

# Public-Private Mix for TB Care and Control A Toolkit



WHO Library Cataloguing-in-Publication Data

Public-private mix for TB care and control : a toolkit.

1.Tuberculosis - prevention and control. 2.Tuberculosis - organization and administration. 3.Tuberculosis, Multidrug-resistant. 4.Directly observed therapy. 5.Private sector. 6.Public sector. 7.Nongovernmental organizations. 8.Guidelines. I.World Health Organization.

ISBN 978 92 4 150048 7

(NLM classification: WF 200)

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Designed by YAT Advertising  
Printed in Egypt

The Global Health Bureau, Office of Health, Infectious Disease and Nutrition (HIDN), US Agency for International Development, financially supported this document through TB CAP under the terms of Agreement No. GHS-A-00-05-00019-00.

### **Background**

Recognizing that strengthening DOTS implementation by national TB control programmes (NTPs) is essential but not enough to meet the global TB control targets, the Stop TB Strategy of the World Health Organization (WHO), adopted by most countries, recommends systematic engagement of all care providers in TB care and control through public-private mix (PPM) approaches.

It is common knowledge that people with symptoms suggestive of TB approach a wide range of health care providers outside the purview of NTPs. These may include care providers within the public sector (general and specialty hospitals; academic institutions; prison, military or railway health services; health insurance organizations, etc.), within the voluntary sector (nongovernmental organizations, community-based or faith-based organizations, etc.) and within the private and corporate sectors (formal and informal private practitioners including traditional healers and, pharmacies, and private and corporate hospitals and institutions). PPM implies engagement of diverse care providers in TB care and control led, guided and supported by NTPs.

The diversity of health care providers and their capacities to contribute to TB care and control vary greatly across and within countries. WHO guidelines to help implement PPM for engaging diverse care providers provide only broad principles of engagement of individual and institutional care providers within and outside the public sector. There has been a felt-need and demand for more specific guidance to NTPs on working with diverse care providers based on country experiences. This toolkit attempts to address this need.

It is hoped that the toolkit will help NTPs engage non-NTP care providers to deliver services in line with national guidelines based on International Standards for Tuberculosis Care.



### The toolkit

This toolkit is designed to provide information at a glance and practical guidance. It may be necessary to adapt the guidance provided in the tools to suit the country needs and contexts.

The toolkit consists of 14 tools, the first seven tools outline basic aspects of PPM implementation, while the remaining seven tools address engagement of specific types of care providers. The tools are listed below.

1. Rationale and generic approach
2. National situation assessment
3. Operational guidelines
4. Advocacy, communication and social mobilization
5. Monitoring and evaluation
6. International Standards for Tuberculosis care
7. Resources and budgeting
8. Engaging private practitioners
9. Engaging hospitals
10. Engaging nongovernmental organizations
11. Engaging workplaces
12. Engaging social security organizations
13. Engagement for TB/HIV collaboration
14. Engagement for programmatic management of drug-resistant TB

Each tool provides references to background documents where additional information may be obtained. Soft copies of the tools and reference documents can be found in the compact disc (CD) provided with this toolkit.

The toolkit is also available online:  
[http://www.stoptb.org/wg/dots\\_expansion/ppm/toolkit.asp](http://www.stoptb.org/wg/dots_expansion/ppm/toolkit.asp)

The online version will serve as a living document for revising existing tools, adding new tools and updating background references.

### Abbreviations

ACSM	Advocacy, Communication and Social Mobilization
ART	antiretroviral treatment
ATS	American Thoracic Society
CPT	co-trimoxazole preventive therapy
DEWG	DOTS Expansion Working Group
DOTS	The internationally recommended strategy for TB control
FHI	Family Health International
Global Fund	Global Fund to Fight AIDS, Tuberculosis and Malaria
HBC	high TB-burden country
HDL	hospital DOTS linkage
HIV/AIDS	human immunodeficiency virus/acquired immunodeficiency syndrome
ILO	International Labour Organization
ISTC	International Standards for Tuberculosis Care
JATA	Japan Anti-Tuberculosis Association
KNCV	Royal Netherlands TB Association
MDG	Millennium Development Goals
MDR-TB	multidrug-resistant tuberculosis
MSH	Management Sciences for Health
NGO	nongovernmental organization
NTP	national tuberculosis control programme
PLHIV	people living with HIV
PP	private provider
PPM	public-private mix
PPM Subgroup	Subgroup on Public-Private Mix for TB care and control
TB	tuberculosis
The Union	International Union against Tuberculosis and Lung Disease
USAID	United States Agency for International Development
WHO	World Health Organization
XDR-TB	extensively drug-resistant tuberculosis

*This tool provides the rationale and generic approach for implementing PPM to engage all care providers in TB care and control, highlighting how PPM is beneficial to country programmes.*



### **Rationale**

In most resource-poor countries with a high TB-burden, patients with symptoms suggestive of TB seek care from a wide array of health-care providers. These care providers, often not linked to public sector-based NTPs, may serve a large proportion of TB suspects. The size, types and roles of these care providers vary greatly within and across countries. In some settings there is a large private commercial sector and numerous NGOs while in others there are public sector providers (such as general and specialized hospitals) that operate outside the scope of NTPs. Evidence suggests that failure to involve all care providers used by TB suspects and patients hampers case detection, delays diagnosis, leads to inappropriate and incomplete treatment, contributes to increasing drug resistance and places an unnecessary financial burden on patients.

Engaging all relevant health care providers in TB care and control through public-private mix approaches is an essential component of the WHO's Stop TB Strategy. PPM for TB care and control represents a comprehensive approach for systematic involvement of all relevant health care providers in TB control to promote the use of the ISTC and achieve national and global TB control targets. PPM encompasses diverse collaborative strategies such as public-private (between NTP and the private sector), public-public (between NTP and other public sector care providers such as general hospitals, prison or military health services and social security organizations), and private-private (between an NGO or a private hospital and neighborhood private providers) collaboration. PPM also implies engaging relevant care providers in prevention and management of MDR-TB and in the implementation of TB/HIV collaborative activities.

Country experiences and scientific evaluations have amply demonstrated that PPM contributes to the six public health dimensions (please refer to the box).

### *Evolution and evidence of PPM*

The evolution of PPM for TB care and control dates back to 1999-2000, when WHO conducted a global assessment on the role of private providers in TB control in 23 countries across six WHO regions. This was followed by a detailed evaluation of a few pilot PPM initiatives, leading to the development of practical tools for PPM implementation.

The DOTS Expansion Working Group (DEWG) of the Stop TB Partnership established a Subgroup on Public-Private Mix for TB care and control (PPM Subgroup) in 2002. The Subgroup has further stimulated country action with a focus on:

- Providing a platform for sharing of country experiences on initiating and expanding PPM activities;
- Widening the scope of PPM to include all public and private health care providers not formally linked to NTP;
- Intensifying advocacy and technical assistance for PPM to overcome barriers for its scaling up; and
- Stimulating evaluation and operational research to strengthen the evidence base for PPM.

Currently, nearly all high TB-burden countries are implementing PPM activities. Fifty-eight of 93 countries and multi-country recipients of Global Fund-supported TB grants had PPM activities in 2008. Several project evaluations have shown that PPM could help increase case detection (between 10% and 60%), improve treatment outcomes (over 85%), reach the poor and save costs. A full list of evaluation reports and scientific publications is provided on the CD. Further information, including country case studies can be found on the PPM website:

<http://www.who.int/tb/careproviders/ppm/en/>

### *The generic PPM approach*

The WHO policy on engaging all care providers in TB care and control provides guidance on practical steps that countries should undertake to involve various providers in TB control efforts. There is no one-size-fits all PPM approach. It is crucial that PPM is planned based on a national situation assessment.

## Box

### *PPM contribution to public health*

#### *Enhanced quality of diagnosis, treatment and patient support*

PPM can reduce malpractice by fostering evidence-based TB diagnosis and treatment in line with the ISTC. This improves cure rates and reduces risks of drug resistance. It also limits misdiagnosis of TB and, unnecessary and often costly treatment.

#### *Increased case detection and reduced diagnostic delays*

PPM can help increase TB case detection and reduce diagnostic delays by involving all health care providers in timely referral and diagnosis of TB. This also helps cut the chain of transmission at an early stage.

