or relatively too many sputum positive cases, he or she should be visited to provide follow-up training.

12 COMMUNICATION WITH PUBLIC

The general public needs to be informed about partnerships between the public and private sector to ensure that a) they are able to benefit from mechanisms intended to increase their access; and b) they know where they can get free drugs and why the drugs are free. Patient perceptions of quality of service can be addressed and the process can be used to increase knowledge about TB. Such communication should occur once the partnerships are established and working, to avoid creating false expectations and risking negative perceptions about partnerships in the initial stages.

Patients should be informed of which partners are involved and where they are located. As noted above, the certification process can assist this. This could benefit the partners themselves through free advertising.

General TB BCC messages can also be used to address patient expectations concerning the diagnostic and treatment process. This will also ensure that private providers are accountable to a more informed patient base.

13 SUMMARY

The above steps demonstrate how districts and provinces can engage with private providers for DOTS implementation. If all the steps are followed then a robust partnership with a clear division of responsibilities will emerge. The number and types of partnership that districts engage in are likely to increase with time and will bring an increased cohesion of service delivery and should result in higher case detection and better treatment outcomes.

SECTION 12: MONITORING AND EVALUATION GUIDELINES

In order to achieve programme objectives, it is crucial to have an efficient monitoring and evaluation (M&E) mechanism. This can build the technical capacity of people working in the programme, enhancing performance and guiding the programme in operational and strategic decision-making.

The NTP has developed a very strong existing monitoring and supervision system for the public sector, which has also been used to monitor existing partnership projects assisted by the Global Fund and FIDELIS. This section reviews how the tools and processes that are used in the public sector can be used to monitor public private partnerships to ensure an integrated M&E system: Figure 3, overleaf, depicts these, with solid lines showing monitoring relationships and dotted lines showing additional levels of review that may take place at evaluation. While care has been taken to ensure that this integrated monitoring system addresses the needs of a varied private sector in Pakistan, the focus is on partnerships with formal providers in accordance with the current NTP PC-1.

1 OVERVIEW

Monitoring and supervision of PPP DOTS is divided into three major components:

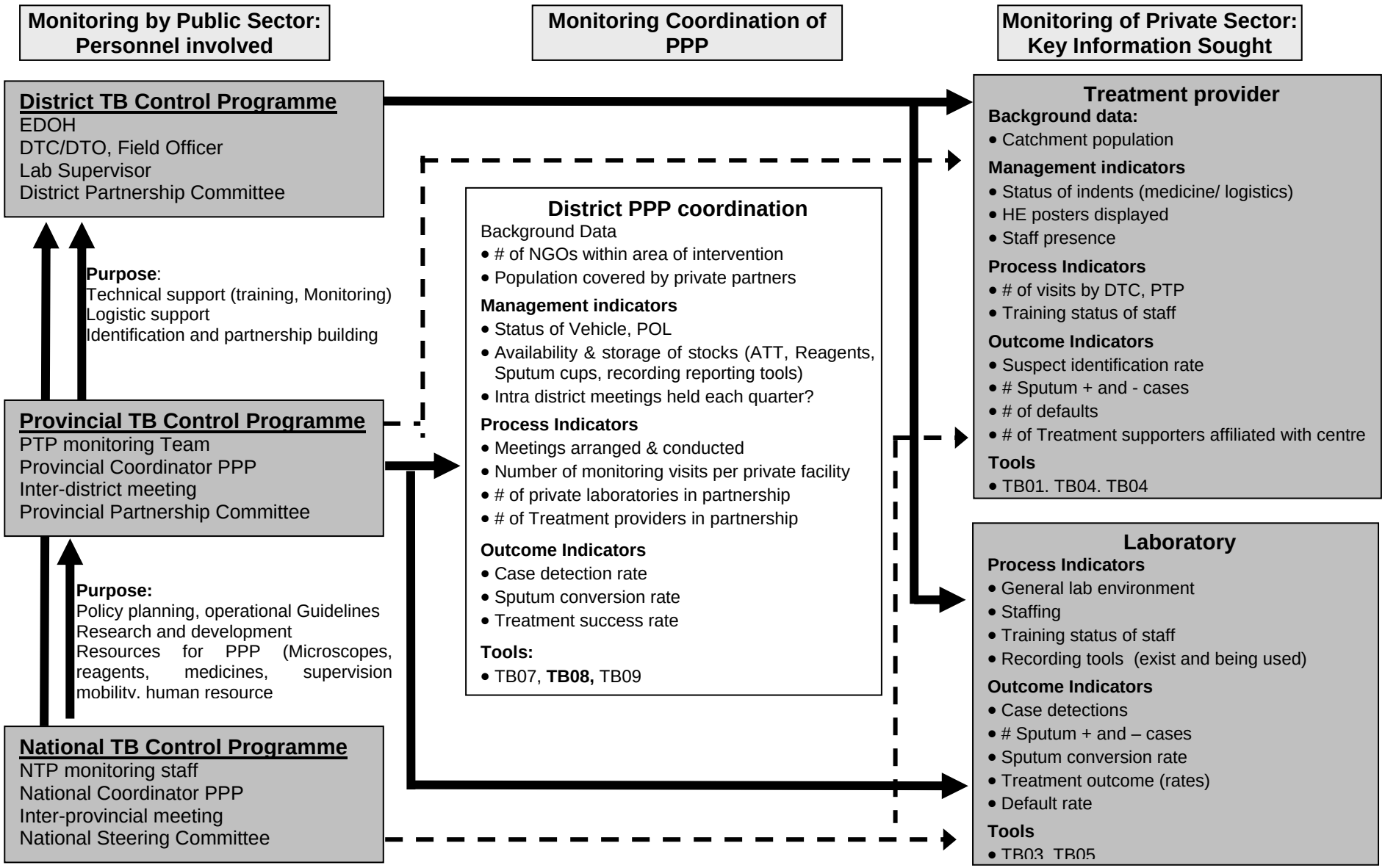
1. Coordination and administration
2. Recording, reporting, dissemination and feedback
3. Technical support and supervision of programme activities at operational site

Within these components, monitoring and supervision focuses on the following operational activities:

- Laboratory Quality
- Quality of treatment
- Patient treatment Support
- Administrative/Logistics Support
- Technical Support at operations level
- Registration/ data entry
- Data Collection
- Data compilation, analysis and dissemination at district, provincial and national levels
- Feedback

In principle, monitoring and supervision will be conducted by public sector staff using existing indicators, supervisory checklists and other tools. Where necessary these will be modified to ensure they reflect specific needs of the partnerships. Thus TB01-TB09 will be used for recording and reporting patient data; and case detection rates, sputum conversion rates and treatment outcomes will be used for reviewing the partnerships. Data will be integrated with public data to produce district-wide reports, but will also be analysed and reported separately at all levels to assess the private provider contribution.

Figure 3 : Monitoring and Supervision mechanism for PPP DOTS



2 ROLES AND RESPONSIBILTIES

2.1 Coordination of monitoring, evaluation and supervision

The monitoring of PPP DOTS will also be coordinated by partnership committees at national, provincial and district levels i.e. National Steering, Provincial and District Partnership Committees. The proposed composition of the committees has been discussed in Section 9.

The major role of the National Steering Committee will be for policy, strategic planning and resolving operational issues that cannot be managed by the provincial managers. It will also be ultimately responsible for ensuring that the partnerships benefit the patients, their families and their communities and protect their rights. It will review national statistics to assess the contribution being made by the private sector and will try to secure additional funds to expand PPP. It will also be responsible for ensuring good governance throughout the PPP programme.

Provincial Partnership Committees will be the primary fora for operational policy planning of PPP. Their major role is to oversee the public-private partnerships in their respective provinces; they will also contribute to identifying partners. They will ensure that province-wide concerns of public or private partners are shared and resolved.

District Partnership Committees are crucial as they deal with operational and monitoring issues. Their primary activities are:

- Selection of partners
- Needs analysis for the partnership interventions
- Sharing and resolving of operational issues
- Monitoring partnership projects
- Overseeing logistic supports
- Advocacy

2.2 Personnel for monitoring and supervising PPP

Supervision will be conducted by the existing NTP monitoring teams, with additional support from new inductions. The teams will therefore comprise:

Existing Team/non-PPP new inductions:
National Technical Officer
National Programme Officer Reference Laboratories
National Programme Officer
EDOH
District Coordinator
Laboratory Supervisors (new induction)

PPP new inductions and increased roles:
National Coordination PPP (new induction-1 position)
Provincial Coordinator PPP (new induction -6 position one fro each province, AJK and NA)
Field Officers (designated positions128 – 20% increase in role)
District Coordinator (designated 128 – 20% increase in role)

Their roles are shown in Table 1 overleaf.

Figure: Roles responsibilities of Supervisors and areas of interventions at different operational levels

Level of intervention	Roles and responsibilities of supervisors and area of intervention			
	Field Officer/Lab Supervisor	**EDOH/DTC/NPO**	**Provincial PPP Coordinator PTP Monitoring team Provincial Reference Lab**	**National PPP Coordinator National Monitoring team National ref lab**
Public sector Diagnostic Facility NGO Lab Private lab	Data verification, Lab quality, Technical and logistic support	Data verification, Technical and logistic support, Organising inter-district meeting	Periodic visits to centres (random or needs based selection) Coordination and Liaising Ensuring supplies Lab quality (Slide cross checks)	Policy planning Ensuring supplies Lab quality (Slide cross checks), Periodic programme review, Medicine and logistic support
Public sector Treatment Facility GP clinic	Data verification, Technical and logistic support Training assessment	Coordination Data verification, Arrangement of training Ensuring supplies Coordinating/arranging intra-district and district partnership committee meeting, Attending inter-district meeting	Coordination and Liaising Ensuring supplies Organising inter-district meeting	Research and Development, Policy planning Ensuring supplies Medicine and logistic support, periodic programme review
Private Clinic/Hospital Community Based Hospital NGO Hospital	Data verification, Lab quality, Technical and logistic support	Coordination Data verification, Arrangement of training Ensuring supplies Coordinating and arranging intra-district and district coordination committee meeting, attending Inter-district meeting	Periodic visits to hospitals (random or needs based selection) Coordination and Liaising Ensuring supplies Organising inter-district meeting	Research and Development, Policy planning Ensuring supplies Lab quality (Slide cross checks), Medicine and logistic support, Periodic programme review,
NGO BCC	Monitoring of BBC material	Supply BBC material	Operational Guidelines/supply of BCC material	Development, printing and supply of BCC material

Their supervision will be based on the following:

- Establishing relationships with partners' staff and developing networks at different operational levels
- Conducting needs assessments for training, medicines and logistics
- Sharing updated information with implementing staff
- Ensuring programme policies/guidelines are being followed
- Periodic analysis of key NTP indicators (sputum conversion rates and treatment outcomes at partner level and case detection rates at district level)
- Identification of programme issues and actions to resolve them
- Regular feedback

3 MONITORING AND SUPERVISION

For the purpose the monitoring mechanism has been divided into different levels, comprising:

- Treatment supporters
- Facilities: laboratories and treatment providers
- District
- Provincial
- National

Supervisory checklists for these levels are given in Appendices 4 to 7.

3.1 Supervision at treatment support level

Doctors and/or DOTS facilitators arrange treatment supporters for patients and are responsible for supervising their performance. They should ensure that the treatment supporters have been appropriately trained. In the public sector, the treatment card (TB01) is the main monitoring/supervision tool at this level; other monitoring and supervisory activities include interviewing patients and inspecting empty packs of drugs to ensure that medicine has been taken. These can also be used in the private sector.

Where NGOs or CBOs are involved in treatment support, their own staff may provide supervision to the community based workers. They should be supported though visits from the field officer. Where unqualified, informal providers are operating as treatment supporters then the district field officer will be responsible for supervision. The same tools noted above will be used and random checks will be conducted to ensure the treatment supporter named on the treatment card is the one who has provided treatment support. Additionally, if the provider has been allowed to distribute the medication to the patient, the officer will examine stocks of medicines and check empty, returned packs.

3.2 Monitoring and supervision at Facility level

At this level, monitoring and supervision is aimed at ensuring a high quality of laboratory and treatment services, including the provision and storage of laboratory supplies and anti TB drugs; prescribing patterns; availability and management of logistics; correct registration; and recording patient data on the relevant forms (TB01-05).

The private providers at facility level, as described in models 1 to 6 (section 10) are either referrers, laboratories, treatment providers or a combination of two or three of these. The two functions require different types of supervision and consequently are described separately below. Where these functions are separate, monitoring of back-referral forms will need to be conducted to ensure that the laboratory, or its associated clinic, is informing the originating clinic or GP of where the patient is being treated. Where a facility provides both services any areas of supervision that overlap may be combined.

Supervision of Laboratory

The laboratory in the NTP is a point where a patient receives diagnostic services and, for smear positives, his/her treatment progress is followed through successive sputum smear microscopic examinations (at 2nd, 5th and 7th months). The laboratory plays a key role in the monitoring process by:

- Recording patients (patients reported positive in TB04 are registered in TB03)
- Storing all examined sputum smear slides for random cross checks by the reference lab for quality assurance
- Receiving and filing feedback from EQA (External Quality assurance).
- Storing and managing logistics (lab reagents etc.).

Laboratories have a highly technical role in TB DOTS so their supervision needs to be carried out by trained and skilled personnel. Laboratory supervisors are responsible for ensuring quality laboratory services by providing onsite technical support to the laboratory staff. The laboratory supervisor ensures that the laboratory workplace is adequate and has the resources it requires, such as adequate safety measures, running water, electricity, a functional microscope and necessary consumables. The supervisors make regular visits to public laboratories and disseminate their visit report to the district and to the reference laboratory for feedback. They are also responsible for collecting randomly selected slides to send to the reference laboratory for quality control. Their activities are supported through regular feedback and periodic visits from the reference laboratories. The visits from reference laboratories are based on a random or needs-based selection of laboratories.

The laboratory supervisors have had their role expanded in the 2005-2010 PC-1 and thus may be able to offer technical support in the supervision of private partners' laboratories. Field officers will be responsible for providing administrative support to the partnership laboratories. They will periodically visit private laboratories to ensure that reagents are sufficiently available and microscopes are functional. He/she will also be responsible for collecting and collating patient data at facility level for submission to the district. In addition the field officer will analyse the training needs of laboratory staff and will report training requirements to the DTC. The key information that the DTC or field officer will review are found in the 'Laboratory' box of Figure 3.

Supervision of Treatment provider

Treatment providers may be an independent entity (e.g. GPs without laboratory services) or may be attached to a laboratory (e.g. NGO clinics, private hospitals). In both cases the functions of the treatment centre for the provision of TB DOTS services are similar (exceptions are noted in brackets below).

In addition to patient management, a treatment provider has a role in the monitoring process. In this regard his/her major responsibilities are:

- Referring suspects to laboratory for sputum smear microscopy so contributing to TB05
- Making diagnosis and prescribing and recording treatment (prescribing depends on level of training of treatment provider)
- Registering patients (for GPs and NGO clinics without laboratories)
- Arranging treatment supporters and supervising them on supporting patients
- Recording and maintaining patient data

The supervision of treatment providers needs to address the diagnosis of pulmonary sputum smear negative and extra pulmonary TB patients, as well as smear positives, ensuring that

NTP policies and guidelines are being adhered to. The NTP's routine analysis for the ratio of sputum smear positive and negative cases, that is 65% positive out of all new pulmonary cases and 50% of all TB cases, will be used to assess private providers. Forms TB03 and TB04 are the monitoring tools for assessing these ratios. These should be accompanied by external laboratory quality assurance, based on random selection of smear slides, to assess whether any differences in ratios are laboratory or a treatment provider issue.

Treatment providers will themselves be supervised by the DTC and the field officer. The field officer will provide administrative and technical support and supplies where necessary. He/she will ensure that NTP guidelines being followed and will assess the training needs of treatment providers. Where the treatment and diagnostic centre are combined, the field officer will cross check treatment centre and diagnostic centre records. Where the two are separate the field officer will collect the monitoring data from the GPs or clinics. The key information that the DTC or field officer will review are found in the 'Treatment Provider' box of Figure 3.

At the start of the partnership supervision will need to be very frequent (possibly once per month) and provide a mentoring function and then less often as time passes.

3.3 Monitoring and supervision at District level

The district, and within that, the DTC, has a central role in the implementation and monitoring of PPP DOTS and in ensuring that private partners are implementing DOTS in accordance with NTP guidelines. The DTC will be responsible for regularly conducting supervisory visits to private treatment providers and laboratories and for addressing any training, resource or logistical needs that may arise during the supervisory visit.