#### *Improved and equitable access*

PPM can improve access to treatment and help overcome barriers such as stigma, by involving health care providers from whom the poor, marginalized and most vulnerable seek care.

#### *Reduced cost of care and financial protection for the poor*

PPM reduces costs to patients by ensuring that treatment for TB is free of charge and all other costs are kept to a minimum. PPM can also reduce indirect costs for patients by providing services closer to their homes or workplace.

#### *Ensured gathering of essential epidemiological data*

PPM contributes towards completeness of epidemiological surveillance on TB when all care providers who diagnose and treat TB follow proper TB recording and reporting routines linked to national information systems.

#### *Improved management capacity*

PPM improves management capacity of both the public and the private sector, and can contribute to health systems strengthening in general.

## Rationale and generic approach

In PPM, the NTPs are mandated to shoulder the stewardship role, to ensure that technical standards are met, drugs are provided free of charge to patients, and that all aspects of coordination, training, contracting, supervision and surveillance are carried out as per NTP guidelines. Suitable roles for different health care providers should be allocated according to the need of the programme, and the capacity and willingness of different health care providers.

The generic PPM approach involves the following main steps each of which requires provision of adequate human and financial resources:

### 1. A national situation assessment

National situation assessment is the first step to determine the need and possible ways to implement PPM interventions. Please refer to tool 2 for detailed information.

### 2. Creating national resources for PPM

It is important that a PPM focal point, and where required a steering committee and a team of consultants for support, should be appointed at the central level to coordinate and facilitate PPM implementation.

### 3. Developing national operational guidelines on PPM

Operational guidelines, to clarify the roles and responsibilities of NTP staff and non-NTP health care providers,



should be developed and implemented in consultation with relevant stakeholders. Please refer to tool 3 for detailed information.

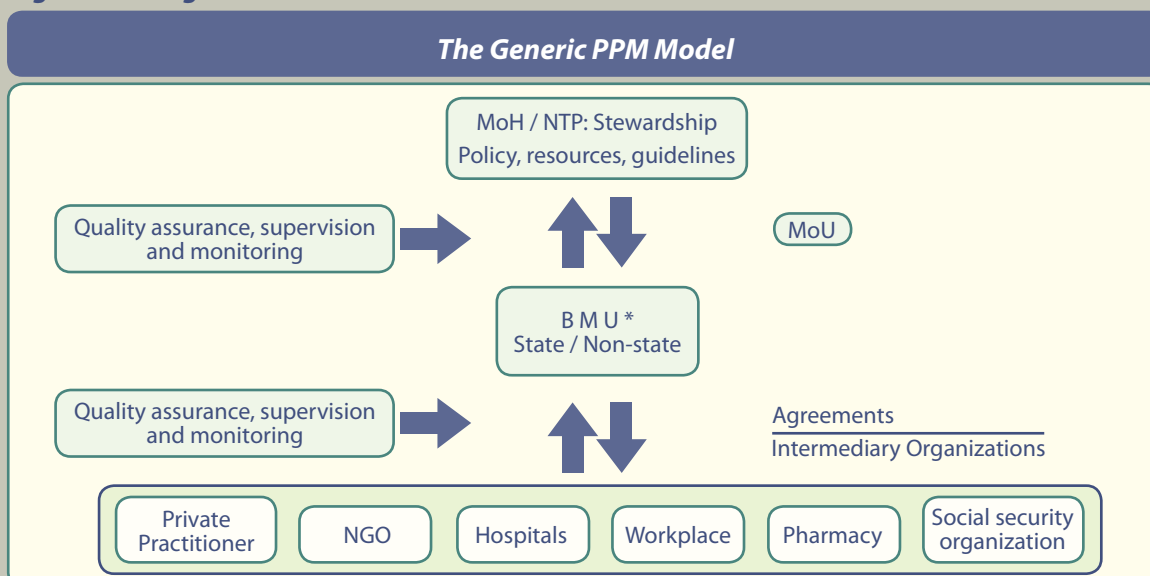
### 4. Local implementation

The key steps in local implementation of PPM for TB control include:

- Preparation
- Mapping of providers
- Proper implementation
- Advocacy and communication

Please refer to tool 3 for detailed information.

Figure 1. The generic PPM model



\* Basic Management unit

### 5. Supervision and monitoring

The main aim of implementing PPM is to improve case detection and case management by bringing all patients managed by diverse health care providers under DOTS. Supportive supervision is important to monitor the progress of PPM in relation to defined objectives. This activity could be coordinated by the NTP and carried out in collaboration with professional associations or NGOs.

The details of the different steps, and special considerations for different types of providers are further discussed in other tools in this toolkit.

### CASE STUDY: Pakistan

Pakistan's large and diverse private health sector (both profit and not-for-profit) is extensively used by TB patients. In recent years, successive NTP managers have given high priority to developing viable partnerships with health care providers in this sector by using a systematic approach that is consistent with the steps recommended in WHO guidelines.

Introducing PPM began with a situational analysis that was used to design a range of PPM models suitable for the following types of providers: NGO clinics with and without laboratories; individual general practitioners (GPs); GPs who are grouped in clusters or linked to NGOs involved in social franchising; private clinics and hospitals; and informal providers (including both those who practice conventional medicine and those who do not).

Developing national operational guidelines as a foundation for countrywide implementation was followed by establishing and funding staff positions specifically for PPM at national, provincial and district levels. The government also made a strong financial commitment, with 39% of the domestic funding available for TB control allocated to PPM in the 2005–2010 development plan.

The operational guidelines provide practical advice on several key topics, including the role of agreements with decision makers at district level; creation and maintenance of Public-Private Partnership (PPP) coordination committees at provincial and district levels (with functions similar to those of the national steering committee);

### Key background reading

- Engaging all health care providers in TB control - guidance on implementing public-private mix approaches. Geneva: World Health Organization, 2006 (WHO/HTM/TB/2006.360). [http://whqlibdoc.who.int/hq/2006/WHO\\_HTM\\_TB\\_2006.360\\_eng.pdf](http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.360_eng.pdf)



identification and selection of private partners; the value of a memorandum of understanding and how to develop one; training and certification of providers; monitoring and supervision; recording and reporting; and how to ensure that the general public is properly informed.

Many partners are now contributing to TB control via PPP schemes, and evidence of their contribution to case detection is emerging. Currently, 1600 GPs and 110 NGOs are engaged in PPM activities. PPM models contributed 16% of TB cases detected in 2009, and a treatment success rate of 84% in 2008.



*The tool describes how to undertake a national situation assessment before designing and implementing PPM for engaging all care providers in TB care and control in a country.*



### **Rationale**

The aim of the National Situation Assessment (NSA) tool, is to collect and collate information on all aspects of PPM for TB care and control in the country, and to facilitate the use of this information to assist the systematic implementation of PPM.

Once the NSA is complete, the programme should be able to answer the following questions:

- when, where and how should PPM be implemented?
- what inputs are needed in order to do so?

### **Evidence**

The NSA tool has been used by over twelve countries in the African and Eastern Mediterranean regions, with support from PPM consultants to determine the priorities and possible ways to implement PPM interventions. Based on this assessment, the countries then developed operational plans to facilitate systematic PPM implementation.

### **The process**

The detailed steps in conducting a NSA are outlined below:

#### **1. Form a consultative committee of stakeholder representatives**

The NSA should follow a participatory process. Representatives of relevant stakeholder groups, such as the health ministry, regulatory agencies, academic institutions, professional organizations, civil society, consumer organizations and the pharmaceutical industry, should be approached to form a consultative committee for the NSA. A relevant and legally recognized body may facilitate the consultative meetings for it to gain acceptance. Since the ministries of health in most countries have the mandate to provide leadership within the health sector, NTPs may initiate this process on their behalf where applicable. Through a process of consensus and dialogue, a vision for the NSA should be developed, taking into account the positions of the various stakeholders.

## 2. Identify existing information and information still required

To a large extent, data will be available through secondary sources of information such as reports of the government and funding agencies, independent research studies, and through consultations with experts, stakeholders and programme staff. The topics and possible sources of information are listed in the comprehensive NSA tool (please refer to the background reading section). Existing information should be shared with the consultative committee, gaps in knowledge identified, and priorities for further exploration or research determined.