He or she is also responsible for the organisation of intra-district and district partnership committee meetings. These provide a forum for district-wide data to be compiled incorporating private as well as public sector data; for the dissemination of monitoring outcomes; and for addressing issues arising from the monitoring process. These issues may involve partnerships not only between the public and private sector, but also between different private sector partners. The DTC will have to handle issues sensitively and, should any dispute arise, will have to find a means to quell it within the meeting and address it, with all parties involved, after the meeting.

Any difficulties that private partners are facing in filling in the NTP forms may also come to light during this meeting and so provide an opportunity for additional on-the-job training. It should be noted that GPs are less likely to attend these meetings, due to the demands of their clinics, thus it is the field officer's responsibility to become aware of any difficulties the GPs may have in recording, and subsequently provide appropriate support to them.

The intra district meetings also provide a forum for advocating for PPPs to senior district officials. The National Programme Officers (NPOs) can support the DTCs in using monitoring outcome data from PPPs for advocacy purposes in this forum.

In turn, the district is monitored and supervised by the NTP and the PTP, particularly the Provincial PPP Coordinator and the PTP. The key indicators and other information they focus on may be seen in figure 3, in the box labelled 'District PPP Coordination'

3.4 Monitoring and supervision at Provincial level

Provincial PPP Coordinators are proposed to be designated from existing staff. The major role of the coordinator is to act as provincial focal person for PPP. He/she will be responsible for coordinating and supervising PPP activities at provincial level, in particular ensuring that

PPP activities are carried out in accordance with the NTP guidelines, with the support of the National PPP Coordinator. He/she will ensure that any issues over supplies to private partners that arise during district monitoring processes are addressed. He/she will also ensure regular reporting of partnership data by supervising coordination between districts and private providers.

The quarterly inter-district meetings, which are organised by the PTP provide further opportunities for disseminating monitoring information. They are attended by the key people responsible for monitoring at district level, that is the DTC and the NPO; a senior technical person from the NTP also attends the meeting. Each district presents its district monitoring data and, with the assistance of the PTP and NPOs, it is consolidated and validated. Existing provincial level private partners also attend these meetings and present any of their data that is not already incorporated into the district data. A provincial report is prepared for dissemination to National TB Control Programme and a report disaggregating data between the public and private sector may be prepared so that the contribution to the outcome indicators by the private sector can be assessed by the NTP.

These fora present another opportunity for resolving partnership issues arising through the supervisory process. Provincial level technical support and guidance may be offered to enable the partners to improve their performance and achieve the objectives of the partnerships.

3.5 Monitoring and supervision at National level

The NTP will take a lead in the implementation of PPP DOTS in the country and will be responsible for ensuring that partnership TB control activities are in accordance with national guidelines. It will also be responsible for ensuring, and hence monitoring, that resources allocated in the PC-1 are supplied and utilised in accordance with the set NTP policies. It will be supported in this role by the National Partnership Coordination Committee, which will be convened by the NTP on a regular basis.

Quarterly inter-provincial meetings are held by the NTP and are attended by PTP managers, NPOs and national level private partners. The meeting aims to validate provincial monitoring data and calculate national data from both public and private partners; it also provides a forum for discussing technical issues arising from the monitoring of the TB Control Programme. The same forum can be used to oversee technical aspects of partnership programmes, to share information between the public and private sector and to resolve technical issues related to PPP DOTS.

A National PPP coordinator is a proposed new induction in the NTP (see section 9). He or she will work together with the National Technical Officer to monitor the PPP activities at national level and to provide regular feedback to the provinces and districts. He/she will also be involved in the NTP's periodic monitoring visits to the provinces. These monitoring visits will include a review of the performance of PPP DOTS at those levels.

The NTP will be responsible for arranging and conducting operational research in PPP, including impact assessments, through its research and development unit, to guide evidence-based implementation of PPP in the country.

3.6 Supervisory checklists for monitoring Partnership TB DOTS

All the supervisors visiting from NTP, PTP and districts will use supervisory checklists to monitor the partnership TB DOTS activities. The supervisory checklist will be completed and at the end of visit the supervisor will discuss and resolve issues with the party concerned.

Actions to be taken at different levels by the public and the private sector will be agreed by both parties and noted.

The NTP's existing supervisory checklists (see Appendices 4 to 7), with some modification for specific PPP needs, can be used by supervisors while visiting different sites.

4 EVALUATION OF PPP DOTS

The performance of PPP DOTS will be evaluated through the routine NTP surveillance system. That is the analysis of quarterly reports for case detection, sputum conversion and treatment success rates.

In addition, the NTP will coordinate and arrange national review of partnership TB DOTS on annul basis, with the support of the National Partnership Coordination Committee. The NTP, international partners and representatives of the private sector will participate in the review to assess the performance of PPP DOTS. The review report will be shared with all stakeholders.

In order to evaluate partnership TB control programme activities, a range of PPP performance indicators have been identified that are realistic, achievable, reliable and verifiable.

Input Indicators

- Development and implementation of PPP models and operations plan
- Implementation of PPP component of PC-1
- National and provincial PPP focal points appointed
- National Steering Committee, Provincial and District Coordination Committees formed.
- Consensus on NTP priority interventions for PPP
- Orientation of various public sector stakeholders on PPP strategies
- Identification and selection of private partners
- MoUs between NTP/districts and partners signed
- Resources identified and allocated and supplied
- Training of partner private providers completed
- Case detection under TB DOTS started by private providers

Output Indicators

- Number of private providers involved in partnership, by category
- Number of private partners working directly with poor populations
- % population covered by private partners
- % patients from lowest quintile of population (e.g. based on asset measures)
- % patients reached living more than 5km from public facility
- % suspects identified by private partners, by category of patients and partners
- Number of districts engaged in PPP DOTS
- Number of reporting NGOs
- Number of treatment centres established to provide TB DOTS in the private sector
- Number of Laboratories engaged, trained and quality controlled in the private sector
- Number of private doctors trained
- Number of private doctors actively participating
- Number of private laboratory technicians trained

Outcome Indicators

- Increase in case detection rate
- Increase in sputum conversion rate

- Increase in treatment success rate

Impact Indicators

- Incidence of TB
- Prevalence of TB

SECTION 13: MODELS TO STRENGTHEN THE TB DOTS ENABLING ENVIRONMENT

Three areas in which the private sector could help to strengthen the DOTS enabling environment were noted above, namely:

1) Behaviour Change Communication
2) Advocacy
3) Research

The processes and operational activities required for engaging the private sector in these follow. BCC and advocacy are discussed together, as many of the same types of organisation will be involved in both.

1 BEHAVIOUR CHANGE COMMUNICATION AND ADVOCACY

The Pakistan NTP has a well designed BCC strategy, incorporating advocacy activities as well as all aspects of BCC, which is described in the 'NTP communication strategy 2005-2010'(1). Its vision is:

> *"To provide a positive, credible image of NTP, TB-DOTS and increase awareness and knowledge about TB and the services available and address all related concerns."*

It highlights the need to involve private providers, including NGOs, faith based organisations, donors, the media and private companies, with different partners providing different BCC services at national, provincial, district and sub-district levels. It further identifies the public sector stakeholders that will be involved at each level.

The strategy does not, however, fully outline the process of developing public private partnerships for BCC. It is important that this is articulated, as without cohesion at all levels there is a risk that opportunities for reaching communities with positive messages will be lost and conversely that wrong messages may be sent out by private sector actors who are not in partnership with the NTP.

The key steps involved in establishing such partnerships are:

1) Decision to engage in PPP for BCC at National, Provincial and District levels
2) Identify and Select Private Providers
3) Agreement
4) Coordination

These are discussed in turn below.

1.1 Decision to engage in PPP for BCC at National, Provincial and District levels

The BCC strategy outlines different activities that are required at the different levels of implementation. There has already been agreement at national level that such a strategy is required and that it involved private partners. Similar agreement is required also at provincial and district levels, since many forms of communication will be district- and province-specific and it is at this level that increased case detection resulting from good BCC will be noticed.

Some public providers in the districts, notably LHWs are engaged in some form of BCC themselves, thus it is important to ensure cohesion between them and other organisations who are working with communities. Others are involved in advocacy, notably the DTC and EDOH who respectively advocate for funding for TB and health services from the district government; it is important to ensure that advocacy NGOs are conveying the same messages.

The lead in encouraging such partnerships and providing advice on establishing them needs to come first from national and then from the provincial TB programme managers. Agreement to engage needs to be from EDOH's and DTCs.

1.2 Identify and Select Private BCC partners

At district level the identification of private BCC partners is likely to be multi-faceted. Some NGOs that are already engaged in communications and advocacy may approach the EDOH, requesting to promote certain key health messages; these messages may not be TB-specific, but the EDOH could encourage them to provide such messages. Alternatively district staff, at all levels, may themselves identify NGOs that are engaged in BCC and approach them. All private partners who are involved in referral, diagnosis and treatment should also be active in BCC, by nature of their work, and so can disseminate health education material to their TB suspects and patients and to their wider clientele through direct verbal communication, providing leaflets (including those suitable for non-literate people) and by displaying posters in their clinics. Another forum will be through intra-district meetings and/or the PPP coordination committees noted above, which are attended by private partners who themselves may be able to assist in implementing the district and sub-district level BCC strategy, or may be able to recommend others.

At provincial level the identification of some partners will be the same as for the districts, particularly for engaging with BCC NGOs who have province-wide rather than district-specific coverage. Since the messages to be conveyed are likely to be similar across the province, concepts could be discussed and agreements entered into at this level. The provinces may also want to engage with private-for-profit media organisations to publicise TB messages in print and on radio and/or television. It could also identify other health programmes which appear to have good communications processes and develop links with them or their partners. One exercise could be for staff at provincial and other levels to think of some of the health messages that they see or hear most frequently and work with those programmes.

At national level the NTP has already identified a number of partners, including WHO, GFATM, JICA, Green Star, Asia Foundation, Mercy Corp., AKHSP, GTZ, GLRA, ACD, PATA and MALC. As with the provinces, it could engage the media and also develop links with other programmes for shared communications channels.

Concepts for partner involvement at all levels are given in the NTP communications strategy.

1.3 Agreement

Once a partner has been selected, the district will need to establish an agreement with them, outlining:

- The aims and objectives of the partnership and of the BCC strategies – to ensure that the partnership has clearly defined, measurable objectives
- The duration of the partnership
- How the strategies ally with the national communication strategy – to ensure that both parties have read and are familiar with the strategy and that the messages to be conveyed are consistent with national goals
- The roles and responsibilities of private and public providers with regards to developing BCC and advocacy messages, identifying target groups, designing communications channels and implementing communications activities. The provincial social scientists are a key resource that can be utilised from the public sector in devising, pre-testing and evaluating messages
- The division of resources to be provided to the partnership, particularly as regards the source of the funding for the activities

- Potential areas of conflict of interest and agreed strategies to overcome them – for example a BCC or advocacy NGO may have links to specific clinics; it must be ensured that they encourage suspects to attend public as well as their own clinics.
- Mechanisms of monitoring and evaluating the success of the communications strategy.

Such an agreement is likely to take the form of an MoU for an NGO or CBO or any other organisation that is not receiving payment for such services, and the form of a contract with a for-profit organisation that is being paid for services.

1.4 Coordination

The communications strategy recommends the establishment of communications committees at each level to ensure coordination between the different partners as regards BCC. These could become subcommittees of the partnership committees recommended here. This would ensure that the communications and advocacy activities are directly in line with public goals and are reported to all public and private partners at district, provincial and national levels.

Coordination is also required between district, provincial and national levels. To ensure this happens, one contact person at each level is required. At district level the key contact for all messages will be the DTC; he/she will report back from the district communications subcommittee to the province, for example by providing a short written report and highlighting any new developments or successes verbally at inter-district meetings. At provincial level, the contact will be the PTP, supported by the social scientists, and at national level the contact will be the health education officer (a new induction in the 2005-10 PC1), reporting in turn to the NTP manager.

2 RESEARCH

DOTS implementation is a relatively complex process, and research at international level is ongoing to bring improvements to the process, through initiatives such as PPM DOTS and community based DOTS; and to specific components thereof, such as diagnostic procedures and drug combinations. Research is also required at national level to trial new international initiatives and adapt them to local settings and to ensure that national service delivery is able to increase case detection and improve cure rates.

The NTP has already engaged with the private sector to increase research capacity, for example through its partnership with ASD, funded by FIDELIS. The NTP or PTPs may also want to enter into new partnerships with academic institutions (nationally and internationally), local technology companies or other health service providers. National level partnerships may be focussed on issues affecting policy and national operations, such as new diagnostic techniques, or strategies for TB/HIV. Research partnerships at provincial level may be linked to the social scientist's work, for example on patient pathways to care, acceptability of services, extent to which the initiatives reach the poor, impact on diagnostic delay and financial protection. Research at district level is likely to be more focussed on operations, for example studies on treatment supporters.

Again the purpose of this section is not to state precisely what form these partnerships should take or what research should be undertaken, as this is likely to vary significantly from situation to situation and over time, but to provide a consistent protocol for operating them. The protocol is similar to that for BCC and advocacy, but there are important differences in the implementation of them. The key steps involved in establishing such partnerships are:

1) Decision to engage in PPP for research
2) Identify and select research partners
3) Contract
4) Dissemination of research findings

5) Getting research into policy and practice

2.1 Decision to engage in PPP for Research

As seen above, the NTP has already engaged in a number or PPP for research, however fewer examples have been seen at provincial and district levels. The demand for research at these levels may come from the PTP, EDOH or DTC themselves, or may be suggested by the NTP or PTP. In either case the district or province needs to be clear on the objectives of the research; how they may benefit from the research; their role in the research process; and what support from other stakeholders might be needed.

2.2 Identify and Select Research Partners

The selection of research partners will depend on the type of research being undertaken, its purpose and its objectives. At national level if, for example, research results are intended to inform international as well as national strategies, then engagement with an academic institution that may up findings for journals may be a useful strategy. If new technologies are being trialled, then one or more potential providers of supplies could be involved in the research process. At provincial level operational research activities could involve NGO providers, for example in trialling new BCC messages, or could involve an academic institution or other independent partner to evaluate other PPP partnerships. At district level an NGO or social science research organisation could work with the Provincial Social Scientists to trial different methods of DOT.

The selection of any partners requires commitment to the research process from both sides. At all levels the identification of private research may be two-way. Some research institutions may approach the NTP, PTP, EDOH or DTC with a research concept. Alternatively the research ideas may come from the public sector which then identifies suitable partners, based on previous experience, recommendation, or from advertising for such partners and evaluating expressions of interest or proposals responding to such adverts.

2.3 Contract

Once a partner has been selected, the district, PTP or NTP will need to sign a contract with them outlining:

- The aims and objectives of the study – to ensure that the research has clearly defined, measurable objectives and that these are in line with NTP goals
- The duration of the study
- The roles and responsibilities of private and public sectors with regards to developing a research proposal; accessing funding; conducting field and desk research; reporting and disseminating results
- The division of resources to be provided to the partnership, particularly as regards contracting field researchers, the provision of logistics and funding the research activities
- Intellectual property rights: that is, who owns the data, who owns the report and what can and cannot be disseminated to a wide audience
- Potential areas of conflict of interest and agreed strategies to overcome them – particularly in working with private for profit technology or pharmaceutical companies.
- How the results of the research will be disseminated and to whom

A contract is required because of the degree of confidentiality with regard to findings and ownership of data

2.4 Dissemination of Research Findings

The process for and content of research findings to be disseminated should be agreed prior to starting research. The audience for dissemination will depend on the purpose of the research and may vary from the international community, through international journals; a regional interest group, such as WHO EMRO office; other national health programmes; the NTP; PTPs; other EDOHs and DTCs within a province; district government; and communities

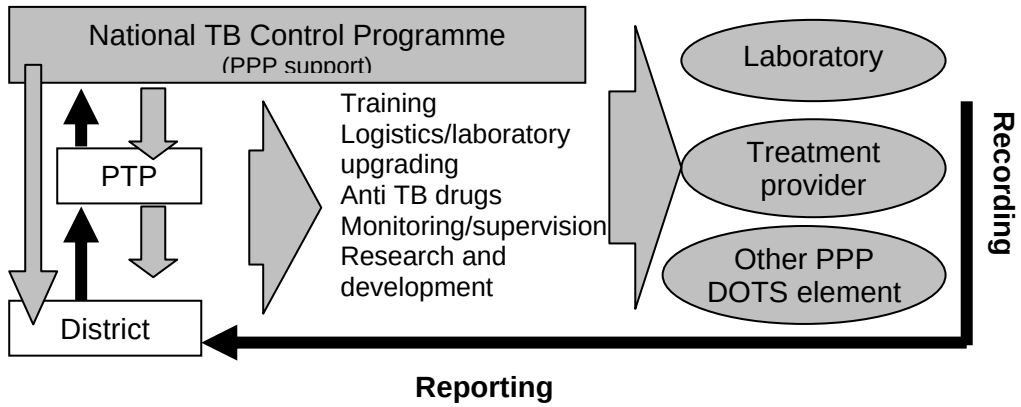
The process of dissemination may involve academic writing; presentations at different levels; the sharing of reports; advertising through media; local communication. Where local dissemination is required there should be some integration with the BCC strategy. Thus the process for dissemination may require a different partnership than the process of research.