## 3. Collect data

The NSA can be conducted by the NTP or be contracted out to relevant partners such as nongovernmental organizations or professional associations working in TB control under the supervision of the NTP. Alternatively, trained PPM consultants could also be recruited to carry out the assessment. If there is a deficiency of readily available information on necessary topics, fresh research studies or secondary literature reviews may have to be conducted. These can also be commissioned from independent research agencies.

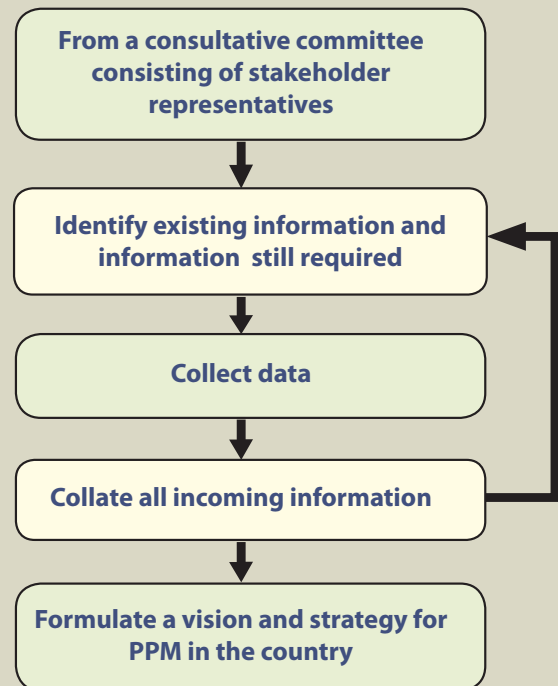
## 4. Collate all incoming information

Information from the NSA on the listed topics, including secondary research, any new primary research and PPM monitoring data, should be managed by the PPM focal point at a central level. This information should be regularly updated and fed back to the consultative committee.

## 5. Formulate a vision and strategy for PPM in the country

One of the main purposes in undertaking a NSA is to help formulate a vision and strategy for PPM in the country. The consultative team of stakeholder representatives and programme staff may be called together for meetings or a workshop to decide on a vision and strategy for phased implementation and scale up of PPM in the country. Key issues such as which provider groups should be involved, when, in which sequence, for what purpose, how, and the roles and responsibilities of stakeholders should all be sorted out jointly through consensus.

Figure 1. Steps in conducting a NSA



## Information to be collected with the NSA

### Epidemiology of TB

A proper understanding of TB burden by region, case notification, case detection gaps, TB/HIV co-infection and multi-drug resistant TB (MDR-TB), should be included in the areas of inquiry to provide the logic for planning PPM activities.

### Use of health services by people

Knowledge about people's health seeking behavior, delays and discontinuities in diagnosis and treatment and costs of care, identifies gaps that PPM could address. It also facilitates identification of sections of care providers that should be targeted.

### Composition and characteristics of non-NTP institutions and care providers

It is important to understand who are the different care providers engaged in providing TB care and categorize institutions and individual providers that can be engaged in PPM implementation.

# National situation assessment

## Preparedness of the NTPs

Before engaging other health care providers in TB control, NTPs should have demonstrated successful implementation of DOTS. NTPs must also demonstrate capacity to collaborate and extend important key TB control activities and support e.g. quality assurance of laboratories, and supervision to other providers.

## Policy and regulatory environment

The NTPs should be familiar with existing policies and regulations facilitating PPM implementation and capitalize avenues to advocate for legal instruments conducive to the process.

It is essential to ascertain the existence of any regulatory agencies for medical education, medical services, diagnostic laboratories, and for pharmaceutical production and sale, and to study their rules. Laws and policies pertaining to health care and drug production should also be analyzed.

For detailed action points on how to use the outputs of the NSA please refer to Figure 2.

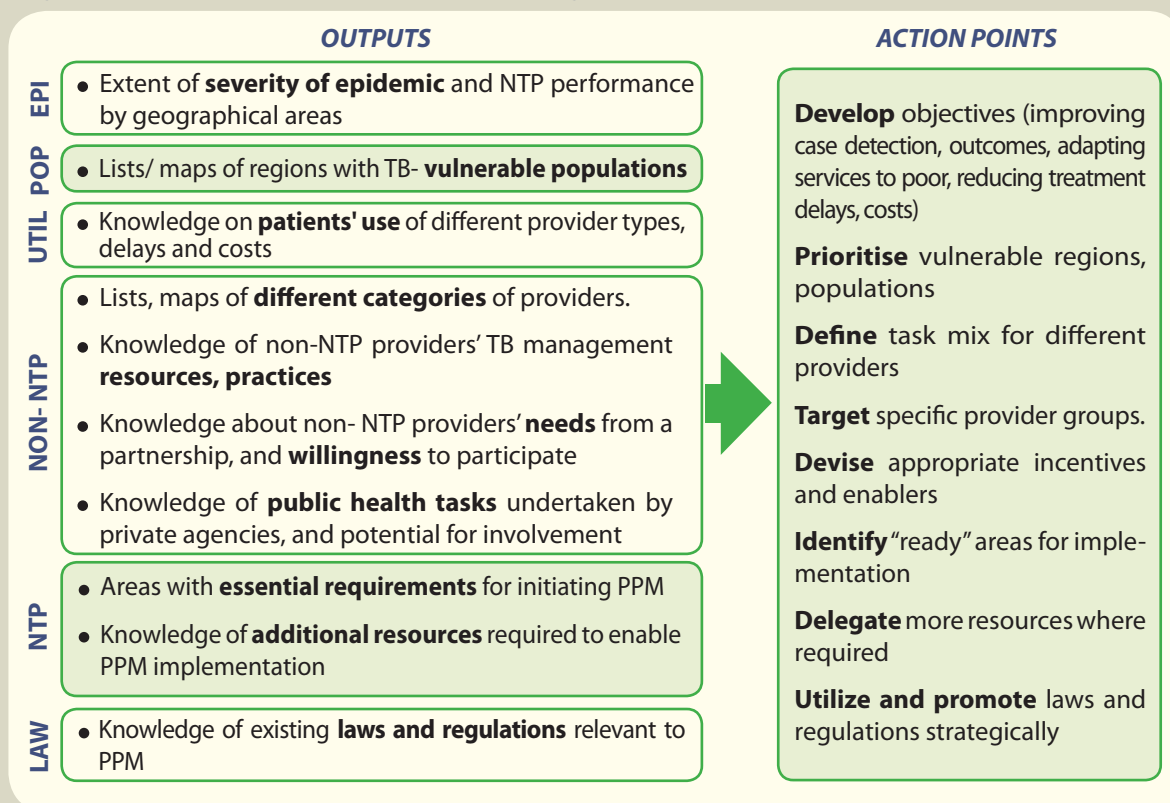
NTP may also advocate for new regulations, or refinement and enforcement of existing ones. For example, many countries have a policy for notification of all TB cases diagnosed or treated outside NTP facilities. If such legislation exists, PPM should facilitate its enforcement. Over the counter sale of anti-TB drugs should be prohibited. Moreover, restricting prescribing and dispensing rights of anti-TB drugs to accredited providers would also facilitate PPM. Free supplies of anti-TB drugs to non-NTP providers may be linked to a system of formal certification or accreditation to ensure their proper use.

## Using the outputs of the NSA

The NSA will inform the creation of national resources and contribute to the development of a country-specific operational plan for implementation of PPM. Practical recommendations should then be formulated on the next steps to be initiated and the roles of various stakeholders in taking PPM implementation forward.

It is important to note that the tool provides only a general framework for conducting a NSA. It is expected that countries will tailor the tool to match their national context so that it covers country-specific issues.

Figure 2. Outputs and action points for using the NSA



**CASE STUDY: Nigeria national situation assessment (2007)****TB epidemiology**

Incidence (ss+ cases/100 000 population/year)	123
Prevalence (all cases/100 000 population)	536
Mortality (deaths/100 000 population/year)	76
Notification rate (new ss+ cases)	27
DOTS case detection rate (new ss+ cases, %)	22
DOTS treatment success (new ss+ cases, %)	73

**Health-care-seeking behaviour in the public and private sectors**

- Private not-for-profit health institutions (mainly mission hospitals) are the main health care providers for patients.
- In many states in southern Nigeria, private hospitals provide an estimated 60-70% of health care.
- People seek care for TB between two and six other providers before coming to DOTS centres.