SECTION 14: OTHER ACTIONS AT NATIONAL LEVEL

1. Funding

The NTP has ensured that funding for PPP DOTS is available through the PC-1. It will, however need to put mechanisms in place to ensure that these resources can reach the districts where the activities will be implemented. The district will be responsible for providing resources to partners, for example for upgrading or establishing treatment and diagnostic centres and sustaining supplies on the basis of needs and replenishment. This process is depicted in Figure 4 below, showing that national resources flow to the districts directly or via the PTPs. Training, logistics, resources, monitoring and supervision are provided by the PTPs and the districts to the private partners providing laboratories, treatment, or other aspects of DOTS. The private partners respond by providing monitoring data to the district, which send it to the province and from there to the NTP.

Figure 4: Flow of National support to Partnership TB DOTS



The National Coordinator PPP in consultation with the National Manager will take the lead in these arrangements. He/she will be supported by Provincial Coordinators and District TB Coordinators who will conduct the needs analyses in discussion with the private partners.

2. Legislation

Other actions that can be taken at national level to improve the enabling environment for PPP centre around legislation. One measure could be to make notification of TB cases a legal matter; that way every patient diagnosed with TB will be counted and associated with a doctor; if that patient interrupts treatment and has MDR TB, a link can be made to the doctor that treated him/her to establish the problem that arose. This will encourage more doctors to seek association with the public sector to ensure that treatment is appropriate in the first place.

Regulations regarding drug formulations and treatment could also be established, including enforcing legislation on non-prescription sales of anti-TB drugs and developing legislation to enforce appropriate, standardised treatment by providers.

It is acknowledged that these will take some time, however in the long run they will support the provision of appropriate TB treatment in the private sector.

SECTION 15: CONCLUSION

A range of models have been developed for the Pakistan NTP, covering a wide range of providers and of different relationships between them. Operational and monitoring and evaluation guidelines have also been developed. It should be noted that the detail of specific models will vary for different providers in different districts and will vary over time with the benefit of practical experience. It is hoped that the models presented here will be used to guide discussions as private public partnerships are being established and will be adapted accordingly.

It is hoped that the resulting partnerships will be of benefit to both public and private sector providers and that such partnerships will strengthen as trust and confidence in each other grows. It is finally hoped that these models will contribute to enabling the NTP of Pakistan to reach the 70 percent case detection and 85 percent treatment success rates that are being aimed for.

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APPENDICES

APPENDIX 1: TERMS OF REFERENCE

Situation Analysis and Model Development for Public-Public and Public-Private Partnership

1. Conduct literature review.
2. Review the existing Public-private and initiatives of the National TB Control Programme (NTP).
3. Develop context sensitive Public-private partnership (PPP) model for the NTP.
4. Develop implementation protocols for the PPP model.
5. Develop implementation and monitoring and evaluation plan as per the requirements of the NTP PC-1 for 2005 – 10.

APPENDIX 2: MEMORANDUM OF UNDERSTANDING

Please note, this is just an example, adaptation will be required

1. Parties
The Executive District Officer Health (EDOH) of [District Name] and NGO [Name of NGO], hereinafter referred to as "designated agency", agree to cooperate in the implementation of TB control activities to the population of [geographical area] with a population of approximately [population size].

The National Tuberculosis Control Programme (NTP) aims to improve cure rates among tuberculosis (TB) patients, to more than 85%. To make the programme more effective, wider participation of local communities and private health care providers in TB control is required. The designated agency is an organization that [insert one sentence about the organization's involvement in health].

2. Period of cooperation
The period of cooperation shall be two years, commencing the first day of [month] of [year] until the last of [month] of [year].

3. Objectives
The objectives of the partnership are:

i. To provide diagnosis and treatment services for TB control following the NTP strategy to contribute to achieving 70% case detection and 85% cure rates.
ii. To develop the capacity of health care workers to diagnose and treat TB and implement the NTP guidelines

The objectives of the Memorandum of Understanding are:

iii. To identify and establish the roles and responsibilities of the partners in the organization and delivery of TB care as per guidelines to populations referenced in Clause 1.

.
4. Terms, conditions, and specific services for the period of this agreement
A. The EDOH shall:

i. Provide start-up and recurring costs to the designated agency as detailed in this Memorandum.
ii. Provide anti-TB drugs to the designated agency. The amount of drugs provided will be sufficient to treat patients reported in quarterly reports and confirmed in the TB Register and through patient interview, plus a minimum of one month's buffer stock.
iii. Provide overall monitoring and quality assurance, including quarterly [or other frequency] site inspection visits, cross-checking of laboratory and TB registers as well as other medical records.
iv. Provide technical guidelines and updates (manuals, circulars, etc.) from the NTP to the designated agency and review educational materials to be used.
v. Provide technical training for all staff engaged in providing TB DOTS services.
vi. Provide TB and laboratory registers, laboratory forms, as well as reagents for patients undergoing sputum examinations.

B. The designated agency shall:

i. Assume responsibility for executing this project in the target areas specified in Clause 1 following NTP policy outlined in the National Guidelines for Diagnosis and Management of Tuberculosis [or other relevant NTP publication]
ii. Provide appropriate TB services according to NTP policy during the term of this agreement.

Diagnosis

iii. Provide its own medical officer, as its own sole expense, for diagnosis and treatment of tuberculosis. Liaise with qualified private practitioners in the area to establish a screening and referral system through which TB suspects are sent to the designated laboratories for sputum examination. Develop a referral system through which TB suspects are sent to the designated laboratories for sputum examination. Develop a referral system through which functionaries of all public dispensaries and clinics operating in the area are able to refer symptomatic patients to the designated microscopy laboratories.
iv. Perform acid-fast bacilli microscopy and maintain the laboratory register as per the NTP guidelines, ensuring that every patient whose sputum is examined is recorded in the TB laboratory register. Perform laboratory quality control as required. Not charge patients for AFB microscopy. Arrange for feedback of results of sputum examinations to public and private providers who referred the symptomatic patients.
v. Provide health education to the community.
    a) Generate health education and awareness in the community through meetings, discussion, posters, videos, slide shows and home visits.
    b) Prepare and disseminate literature and training materials.
    c) Inform the community about the dangers of TB, signs and symptoms, diagnosis and treatment facilities and prevention of TB through different local community forums. Cured patients can also play an important role in the identification and motivation of symptomatic persons for sputum examination and in ensuring that they take regular treatment. These patients can also be mobilized as health educators and DOT providers.
    d) All microscopy/treatment centres shall have the following message prominently displayed in the local language:
        1. All diagnosis and treatment of TB are free of cost.
        2. All persons with cough for 3 weeks or more should have 3 sputum samples examined.
        3. TB can be cured.

Treatment, including direct observation of therapy

vi. Provide anti-TB treatment as per NTP policy.
vii. Develop a system for direct observation and follow-up and return to treatment of non-adherent patients according to the NTP policy. Patients who miss a dose of treatment during the intensive phase are to be visited in their homes within one day of the missed dose, and, during the continuation phase, within one week of a missed dose.

Drug supply

viii. Maintain adequate inventories of drugs and consumables for smooth operation of the NTP in the area. Not charge patients for anti-TB medications given.

Monitoring and supervision

ix. Appoint a senior treatment supervisor, who shall perform the duties described in the NTP *Operational Guidelines* for TB Control [or other title]

x. Maintain a TB register and ensure that all patients who begin treatment are registered; ensure those patients are not already registered for TB treatment with another private or public facility
xi. Prepare and submit monthly and quarterly reports (New and re-treatment cases, Sputum Conversion, Results of Treatment, Programme Management and Logistics) to the DTC and according to NTP guidelines as per the schedule in this Memorandum.