**High-risk groups**

- People living with HIV/AIDS and those living below the poverty line are the main populations vulnerable to TB.

**Cost of care**

- In a study by the German Leprosy and Tuberculosis Relief Association (GLRA), only 6% of the patients said that the cost of TB treatment with NTP was too high while 5% said that the DOTS centre was too far away.

**Delays and discontinuities in treatment**

- The average delay from onset of symptoms to the first health care contact was 10 days, while the average delay in initiating DOTS was 92 days (GLRA study).
- 23% avoided going to a DOTS centre because of the attitude of government health workers.

**Composition and characteristics of non-NTP Care Providers**

- The not-for-profit private providers are NGOs, dominated by mission hospitals. In the northern zones of Nigeria, mission hospitals are the dominant type of private provider.

- Most for-profit health care providers register either as clinics or hospitals. Many of these facilities are often individual practices.
- Private for-profit pharmacies proliferate in Nigeria.
- Herbalists constitute 15% of the total visits TB patients make before they reach DOTS centres.

**Capacity for DOTS in the private sector**

- There is substantial potential for professional, medical and nursing organizations to raise DOTS awareness among their members, to monitor for TB case notification and to provide continuous medical education on ISTC or DOTS training as an incentive for private providers to engage with the NTP.
- There may also be potential for private provider associations to support the NTP's DOTS quality assurance activities.

**Preparedness of NTP**

- Several states and local government areas (LGAs) are successfully implementing DOTS in public facilities and are ready to begin or expand engagement of private providers.
- Laboratory capacity, including internal and external quality assurance needs to be strengthened.
- LGAs involving only a few private providers have adequate staff to cope with the expected increase in workload.

**Policy and regulatory environment**

- TB is a notifiable disease in Nigeria. There is no specific regulation governing the sale of anti-TB drugs.

**Key background reading**

- A tool for national situation assessment - Public Private Mix for TB Care and Control.

Geneva: World Health Organization, 2007 (WHO/HTM/TB/2007.391)

<http://www.who.int/tb/updatedPPMNSATool.pdf>

*This tool describes the process of developing country-specific operational guidelines on PPM, taking into consideration the tasks diverse care providers can undertake in a country-setting.*



### **Rationale**

Operational guidelines help define the complementary roles and responsibilities of NTP staff and non-NTP health care providers engaged in PPM for TB care and control.

These guidelines should be developed and implemented in consultation with stakeholders and in tandem with the PPM national policy. While the policy should guide the preparation of guidelines for phased implementation, the results of implementation should feed back into the policy for any revision required.

### **The process**

Operational guidelines for PPM should cover the following areas:

1. Objectives of PPM
2. Task mix for different providers
3. Practical tools for implementation
4. Training of diverse providers
5. Incentives and enablers
6. Certification and accreditation
7. Surveillance and monitoring
8. Implementation of the guidelines

#### **1. Objectives of PPM**

The objectives of PPM should be in conformity with those of the NTP. Short-term objectives and long-term goals should also be defined. PPM implementation should, for example, help enhance access to and equity in TB care provision, increase case detection, improve treatment outcomes and minimize financial burden on patients. PPM eventually should help strengthen the health system by optimizing contribution of all care providers -- public, private, voluntary and corporate -- to achieving national and international public health goals.

## 2. PPM task-mix

TB care and control require undertaking some essential clinical and public health functions. Diverse care providers -- from traditional healers to chest physicians and private hospitals -- may not have the capacity to undertake all the tasks. For instance, a medical college or a private institution may be able to undertake most of the tasks. Individual providers, including pharmacists and non-physicians, may be able to refer suspects and, at times, supervise treatment, while trained physicians could diagnose and categorize patients as well as initiate treatment.

To guide this process, it is useful to map different providers, and define which provider can take on which task, through a task-mix (Table 1). The latter may vary from setting to setting across and within countries. Defining

a local task-mix should inform training and support of different care providers for TB care and control. It goes without saying that stewardship, financing and development of policy guidelines should remain the key responsibilities of the NTP.

## 3. Practical tools for PPM implementation

Practical tools to facilitate the process of implementing, monitoring and evaluation of PPM initiatives may include simple forms for laboratory request, referral-for-treatment, feedback or back-referral and transfer, etc. The laboratory and TB registers as well as TB treatment cards used by the NTP may require some alteration and adaptation. Other tools include templates of contract to formalize collaboration such as a Memorandum of Understanding (MOU) for institutions and a Letter of Agreement (LOA) for individual providers.

**Table 1. Indicative PPM task-mix \***

	Tasks	National TB programme	Public or Private institution	Individual private provider	Private/ Public Laboratory	Non physician/ pharmacy
Clinical tasks	Identify TB symptomatics					
	Collect sputum samples					
	Refer TB suspects					
	Notify/ Record cases					
	Supervise treatment					
	Do smear microscopy					
	Diagnose TB					
	Prescribe treatment					
	Inform patients about TB					
Public health tasks	Identify and supervise treatment supporters					
	Follow up on defaulters					
	Training care providers					
	Supervision					
	Quality assurance for laboratories					
	Monitoring and evaluation					
	Drugs and supplies management					
	Provide stewardship: financing and regulation					

\* Shaded cells correspond to tasks that can be taken up by respective provider type.

### 4. Training for PPM

The success of PPM initiatives often depends on the NTP staff's receptivity to the idea of PPM and on training and sensitization of other provider groups. The PPM operational guidelines should include a training strategy linked to or integrated with other NTP training activities. Training of NTP staff on PPM is as important as training other care providers.



In order to develop an effective training strategy, it is important to:

- Determine the task mix;
- Formulate need-based training material for different providers including NTP staff in relation to assigned tasks;
- Adapt methods to local context and working conditions of providers;
- Develop materials and programmes using or adapting available TB training modules;
- Devise a follow-up structure linked to ongoing programme supervision activities;
- Revise training programmes based on evaluations.

The choice of trainers plays a key role in establishing the credibility and acceptance of the training. The involvement of senior officials within the NTP and well-known local and national experts in the private sector as trainers has been observed as having great value. Senior NTP staff may be able to effectively influence heads of large hospitals through information,

training and encouragement; medical officers within NTP may be able to brief individual qualified providers; and non-physicians may be comfortable interacting with field-level technical staff.

### 5. Incentives and enablers for PPM

Well-designed incentives and enablers can help motivate care providers to engage in TB care and control. They can also ensure continued involvement of providers. Application of incentives may depend on the type of setting.

There are two types of incentives: financial and non-financial. Financial compensation may have to be considered when (a) negotiating collaborative arrangements with professional associations, (b) dealing with providers managing a large number of TB suspects and cases and, (c) scaling up PPM. Individual private practitioners handling a few TB patients and voluntary organizations providing TB care may find non-monetary incentives attractive enough to enter into a collaborative arrangement with the NTP. The types of incentives may vary from setting to setting but can include the following:

- access to free anti-TB drugs,
- opportunity to serve the society through provision of free care to the poor,
- access to free training and continuing education,
- access to free microscopy services,
- recognition due to formal association with a government programme and potential to expand business as a result thereof.

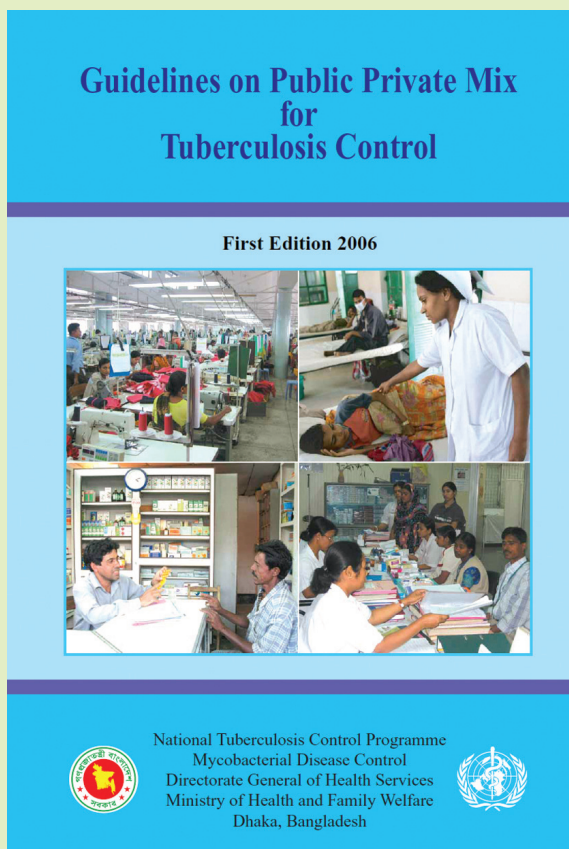
### 6. Certification and accreditation

Certification is a process through which an NTP officially acknowledges that a provider, a laboratory or an institution has met the appropriate criteria to supply the services being certified. Certification requires compliance with a uniform set of standards.

The criteria for certification and de-certification relate to the specific task allocated to respective providers and should be the same for public and private sectors. The certification may initially be informal, gradually evolving into a standardized procedure for formal certification. Periodic evaluations of the certification system and the criteria used for it should be undertaken and re-certification done at regular intervals.

## 7. Surveillance and monitoring of PPM

The purpose of PPM is to improve TB case detection and management by diverse care providers. It is important to monitor the PPM process in relation to defined objectives.



Indicators to monitor the quality of diagnostic and treatment services offered through PPM initiatives should be similar to the public sector programme. Suggested PPM monitoring indicators and measurement approaches are discussed in tool 5.

The effect of PPM in improving access to the poor, reducing diagnostic delay and providing financial protection for patients may have to be determined through special studies.

## 8. Implementation of guidelines

The key steps in local implementation of PPM for TB control include:

### Preparation

A clear message from the top NTP management signifying that the commitment and prioritization of PPM is the first prerequisite before local implementation begins. Operational guidelines, sensitization and training materials should be ready for use. The implementation tools, including any new formats and adapted NTP registers and reports, should be handy. Most importantly, NTP staff must be first oriented about PPM; their tasks and responsibilities should be defined and a plan of implementation should be available according to locally defined objectives for PPM. A local task force, equivalent to a national task force, may be established to engage all relevant partners in planning and implementation at the local level.

### Mapping and selection of providers

The local NTP unit should prepare or procure a map of its area, with all public and non-public providers marked on it. It may be easier, in some settings, to work with institutional care providers. In others, rural areas for example, informal and traditional care providers may be the only private providers that need to be engaged. While mapping will give a general idea of the nature of individual and institutional providers, a first contact with them will then be required to understand their current and potential contribution to TB control.

### Use of intermediary organizations

In working with private providers, using an intermediary such as a local NGO, a professional association or a civil society institution may help expedite both provider enrolment and ease the NTP units of some of the burden of PPM implementation.

### Implementation proper

Even though the process of launching PPM will vary from setting to setting, the following aspects may be considered for effective implementation of PPM:

- A proper launching ceremony may be arranged to inspire and boost the commitment of NTP staff and other health care providers.





- Use of political/administrative heads to give initial leadership has been useful in some settings.
- Both public and private counterparts should initially see PPM as a 'learning-by-doing' exercise; expectations should not be kept too high in early stages.
- Mutually agreed roles and responsibilities should be diligently followed especially by the NTP staff, to elicit reciprocal response. Referral routines should be adhered to and proper records maintained.
- Documenting the process, particularly in the initial stages of implementation, may help. Listing of locally identified problems and forwarding them to the senior NTP management may help to foster better understanding of the collaborative process and feed into any future revision of the operational guidelines.
- Continuous dialogue should be maintained between the collaborating partners to address identified problems and potential tensions.
- Use of practical tools as well as process and outcome indicators should help proper monitoring and evaluation of the process and the outcomes of PPM implementation.

### ***Advocacy and communication***

Locally-appropriate advocacy and communication methods and materials should be used giving due consideration to the social stigma attached to the disease and to those suffering from it. Please refer to tool 4 for more details.

### ***Key background reading***

- Engaging all health care providers in TB control-guidance on implementing public-private mix approaches.  
Geneva: World Health Organization, 2006 (WHO/HTM/TB/2006.360)

**CASE STUDY: PPM operational guidelines- India**

The Revised National Tuberculosis Control Programme (RNTCP) has developed partnerships with a wide range of stakeholders. To date more than 2500 NGOs, over 19,000 private practitioners, 267 medical colleges and over 150 corporate sector health facilities are involved in the programme. PPM has had a significant role in achieving the national objectives of case detection and treatment outcomes. National, zonal and state task forces have been created for the involvement of the medical colleges. Significant headway has also been made towards the involvement of the Employees' State Insurance, Central Government Health Scheme, Railways, Armed Forces, Corporate Sector and other Public Sector undertakings in the programme.

In the years 2000 and 2001, the Government of India developed guidelines for NGO and private sector involvement in TB control. However over a period of eight years it was observed that the uptake of schemes under formal agreements were on the decline. Furthermore, with the advent of new initiatives targeted at MDR-TB as well as TB/HIV, a need was felt for updating the guidelines.

In January 2008, the Central TB Division conducted a three day consultation on the revision of the NGO/private practitioner (PP) guidelines. The consultation included 60-70 participants encompassing programme implementers like state TB officers and district TB officers of regions where NGOs/PPs have been active in the RNTCP; professional bodies like the Indian Medical Association (IMA) and NGO representatives both from within and outside the RNTCP. The main aim of the consultation was to build consensus on the revised schemes in collaboration with all stakeholders. Experiences were shared by NGOs and PPs involved under the old schemes, those who discontinued their engagement with the RNTCP, as well as NGOs/PPs who didn't participate in the schemes because of their inflexibility. New schemes were also discussed to engage private providers in facilitating culture and DST in private labs, sputum collection centres and TB/HIV collaboration.



Based on the inputs from the consultation, the Government of India developed and published revised NGO/PP guidelines, which were put into effect from October 2008.

***The revised schemes as approved by the Government of India are given below:***

- Scheme for ACSM
- Scheme for sputum collection centre
- Scheme for sputum pick-up and transport service
- Scheme for designated microscopy cum treatment centre
- Scheme for strengthening RNTCP diagnostic services
- Scheme for culture and DST services
- Scheme for treatment adherence
- Scheme for urban slums
- Scheme for the tuberculosis unit
- Scheme for TB/HIV

*This tool describes the concept and suggests ways to implement advocacy, communication and social mobilization (ACSM) activities in the context of PPM.*



### **Rationale**

The main purpose of PPM initiatives is to bring all health care providers into the realm of the Stop TB Strategy, so that uniform methods of diagnosis, treatment and notification are adopted in line with the ISTC. ACSM has an important role in the context of PPM, it focuses on the following key areas:

- Ensure high level commitment to broaden TB care by initiating and implementing PPM in the country;
- Influence all forms of health providers to become engaged in TB care;
- Create an environment in which all forms of health care providers feel attracted towards providing correct TB diagnostic and treatment services;
- Create appropriate demand for TB care so that populations use public as well as private facilities that follow the guidelines set according to international standards;
- Help the NTP achieve its targets on improving diagnosis and treatment and reducing TB related mortality, incidence and prevalence.

### **The process**

Advocacy is one of the main strategies to convince and motivate both NTP managers, staff and their counterparts among other private and public provider groups. Advocacy should not only improve acceptability of the TB programme in the private sector but also motivate NTP staff to work together. Better communication is required at two levels: inter-provider communication to facilitate dialogue between the programme and non-programme providers and patient-provider communication to improve quality of patient counselling and education. NGOs and community-based organizations (CBOs) who have experience in communication and social mobilization may provide useful assistance in communicating with both providers and patients.

Practical steps to integrate ACSM into PPM approaches are outlined below.

### *Develop a PPM-specific ACSM plan*

The first step is the development of a PPM-specific ACSM plan with clear objectives, appropriate channels, and defined roles and responsibilities. This should be developed in consultation with all stakeholders, as well as national/local ACSM taskforces if they exist. An effective ACSM plan should be based on an analysis of the problem at hand, the capacity available, key audiences, appropriate communication interventions and monitoring and evaluation. A general framework outlining important stakeholders and possible ACSM activities are presented in Table 1. These are only illustrative activities. It is expected that programmes will refine and improve this list through effective monitoring and evaluation of their ACSM activities.

### *Integrating PPM in national ACSM Strategy*

Many countries have a broad national ACSM strategy in place. PPM approaches should be integrated into this

strategy. Rather than promoting only government facilities, all health facilities that apply national guidelines and standards should be promoted.