C. Start-up and recurrent support
The following logistical support shall be provided

Start-up in-kind support (one-time only)
- [number] microscopes
- Training for [number] laboratory technicians
- Training for [number] general practitioners
- Training for [number] treatment supervisors
- Training for [number] informal providers/NGO community workers/other personnel in identification and referral of cases
- Initial stock of [number] reagents
- Initial stock of [number] treatment packs
- Initial stock of [number] referral and monitoring forms/registers

Recurrent in-kind support
- [number] reagents per quarter
- [number] treatment packs per quarter
- [number] referral and monitoring forms/registers per quarter

6. Penalties/guaranties
i. Either party shall have the right to terminate the understanding at any time with 30 days' notice in writing indicating reasons for the same to the other party. In-kind goods must be returned at the point of termination of this agreement.
ii. If the other party wishes to continue the contract, it must respond in writing within 30 days of receipt of the termination notice.
iii. If a resolution between the two parties is not possible, then the provincial TB officer shall attempt to resolve the dispute.
iv. Failure to implement the project as agreed upon in clause 5 may lead to termination of this agreement.

7. Programme monitoring
If the proportion of sputum smear-positive patients is less than half the number of pulmonary cases receiving treatment, or if the sputum conversion rate at three months for new smear-positive patients is less than 85%, intensive supervision and evaluation will be carried out collaboratively.

8. Programme evaluation
The NGO is required to submit to the DTCS quarterly reports on
1) new and re-treatment cases of TB;
2) sputum conversion of new cases, relapses and failures,
3) results of treatment of TB patients registered 12–15 months earlier,
4) programme management and logistics.

The DTC shall evaluate the performance of the designated agency in the implementation of this Memorandum of Understanding every six months in order to ensure the appropriate implementation of this agreement to assess the need for technical support.

9. Duration and Renewal

This MoU shall be valid from the first day of [month/year] to the last day of [month/year], unless terminated sooner by either of the parties hereto. The parties shall meet after the evaluation conducted at the end of the sixth months in order to discuss renewal of this agreement.

Signature of District Tuberculosis Officer

Signature of NGO Official/GP/SFO etc

APPENDIX 3: NTP TRAINING GUIDELINES - TOPIC GUIDE

1. An Introduction to TB and its Control in Pakistan
2. Effective Communication and TB Case Management: a Desk Guide
3. Identifying a TB Suspect
4. Diagnosing a Case of TB
5. Prescribing TB Treatment
6. Registering a TB Patient
7. Educating TB Patients and Managing Contracts
8. Explaining DOT and Selecting a Treatment Supporter
9. Preparing a Treatment Supporter
10. Patient Follow-up at a Treatment Centre
11. Patient Follow-up at a Diagnostic Centre
12. Managing Patients who Interrupt Treatment
13. Treatment Outcomes and Quality of Care
14. Quarterly Reporting on Case Finding (TB07)
15. Quarterly Reporting on Smear Conversion (TB08)
16. Quarterly Reporting on Treatment Results (TB09)

Source: Training Module for Doctors, NTP, Pakistan

APPENDIX 4: SUPERVISORY CHECKLIST FOR DISTRICT (TO BE USED BY NTP AND PTP)

Name of district: Name of Supervisor:		Date of visit:	
Name of Dist. Coordinator: Name Field Officer Name of Lab Supervisor:		Name of EDOH:	
Total Population:		Population covered through PPP:	
No. of private treatment providers in PPP:		No. of private laboratories in PPP:	
Names of private partners: 1. 2. 3. 4. 5. In case of GPs please print the name of area covered)			
Est. TB cases/quarter:		Est. new S+ cases:	
No. of monitoring visits to partnership facilities by DTC during last quarter: NGO Clinics: SFOs: GP clusters: Private Clinics: Solo GPs (rural only): Informal:			
District coordination Committee meeting conducted during last quarter Y/N			
Quarterly reports of partnership TB DOTS			
TB07			
No. of Laboratories:			
No. of reporting Laboratories:			
Total of column I in block -1 is consistent with total in block 2			Y/N
Ratio of new and smear-positive to new to new smear-negative extra pulmonary cases is 1:1			Y/N
Proportion of new smear-positive cases out of all pulmonary cases is more than 65%			Y/N
Case detection rate all TB cases:		Case detection rate S+ cases:	
TB08			
All S+ patients reported in TB07 of previous quarter evaluated in TB08	Y/N	No. of Laboratory reports received:	
Conversion rate (new + cases		Default rate (new + cases:	
TB09			
All S+ patients reported in TB07 12-15 months earlier equal to those evaluated in TB09	Y/N	Success rate (new cases)	Default rate (S+ cases)
Store			
		Situation	Remarks
Anti TB drugs sufficient in the stock		Y/N	
Anti TB drugs are properly stored		Y/N	
Are stocks of drugs expired or near to expiry?		Y/N	
Are drug kept under FEFO rules?		Y/N	
Are a sufficient quantity of sputum containers are in the stock		Y/N	
Are the stock of recording and reporting material is sufficient?		Y/N	
What are missing:			
Are sufficient lab reagents available		Y/N	

Source: NTP module for monitoring and supervision (modified).

APPENDIX 5: SUPERVISORY CHECKLIST FOR PARTNERSHIP LABORATORIES
(TO BE USED BY DTC, FIELD OFFICER AND PTP/NTP)

General information					
Name of District:					
Population of district:					
Name of Laboratory:					
Catchment population of facility					
No. of treatment providers receiving diagnostic services:					
Kind of laboratory:	NGO not-for-profit/Community based/ for-profit				
Date of visit:		Date of last visit			
Date of start of DOTS:		No. of visits in last 3 months			
Estimated new TB cases in review period		Estimated new sputum positive cases in review period			
Indent for supplies submitted	Y/.N	Indent received as demanded			Y/N
List of associated treatment providers available		Y/N			
Health education materials					
Posters for TB awareness displayed		TB advocacy kits available			
Trainings					
Laboratory in charge/section head trained	Y/N	Laboratory technician dealing Sputum Smear microscopy trained			Y/N
Management of contacts					
No. of contacts referred for sputum smear microscopy		No. of contact found sputum smear positive			
Laboratory and laboratory register (TB04)					
Workplace		**Yes**	**No**	**Remarks**	
Separate area for lab					
Security restricted access					
Efficient workflow					
General cleanliness, tidiness					
Running water, power, gas supply services					
Staffing					
Any change in the staff since last visit					
Appropriate training for all staff					
Staff adequate for workload					
Proper placement of trained staff					
Standard operating procedures materials					
Laboratory Manual available and accessible					
Smearing and staining charts displayed					
Grading chart displayed					
Laboratory register					
Register placed in laboratory					
Register neat and legible					
Register up to date					
Lab serial number practiced on yearly basis					
Positive results printed in red colour ink					
Data collection					
Quarterly workload report prepared on NTP format					
Report is accurate					

Supplies			
Adequate lab supplies for next quarter			
No recent (last quarter) run out of supplies			
Staining agents			
Staining agents prepared by District lab are used			
Staining reagents are labelled (name, concentration and expiry date)			
0.3% Carbol fuchsin			
0.3% Methylene Blue			
25% Sulphuric Acid			
Other Laboratory supplies (consumables)			
Glass slide			
Disposable plastic sputum containers			
Markers			
Filter paper			
Xylene			
Immersion oil			
Lens tissue/soft tissue/gauze			
Lab register			
Lab workload form			
Sprit for sprit lamp			
Disinfectant			
Laboratory supplies (non-consumables)			
Sprit Lamp or Bunsen burner			
Wire loop with holder/sticks			
Glass funnel			
Sand Alcohol bottle			
Forceps			
Bacteriology tray			
Amber glass or opaque plastic bottles for stains			
Staining racks			
Drying racks			
Slide boxes (storage of slides)			
Diamond pencils			
Red pen			
Laboratory safety and waste disposal			
Protective laboratory lab coat warn			
Rooms has sufficient ventilation and electric exhaust			
Fresh disinfectant readily available			
Staff has knowledge of TB symptoms			
Facility for hand washing available and functional			
Disposal of sputum containers and other infected material by burning/boiling			
Waste containers with lids			
Specimen submission			
Instructions given to patients			
Collection in ventilated area outside the room			
Specimen processed same day			
Sputum quality of submitted specimen is acceptable			

Smear examination			
Only new slides used for smear preparation			
Permanent labelling on smear slides			
Labelling includes lab serial number and specimen sequence number			
After smearing wire loop is disinfected in sand alcohol jar prior to sterilising it over flame			
Majority of smears are of appropriate size and thickness			
Staining			
All reagent bottles are labelled			
Positive & negative control done at least monthly to check the quality of stain			
Stained slide are blue in colour			
Microscopic examination			
Microscope is binocular, electric			
Microscope performance is acceptable (bright oil field)			
Positive slides are graded			
Results of randomly selected recent slides is correct			
Reporting and recording			
All patients reported positive in TB04 are registered in TB03 and vice versa			
All TB05 not collected (completed and incomplete) returned to the Doctor/DOTS Facilitator			
EQA blind rechecking			
All examined slides stored in serial order			
All slides of last quarter available			
Feedback on EQA received and filed			