### *Internal advocacy*

The NTP should carry out strategic advocacy within the Ministry of Health, as well as with other ministries/departments. The purpose is to convince internal partners that TB is a shared problem and participating in its control is beneficial to all.

### *Influencing health care providers*

Non-NTP health care providers should be encouraged to work with the NTP in TB control efforts. This could be done through continuous medical education programmes or advocacy campaigns in collaboration with professional associations. Social franchising mechanisms in collaboration with NGOs can also be initiated to encourage health care providers to participate in TB control efforts.

**Table 1. PPM-specific ACSM framework**

<i>Model</i>	<i>Stakeholders</i>	<i>Possible activities</i>
Public-public	Ministry of Health (MoH) and other ministries/departments e.g. prisons, police, military	High-level advocacy within MoH and with partners. Activities may include meetings, lobbying, presentations, advocacy materials, World TB day activities with respective partners, etc.
Public-semi public	Insurance, parastatal organizations e.g. railways, airlines, post office, highways	The level of interaction will be with NTP and CEOs of respective organizations. Activities may include meetings, presentations, advocacy materials and availing mass communication opportunities available with partners e.g. public announcements and billboards at railway stations.
Public-private non-profit	NGOs implementing DOTS	Various tiers of NTP can interact with partner NGOs. There should be clarity on each other's role and a sense of partnership.
Public-private for-profit	Private practitioners and private hospitals	District TB staff with associations, individual GPs, and hospital directors and staff. Individual meetings as well as large gatherings can be used to develop a mutual partnership. However, one-to-one interaction is most effective with individual, independent, practitioners.

## Creating and increasing demand

Communication in the context of PPM is to inform people that high-quality TB care services are also available at selected private facilities. The public messages through all forms of mass media should promote providers who provide quality care at low cost, rather than specifying public or private facility. This can be facilitated by branding of DOTS facility or engaged health care providers, displayed as a signboard or a prominently placed logo. All public events including World TB Day activities should purposefully declare and display all types of linked providers as partners and providers of quality TB care. Local events especially free health camps at or around clinics of private providers can be a useful tool for advocacy as well as communication. Where applicable, community health workers should educate households and the community on opportunities they can avail under PPM. The workers should also be allowed to refer suspects to an engaged private provider. Effective communication can also play a significant role in shedding social and cultural stigma attached to TB.

## Reinvest the lessons learned

It is important for NTPs to pilot ACSM ideas specific to PPM, evaluate and re-invest in the light of lessons learned.



## Monitoring of ACSM in PPM Initiatives:

The utility and impact of ACSM efforts should be regularly monitored. Monitoring information should be used to improve ACSM interventions during PPM implementation. For more details on monitoring and evaluation please refer to tool 5.

## Challenges and Opportunities

Involving all types of health providers and publicizing their role can cause confusion if there is no clarity among partners on roles and responsibilities. Developing an outline of who will be doing what and sharing it with all partners before going into implementation will help in avoiding confusion. ACSM can prove effective only when other programme components are in place. Promoting partners not yet on board or who lack skills/supplies can be counter-productive. The evidence of proposed activities is limited as both ACSM and PPM are relatively new areas. It is expected that programmes will be able to improve the component through effective monitoring and evaluation mechanisms.

## References and Key background readings

- WHO. Engaging all health care providers in TB control. Geneva: World Health Organization; 2006.
- Engaging all public and private care providers in tuberculosis control: PPM advocacy brochure. Geneva: World Health Organization; 2009.
- Uplekar M. Involving private health care providers in delivery of TB care: global strategy. Tuberculosis 2003; 83:156-64.
- Advocay, Communication and Social Mobilization, National Strategy and operational guidelines, National TB Control Programme, Pakistan, 2008

### Case Study: Social marketing in Myanmar

Myanmar is among the countries in Asia with a high burden of TB. The poor still have limited access and often delay diagnosis. Furthermore, the large private sector in Myanmar treats many TB patients, including the poorest of the poor. There are several initiatives in Myanmar to involve private providers.

One initiative is a social franchise scheme run in collaboration with the NTP, by an international NGO, Population Services International (PSI), under the brand 'Sun Quality Health' (SQH). SQH involves private GPs who provide quality-controlled and highly subsidized TB diagnosis and treatment and a range of other clinical services.

This initiative was established in 2001. Members were selected among full-time licensed GPs with existing clinics serving low-income populations. As part of this collaboration the following benefits were provided to partnering GPs: a 2–3 day training course; posters, leaflets and a signboard for use in the clinic; promotion of SQH products and access to branded, high-quality products, either free or at highly subsidized prices. In return, the providers agreed to keep clinical records, to respect service standards and to apply a price structure that offered them small margins but ensured that the services were affordable to low-income populations. As of December 2005 the SQH network included 556 active members located in more than 100 of Myanmar's 324 administrative townships, of which 220 SQH GPs in 49 townships were participating in the TB component.

PSI has organized several communication campaigns, including billboards (see photo), TV and radio spots, using "DOTS" as the brand of quality, to promote use of both the SQH network as well as public providers under the NTP.



Advocacy Campaign- Myanmar: "Treatment with DOTS for TB is free of charge"

The results of this initiative indicated that the SQH franchise helped to increase TB notification in Yangon.

*This tool describes the significance of monitoring and evaluation of PPM programmes in order to maintain the quality of care and suggests indicators to measure the contribution of collaborating care providers to TB care and control.*



### **Rationale**

Partners engaged through PPM can contribute to TB care and control in many different ways: by helping to increase case detection, enhancing TB treatment outcomes across the health system, improving access to quality services and minimizing financial burden for patients. It is essential to continuously monitor and evaluate the contributions of PPM, in relation to the specific objectives and targets set by the NTP. This will help justify continued financial support for PPM activities, as well as fine-tuning PPM operations and target resources effectively. This tool summarizes key steps and tools for PPM monitoring and evaluation.

### **The process**

The scope of PPM monitoring and evaluation, and the level of detail required depends on the existing PPM strategy in a country, specific PPM objectives, and the stage of PPM scale up. Planning of PPM monitoring and evaluation is therefore a key part of overall PPM planning in any given setting.

### **Implementation steps**

The following steps are required to ensure recording and reporting of essential PPM data:

#### **1. Decide on PPM indicators to be used in the country.**

In all settings, the following two indicators are recommended, as a minimum, for routine PPM monitoring at national, regional and global level, and should be reported at least annually (see the box for details):

- proportion of listed providers actively engaged by the NTP,
- proportion of new bacteriologically confirmed cases detected by referral/diagnosis by different types of providers.

## Box

### Key indicators for PPM monitoring

#### **Proportion of listed providers actively engaged by the NTP**

**Definition:**

**Numerator:** Number of providers, by category (e.g. public and private clinics, hospitals, institutions, health insurance, health facilities, workplace health facilities, informal providers, etc.) who are participating in DOTS implementation (referral / diagnosis / treatment / reporting of TB cases).

**Denominator:** All listed providers in respective category.

**Data source:** Yearly inventory of listed providers with identification of how many are actively collaborating with the NTP.

**Reporting frequency:** Yearly

**Note:**

- Depending on availability of data on listed providers (which may, for example, be restricted to only formal health care providers unless a mapping of providers has been done through a PPM national assessment), the indicator may be reported for selected provider categories only.
- This indicator may be further disaggregated by type of involvement and type of provider.

#### **Proportion of new bacteriologically confirmed cases detected by referral/diagnosis by types of providers**

**Definition:**

**Numerator:** Number of bacteriologically confirmed cases registered from among those referred (for diagnosis or after diagnosis) by a specific provider category.

**Denominator:** All bacteriologically confirmed cases detected

**Sources:**

- Standard laboratory register with information about referring provider, or
- Treatment register, if referral source is noted.

**Reporting frequency:** Yearly or quarterly

**Note:**

- Bacteriologically confirmed cases is the minimum reporting requirement. In many settings, depending on the scope of PPM and types of provider engaged, it may also be relevant to report on proportion of all cases, of MDR-TB cases, of patients infected with HIV, etc.
- This indicator may be disaggregated by type of providers, and by referral/diagnosis.

Table 1 shows possible additional process and outcome indicators to monitor. For more details on these indicators please refer to the PPM guidance document. At the start of PPM implementation, and when PPM is extended to new provider categories, it is necessary to monitor quality of care, most importantly treatment outcomes.