APPENDIX 6: SUPERVISORY CHECKLIST FOR PARTNERSHIP TREATMENT PROVIDER

Date of visit:		Date of last visit:		Period under review:	
Name of district:					
Name of Treatment provider/centre:					
Name & designation of supervisor:					
Name of private provider:					
Type of Provider: NGO hospital/ Community based hospital/GP/SFO/Private Clinic					
Catchment population of centre:					
Date of start of DOTS:		Catchment population:		Distance from attached Lab.	
Period under review:					
Visits of any TB Supervisor in last 3 months:					
Doctor trained:	Y/N	Paramedic trained;		Y/N	
TB desk guide available:	Y/N	List and addresses of treatment supporter available		Y/N	
No. of treatment supporters		Health education material available		Y/N	
No of suspects identifies during last quarter			Sputum smear positive patients		
TB suspect identification rate			Sputum negative cases		
No. of suspects diagnosed as TB Patient by laboratory			Total sputum smear positive cases started treatment in review period		
Treatment card					
No. of new smear positive cases started treatment		No. of patient with treatment supporter			
No. of patients completed intensive phase (treatment support card deposited)		No. of cards with more than two weeks interruption in continuation period and no retrieval of patients			
Stores					
Is indent for supplies submitted?	Y/N	Is indent supplied by the district as per demand submitted?		Y/N	
Always sufficient quantity of ATT available	Y/N	Are ATT are stocked properly?		Y/N	
Are drugs and supplies store off the floor?	Y/N	Are the stocks of ATT expired or are near to be expired?		Y/N	
Are drugs kept according to FEFO	Y/N	Are sufficient management tools available all the time?		Y/N	
Treatment support cards	Y/N	Sputum examination forms (TB05) available		Y/N	
Sufficient number of sputum cups always available	Y/N				

APPENDIX 7: SUPERVISORY CHECKLIST FOR TREATMENT SUPPORTERS

Checklist for Treatment Supervisor (used by DTC and treatment provider)

General information		
Date of visit:	Date of last visit:	Period under review:
Name & designation of supervisor:		
Name of district:		
Name of Treatment Supervisor:		
Affiliation of Treatment Supervisor: LHW/ HFS/ SFO/ NGO/ CBO/ FBO/ Informal treatment provider/ Or Other (please specify)…….. Name of organisation in case of SFO/NGO/CBO/FBO: …….. ……		
Name of Treatment provider/centre:		
Type of Provider: NGO hospital/ Community based hospital/GP/SFO/Private Clinic		
Names of patients under supervision: 1. …….. ……Date of start of DOT:…… 2. …….. ……Date of start of DOT:…… 3. …….. ……Date of start of DOT:……		
Verification for DOT: Treatment card/ through interview of patient/ empty medicine packs/ Other (please specify)…….....		

Training status; Yes/No			
Knowledge of TB and DOT:			
Knows Symptoms of TB	Yes/ No	Can store medicines properly	Yes/ No
Knows common side effects of medicine	Yes/ No	Empty medicine packs available	Yes/ No
Aware of importance of regular intake of Medicine	Yes/ No	Sufficient doses of ATT available	Yes/ No
Knows when to advise patient to visit treatment provider	Yes/ No	Can advise on side effects	Yes/ No
Can fill and read TB05 card	Yes/ No	Acquainted with DOT practices	Yes/ No
TB05 Card correctly filled	Yes/ No	Regularly visiting patient	Yes/ No
Knows the correct doses of medicine	Yes/ No	Liaise with Treatment provider	Yes/ No

Remarks/ recommendations: ……

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……..

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APPENDIX 8: LIST OF INTERVIEW PARTICIPANTS:

National TB Control Programme:
Dr Syed Karam Shah, National Manager, TB Control Programme Pakistan
Dr. Hasan Sadiq, National TB Control Programme Pakistan
Dr. Saima Tahir, Deputy Manger, National TB Control Programme Pakistan
Dr. Unaiza Shaikh, Technical Officer, National TB Control Programme Pakistan
Dr. Ejaz Qadeer, Research Coordinator, National TB Control Programme Pakistan
Dr. Sabira Tahseen National Programme Officer, Reference Laboratories WHO/USID
Dr. Akhter Ali, PPM Coordinator, TB Control Programme Pakistan
Dr. Raja Mohammed Ayub, Coordinator GFATM
Dr. Ali Akber, NPO, Technical Unit, TB Control Programme Pakistan
Mr. Amanullah, Task Coordinator BCC, GFATM

Provincial TB Control Programmes:
Dr Iqtadar Ahmed, Director TB Control Programme Sindh
Dr. Baseer Achakzai, Manger TB Control Programme Balochistan
Dr. Lubna Khalil, Deputy Manger, TB Control Programme Balochistan
Dr Ashraf Bugti, NPO, WHO/USAID
Dr. Asmat Ara, Deputy Director, TB Control Programme Sindh
Dr. Nazir Ahmed Shaikh, NPO WHO/USAID, Balochistan

NGO Partners:
Dr. Syed Hussian Hadi, Coordinator PATA
Dr. Murtaza Shah, Coordinator BDN
Dr. Fareed Midhat, The Asia Foundation
Dr. Akmal Naveed, Association for Community Development
Dr. Victor Lara, Senior Technical Advisor, PSI, Pakistan
Dr. Abdul khaliq Ghuori, GreenStar
Dr. Tasleem Iqbal, GreenStar
Dr. Shafiquddin Rashid GreenStar
Dr. Yaser Adnan, GreenStar
Dr. Arif Noor, Mercy Corp
Dr. Saeedullah Khan, Mercy Corp
Dr. Nouman safder, Association for Social Development, Islamabad
Dr. Abdul samad Shaikh, District Anti TB Association Hyderabad
Dr. Zahida Perveen Memon, AKHSP
Dr. Imthiaz Molwani, AKHSP
Mr. Bachoo Rehmatullah General Secretary, Bantva Memom Khidmat Committee
Dr. Asif Memon, Bantva Hospital Karachi
Dr. Sobia Danyal, Dr. Essa's Laboratory and Dignostic Centre, Karachi

APPENDIX 9: LIST OF PARTICIPANTS OF WORKSHOPS

PARTICIPANTS OF CONNSULTATIVE WORKSHOP ON SITUATION ANALYSIS PPP 27th JULY 2006					
S #	**Name**	**Designation**	**S #**	**Name**	**Designation**
1	Dr. Syed Karam Shah	Manager NTP	13	Dr. Amir Khan	Chairman ASD
2	Dr. Baseer Achakzai	Manager PTP Balochistan	14	Dr. Arif Noor	Program Manager Mercy corps
3	Dr. Iqtidar Ahmed	Director TB Control Programme Sindh	15	Dr. Ismat Ara	Dy. Director PTP Karachi
4	Dr. Darakhshan Badar	Manager PTP Punjab	16	Dr. Mikio Tsukamoto	Coordinator JICA
5	Dr. Sabira Tahseen	Program Officer NRL	17	Dr. Ghulam Murtaza	Consultant BDN GFATM
6	Dr. Ejaz Qadeer	Research Coordinator NTP	18	Dr. Sameh Yousaf	Team Leader GTZ STCP
7	Dr. Unaiza Shaikh	National Technical Officer NTP	19	Dr. Akmal Naveed	M.D ACD
8	Dr. Hussain Hadi	Consultanat PATA	20	Dr. Farooq Khattak	Dy. Manager PTP NWFP
9	Dr. Raja Ayub	Coordinator GFATM	21	Dr. Zaiullah	Pulmonolgist SR Peshawar
10	Dr. Hassan Sadiq	Senior Advisor GTZ	22	Dr. Naseer hmed Baloch	President PMA
11	Dr. Muhammad Arif	Programme Coordinator TAMA	23	Dr. Nadeem Hassan	EDO (H) Rawalpindi
12	Dr. Ahsan Qadeer	Health Specialist USAID			
PARTICIPANTS OF CONSULTATIVE WORKSHOP ON PPP MODELS development for NTP PAKISTAN 18th August 2006					
1	Dr. Hassan Sadiq	Dy. National Manager NTP	13	Dr. Iqtidar Ahmad	Manager PTP Sindh
2	Dr. Hussain Hadi	Consultanat PATA	14	Dr. Muhammad Arif	Programme Coordinator TAMA
3	Dr. Farooq Khattak	Dy. Manager PTP NWFP	15	Dr. M. Razzaq	Dy Manager PTP Punjab
4	Dr. Arif Jamal	Medical Officer Noshera	16	Dr.Akmal Naveed	M.D ACD
5	Dr. Akhtar Ali	NPO Punajb	17	Farid Midhat	Dir. Health Prog TAF
6	Dr. Lubna Khalil	Dy. Manager PTP Balochistan	18	Dr. Qaiser Pasha	STA TAMA
7	Dr. Sabira Tahseen	Program Officer NRL NTP	19	Dr. Nekdad	Consultant CIDA
8	Dr. Unaiza Shaikh	National Technical Officer NTP	20	Dr. Sameh yousaf	Team Leader GTZ STCP
9	Dr. Naseer Ahmad Balcoch	President PMA	21	Dr. Thomas Chiang	Consultant GLRA
10	Dr. Ejaz Qadeer	Research Coordinator NTP	22	Dr. Saima Tahir	Medical officer NTP
11	Dr. Raja Ayub	Coordinator GFATM	23	Mr. Muhammad Ejaz	Network Admin NTP
12	Dr. Arif Noor	Program Manager Mercy corps	24	Mr. Tanveer Ahmad	National TB Control Prog