This should be done for each provider category, which requires disaggregated cohort analysis. If and when treatment outcomes are up to standard, disaggregated cohort analysis by provider type can be discontinued, while overall treatment outcomes will be used as an indicator of any quality problems in specific provider categories.



If non-NTP providers are engaged in TB diagnosis, e.g. doing smear-microscopy, X-ray, culture, DST, or any other test, the quality of diagnosis should be monitored through external quality assurance and other approaches, just as for any other diagnostic center in the NTP. Similarly, providers engaged in TB/HIV collaborative activities and programmatic management of drug-resistant TB need to be monitored with regards to standard quality indicators (see tools 8 and 9). Specific evaluation and operational research may be conducted to address specific questions, such as cost-effectiveness of different approaches, impact of PPM on diagnostic delays, equity in access, and identification of factors of success and sustainability. This will normally require collaboration with a research institution or equivalent.

### 2. Adapt / develop tools for data collection, recording and reporting.

The most essential tools for PPM monitoring are:

- the PPM NSA tool (please refer to tool 2),
- the standard laboratory register with information about referring provider,
- the standard TB treatment register with information about treating provider

The PPM NSA tool (see tool 2) provides guidance on how to establish the number of listed non-NTP providers and the number among them who are actively engaged through PPM.

The revised recording and reporting system for TB programmes, available online ([http://whqlibdoc.who.int/hq/2006/WHO\\_HTM\\_TB\\_2006.373\\_eng.pdf](http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.373_eng.pdf)), includes instructions on how to obtain and enter information about referring and treating providers into standard treatment cards and laboratory and treatment registers, as well as on how to present information in the yearly report on programme management. As a minimum, it is paramount that all districts enlist health care providers and report number of engaged providers, and that all diagnostic and treatment centers introduce a routine to record source of referral and place of treatment in the standard registers.

### 3. Select reporting approach and introduce yearly or quarterly routines for PPM indicators.

### 4. Determine role division, nationally and locally, for all relevant activities to ensure PPM monitoring.

The NTP is ultimately responsible for collecting and reporting on these indicators. However, public and private partner organizations may also contribute depending on the type of engagement. In many countries, PPM approaches are being implemented by an intermediary organization, such as a NGO, a professional association, or a franchising organization. When such an organization is implementing TB control in a designated geographical area, they may take the responsibility for monitoring and evaluation in that area.

**Table 1. Additional indicators for PPM monitoring and evaluation**

Indicator	Data source
Proportion of BMUs that have implemented PPM	Yearly report from BMUs on whether PPM is implemented or not
Proportion of TB suspects referred by non-NTP providers	Standard laboratory register with information on referring provider
Proportion of TB patients diagnosed by non-NTP providers	NTP laboratory registers and laboratory registers maintained by non-NTP providers
Proportion of TB patients receiving treatment from non-NTP providers	Standard TB register with information on treating provider
Treatment outcomes among TB cases treated by non-NTP providers	Standard TB register with information on treating provider

Training on PPM recording and reporting routines is important for NTP staff responsible for data entry and reporting, as well as for concerned staff in non-NTP facilities. PPM monitoring should be part of the regular NTP training. The revised generic training modules for health facility and district level staff include instructions on how to collect and record relevant PPM information.

**5. Update NTP operational guidelines and training material as required.**

**6. Train staff on how to fill forms, report on indicators, and supervise recording and reporting practices.**

**7. At local level, as per the recommended recording and reporting system:**

- List all non-NTP providers in the area,
- Identify which providers are already engaged by the NTP,
- Introduce:
  - a. standard referral forms for engaged providers,

- b. routine collection and recording of information on referring and treating provider in treatment card, laboratory register and treatment register,
  - c. reporting practice, as per national policy.
- Evaluate / supervise recording and reporting practices.

**Key background readings**

- Guidance on how to measure PPM contributions to TB control. TBCAP report. The Union, Management Sciences for Health, and World Health Organization, 2010.
- Revised TB recording and reporting forms and registers – version 2006. WHO/HTM/TB/2006.373. Geneva: World Health Organization, 2006
- Management of tuberculosis : Training for health facility staff. WHO/CDS/TB/2003.314. Geneva: World Health Organization, 2003.
- Practical tools for involvement of private providers in TB control - A guide for NTP managers. WHO/CDS/TB/2003.325. Geneva: World Health Organization, 2003.

### CASE STUDY: The Philippines

The following PPM indicators are monitored quarterly at provincial, regional and national level in the Philippines:

- Number of PPM units
- Population coverage of PPM units
- Number of trained referring physicians
- Number of physicians referring TB suspects
- Number of physicians referring TB patients for treatment
- Number of new sputum smear positive (ss+) cases detected by a private PPM DOTS unit and/or through referral from a private physician to a DOTS unit
- Proportion of all new ss+ cases that were detected by a private PPM DOTS unit and/or through a referral from a private physician to a DOTS unit.

Data for above indicators are collected through a standard TB register and lab register, which include information about source of referral and place of treatment. Special referral forms were developed for private physicians, on which the receiving unit should also feed back

information to the referring physician. The standard treatment card includes information about name of referring physician as well as place of treatment. This information is transferred into the TB register. The case finding report disaggregates all cases with regard to source (public vs. private), since 2007. The treatment outcome report is submitted separately by each PPM unit.

There is a separate recording and reporting system for PPM for MDR-TB management in the Philippines. It includes information about the source of referral, the place of the last treatment, the type of treatment provided there, and the place of MDR-TB treatment under the Programmatic Management of drug-resistant TB (PMDT) approach. A special referral form is used.

The box below provides a summary of some PPM indicators in The Philippines in 2009.

Total number of established PPM Units	: 220
Population coverage	: 30 million
Number of cases notified per year	: 3994
% new ss+ cases referred from PPM units	: 28%

*This tool presents an overview of the International Standards for TB Care (ISTC) as a yardstick of quality of comprehensive TB case management that all care providers must adhere to.*



Studies have shown that clinicians, in particular those who work in the private sector, often deviate from standard, internationally recommended, TB management practices. This, together with delays in diagnosis, highlights flaws in health care practices that lead to substandard TB care for populations. The purpose of this brief is to present suggestions and guidance, based mainly on country-level experiences, for using the International Standards for Tuberculosis Care (ISTC), as a tool to foster and guide the delivery of high-quality care by all providers of TB services.

### **Rationale**

The fundamental purpose of the ISTC is to describe a widely accepted level of care that all practitioners, public and private, should seek to achieve in managing patients who have, or are suspected of having, TB. The ISTC comprise a total of 21 standards which address four main categories of activities: diagnosis, treatment, HIV infection and other co-morbid conditions and public health. The box presents examples of standards from the categories mentioned above, to access the other standards please link to the ISTC document at- [http://www.who.int/tb/ISTC\\_Report\\_2ndEd\\_Nov2009.pdf](http://www.who.int/tb/ISTC_Report_2ndEd_Nov2009.pdf). The ISTC is intended to complement, not replace, local, national, and international guidelines.

While non programme providers are the main target audience, NTPs, professional associations, patients and communities are also part of the intended audience. The ISTC are supported by a broad international consensus, and present both the imperative steps to be followed for TB care and control and the supporting evidence base. The ISTC have been endorsed by more than 40 national and international organizations, both public and private, concerned with TB care and control.

### **The process: Utilizing the International Standards for Tuberculosis Care**

Utilization of the ISTC need not always be undertaken at the national level. The document is also applicable at sub-national level, and even

within a single facility. As such, it is not a strategy that can be implemented, but rather requires that strategies be developed and implemented to enable the standards to be met. Key steps on how to utilize the ISTC are outlined below.

## **Planning**

At first, NTP must develop a sound understanding of the individual standards and be willing and able to be in compliance with the standards. Developing a plan is essential to clarify the roles and responsibilities of NTP staff and non-NTP health care providers in using the ISTC effectively, and for monitoring the process. Planned ISTC activities should be clearly linked with the identified gaps to be filled.

## **Formulation of objectives**

Overall objectives should be formulated in relation to national TB control objectives and targets as well as the Millennium Development Goals. It should be based on the situation and context in the country, inputs may be taken from the findings of the ISTC feasibility study or the national situation assessment (tool 2).