APPENDIX 10: MINUTES OF CONSENSUS BUILDING WORKSHOP

Consensus building Workshop on public-private partnership for National TB Control Programme Pakistan

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Minute of meeting

Date: 25th August 2006
Venue: Marriot Hotel, Islamabad
Participants: Appended in the report

Inaugural Session:
Inaugural session opened with the recitation of verses from the Holy Quran. After formal introduction of participants, Dr Syed Karam Shah well come all the participants and highlighted the importance of involvement of private providers in the TB DOTS. He has showed strong commitment for the implementation of PPP DOTS and highlighted the NTP preparedness and resources for entering into this unique partnership. He expressed full NTP support to the private providers. Dr Syed Karam Shah acknowledged the support provided by DFID and TAMA for the development of PPP models for NTP and praised the hard work of Dr. Noor Ahmad and Gillian Mann during the preparation of PPP models.

Dr. Knut Lonnorth addressed the audience and gave an overview of public-private partnership and discussed the role and support of WHO for the PPP.

Mr. Farooq Azam, Country Director TAMA appreciated interest of participants and discussed the technical support provided by the TAMA.

Dr. Hassan Sadiq praised the work done so far and mentioned that models are best and were developed in consultation with the programme.

After the Tea Break Dr. Noor Ahmad gave a presentation on the situation analysis and PPP models, operational plan, and monitoring mechanisms.

During the discussion session, most of the participants discussed and commented on the report. The important comment came from PTP Punjab that PPP activities will over burden the District Coordinator. It was explained that for PPP, the District Coordinator will be supported by Field Officer and Laboratory Supervisor. District Coordinator will be provided a vehicle and POL and 20% allowance through PC 1. The other two officials will also have motor bikes. It is envisaged that through these incentives District Coordinator will be able to manage additional work related to PPP.

It was explained that the PPP activities will be implemented in phased manner and the selection of private practitioners will be limited according to the population of the Districts and districts will have the flexibility to adopt the models according to their requirement.

It was also suggested that the responsibility of M&E of PPM at district level will be assigned to a designated Medical officer who may or may not be a District TB Officer.

Dr Hasan Sadiq explained that the issues are related with the implementation and operations, therefore, if needed these operational guidelines will be further expanded or adapted in accordance with the needs of district.

Finally report on PPP models and operational Plans was unanimously endorsed and approved by the all the stakeholders.

Participant List of Consensus building Workshop					
S #	**Name**	**Designation**	**S #**	**Name**	**Designation**
1	Dr. Syed Karam Shah	National Manager NTP	39	Dr. Muzaffar Ali Khooharo	NPO
2	Dr. Hassan Sadiq	Dy. Manager NTP	40	Ms. Najma Chand	Sociologist
3	Dr. Syed Hussain Hadi	Consultant PATA	41	Dr. Darakhshan Badar	PTP Manager Punjab
4	Dr. Unaiza Shaikh	National Technical Officer	42	Dr. Muhammad Naeem	Add. Director PTP Punjab
5	Dr. Ejaz Qadeer	Research Coordinator	43	Dr. Basharat Javed	NPO
6	Dr. Raja Ayub	GFATM Coordinator	44	Dr. Muhammad Tehseen	NPO
7	Dr. Ali Akbar	Assistant Coordinator	45	Dr. Asif Mehmood	NPO
8	Dr. Sabira Tehseen	Ref. Lab NTP	46	Ch. Muhammad Anwar	Sociologist
9	Dr. Javed Hayat	Assistant Coordinator	47	Dr. Abdul Salam	FPO Northern Area
10	Dr. Saima Tahir	Medical Officer NTP	48	Dr. Saima Gulfam	Dy. Prog Manager FATA
11	Dr. Nek Dad	CIDA Prog. coord.	49	Dr. Guftar Ahmed	EDO(H), Khushab
12	Dr. Akhtar Ali	Coordinator PPP	50	Dr. Sarfraz Khan	Prog Director Khushab
13	Dr. Zafar Toor	NPO	51	Dr. Razia	WHO Fellow
14	Dr. Shaheen	CIDA Prog. Coord.	52	Dr. Arif Munir	PMRC
15	Dr. Saira Bilal	Consultant GFATM	53	Dr. Saeedullah	P.D Mercy Corp
16	Dr. Abdul Ghafoor	PTP Manager NWFP	54	Dr. Umer Toufeeq	Health Coordinator MC
17	Dr. Farooque Khattak	Dy. PTP Manager NWFP	55	Dr. Haroom Ibrahim	SPO Mercy Corp
18	Dr. Saeed Anwar	NPO	56	Dr. Rizwana Zahid	FMO Mecy Corp
19	Dr. Maqsood Ali Khan	NPO	57	Dr. Ghulam Murtaza	Consultant BDN
20	Dr. Abdul Latif	NPO	58	Dr. Amir Khan	Chairman ASD
21	Dr. Khawaja Laeeq	NPO	59	Dr. Victor Laura	Country Rep Green Star
22	Dr. Syed Naser Shah	NPO	60	Ms. Supriya Madhavan	GM Green Star
23	Dr. Baseer Achakzai	PTP Manager Balochistan	61	Dr. Abdul Khaliq Ghuri	Sr. Prog. Mng Green Star
24	Dr. Lubna Khalil	Dy, Manager Balochistan	62	Muhammad Uzair	Coordinator MALC
25	Dr. Nawaz Shah	NPO	63	Ch. Muhammad Nawaz	President PATA
26	Dr. Younas Baloch	NPO	64	Dr. Arif Jamal	NGO Gujranwala
27	Dr. Ashraf Bugti	NPO	65	Dr. Farrukh Altaf	NGO Gujranwala
28	Dr. Muhammad Din	NPO	66	Mr. Farooq Azam	Country Rep. TAMA
29	Dr. Lashkar Khan	NPO	67	Dr. M. Arif	Prg. Coordinator TAMA
30	Dr. Iqtidar Ahmed	PTP Manager Sindh	68	Dr. Sameh Yousaf	Team Leader GTZ
31	Dr. Abdul Karim Shaikh	Dy. Director (Larkana)	69	Dr. Naseer Baloch	President PMA Karachi
32	Dr. Abdul Rashid Shaikh	Dy. Director (Sukker)	70	Dr. Ahsan Qadeer	USAID
33	Dr. Mazhar Rasool	Dy. Director, Hyderbad	71	Dr. Thomas Chaing	Consultant GLRA
34	Dr. Ismat Ara	Dy. Director (Karachi)	72	Mr. Mikio Tsukamoto	Coordinator JICA
35	Dr. Nazir Ahmed Sheikh	NPO	73	Dr. Lornnorth Knut	WHO Geneva
36	Dr. Javed Akhtar Sheikh	NPO	74	Mr. Muhammad Ejaz	Network Admin NTP
37	Dr. Syed Saleem Hassan	NPO	75	Mr. Tanveer Ahmad	National TB Control Prg
38	Dr. Amanullah Ansari	NPO			