## **Incentives for participation**

The ISTC in itself is unlikely to dramatically change clinical practice, it needs to be coupled with an effective communication strategy and incentives and enablers designed to overcome some of the motivational barriers. Implementation of the ISTC thus needs to be part of a broader PPM strategy, which aims to address all barriers for suboptimal TB management outside the NTP.

## **Box**

### **Examples of Standards**

#### **Diagnosis**

Standard 1: All persons with otherwise unexplained productive cough lasting two-three weeks or more should be evaluated for tuberculosis.

#### **Treatment**

Standard 7: Any practitioner treating a patient for tuberculosis is assuming an important public health responsibility to prevent ongoing transmission of the infection and the development of drug resistance. To fulfill this responsibility the practitioner must not only prescribe an appropriate regimen, but also utilize local public health services and other agencies, when necessary, to assess the adherence of the patient and to address poor adherence when it occurs.

#### **TB/HIV**

Standard 14: HIV testing and counseling should be recommended to all patients with, or suspected of having, tuberculosis. Testing is of special importance as part of routine management of all patients in areas with a high prevalence of HIV infection in the general population, in patients with symptoms and/or signs of HIV-related conditions, and in patients having a history suggestive of high risk of HIV exposure. Because of the close relationship of tuberculosis and HIV infection, in areas of high HIV prevalence integrated approaches to prevention and treatment of both infections are recommended.

#### **Public health**

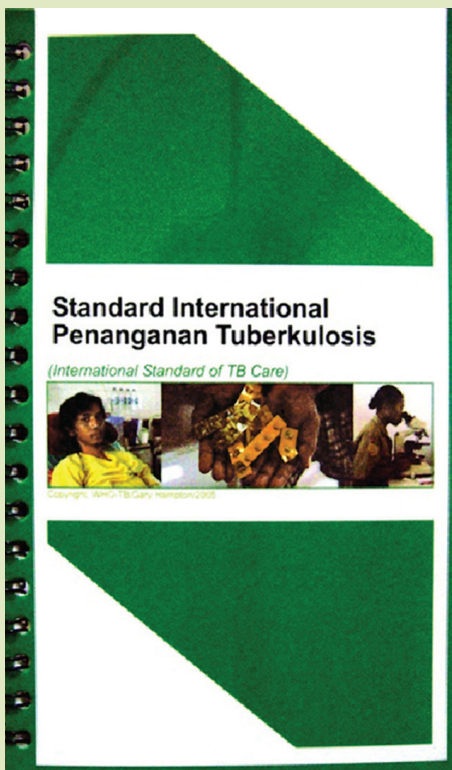
Standard 19: Children <5 years of age and persons of any age with HIV infection who are close contacts of an infectious index patient and who, after careful evaluation, do not have active tuberculosis, should be treated for presumed latent tuberculosis infection with isoniazid.

## **Obtaining local endorsements**

Obtaining endorsements by influential local organizations, including governments and professional societies, serves as a way of obtaining buy-in and commitment to the principles in the ISTC. Moreover, the influence of the ISTC is amplified with each endorsement received and local endorsement paves the way for further ISTC-related activities.

## **Using the ISTC to mobilize professional societies**

Professional societies and their leaders are often influential members of the private medical community, have direct access to a large number of practicing clinicians and have influence that extends beyond their membership. The ISTC was developed with considerable professional society input by a group of organizations that included a respected professional and scientific society, the American Thoracic Society (ATS). Moreover, the document has been endorsed by a number of societies. For these reasons, the ISTC has credibility in the eyes of professional societies and can be used to open the doors to these organizations.



## **Using the ISTC for a feasibility analysis**

The ISTC provide a broad framework for a systematic “feasibility analysis” of local capabilities, and can serve as a vehicle for addressing any shortcomings. It can help NTPs and providers take stock of the standards that are or are not being met in their country. Usually, the ISTC feasibility analysis will be organized by the NTP. However, a local public health department, professional society or institution may also take responsibility for developing the analysis. This may, in fact, be useful as it indicates and fosters a stronger sense of ownership on the part of the organizing group.

## **Quality and performance assessment**

Monitoring and evaluation of the ISTC should be an integral part of general PPM monitoring and evaluation (see tool 5). The individual standards within the ISTC can be utilized to measure the quality of TB services delivered by any provider or program.

## **ISTC as an advocacy tool**

The ISTC provide a set of internationally recognized standards any government should seek to meet. Using the ISTC, NTPs can identify gaps in meeting the standards, providing a powerful advocacy tool to seek improved TB care and control (see tool 4).

## **Engaging patients and communities**

The ISTC are backed by an international consensus and describe agreed upon elements of TB care that should be available everywhere. The Patients’ Charter for Tuberculosis Care, a companion document to the ISTC outlines the rights and responsibilities of people with TB and empowers them and their communities through knowledge of the disease. Patients worldwide should expect their care to be in compliance with the ISTC which, thus, should provide patients with the backing they need to insist that they receive high-quality care. Similarly, communities should expect that the care provided within their boundaries meets the standards, and thus is of high quality. Patients’ awareness of and support for the ISTC can be used to provide leverage in dealings with policy-makers and funding agencies, empowering them to be effective advocates for high-quality TB care.

## Key background readings

- The International Standards for Tuberculosis Care. 2<sup>nd</sup> Edition, 2009.  
[http://www.who.int/tb/ISTC\\_Report\\_2ndEd\\_Nov2009.pdf](http://www.who.int/tb/ISTC_Report_2ndEd_Nov2009.pdf)
- The Handbook for utilizing the International Standards for Tuberculosis Care  
<http://www.istcweb.org/documents/istchandbook.pdf>
- Patients Charter for Tuberculosis Care  
<http://www.istcweb.org/documents/istccharter.pdf> iers for suboptimal TB management outside the NTP.

## CASE STUDY: Tanzania

In Tanzania, it was felt that by addressing pre-service training in medical schools and allied healthcare training programs, clinicians working in the private and public sector would be better equipped to take on an increased role in providing TB services in effective collaboration with the NTP. In addition, the standardization of training in TB in the country's five medical schools could serve as a platform for a similar unification of approach within the nursing schools and the schools in which clinical officers are trained. Given the strength of the training institutions in Tanzania, it was decided that the best approach to utilize the ISTC would be to work with medical schools and focus on updating and improving the pre-service training in TB.

In the one-year period between June 2006 and July 2007, four ISTC planning and implementation meetings were convened in Tanzania. An initial meeting to discuss strategy with the NTP manager was held in June 2006. Possible uses of the ISTC and general goals of implementation were discussed. Following this, a Core Working Group to develop a Generic TB Training Module for Tanzania was formed. The ISTC were used as a focus for medical school and allied health schools curricula development. These included, the ISTC orientation of regional and district TB coordinators, in-service training workshops for healthcare providers where the ISTC was included in the curriculum, and distribution of the ISTC to all TB coordinators in the country.



The lessons learnt in Tanzania highlighted the importance of the leadership role of the NTP to identify the needs that could be addressed by the ISTC and to define the approach using the document. The Tanzanian experience also shows that in using the ISTC for medical student training, "ownership" by the medical school faculty is highly desirable while concerns and questions about the individual standards must be aired and addressed with those who will be using the ISTC.

*This tool summarizes the rationale and methods of planning, budgeting and resource mobilization for PPM implementation.*

### ***Rationale***

Systematic and sustainable efforts to engage all care providers in TB care and control require mobilization and management of resources. This is needed to ensure sufficient funding and manpower for planning, implementation and supervision of PPM activities at national, regional and local levels. All relevant local, national and international funding sources should be tapped, to create and sustain collaboration between various care providers and the NTP.

### ***The process***

Resource mobilization should be based on a comprehensive situation assessment and a detailed description of PPM activities along with costs and indicators.

### ***Identifying needs and resources***

It is useful at the outset to define what essential resources are needed in the context of PPM. The various types of resources for PPM implementation are outlined below.

### ***Human resources***

Having a PPM focal person at a senior level in the NTP to oversee the implementation of PPM is desirable. This focal person should be advised and guided by a steering group such as a national PPM task force with representatives from major provider groups and stakeholders. Depending on the size of the country, the number of non-NTP health care providers, the volume of TB suspects and patients they manage and the systems required to link the providers to NTP, the national PPM focal person and the task force may have counterparts at regional, provincial, district and sub-district levels.

### ***Financial resources***

These may come from a wide variety of sources, including the government budget, grants from international development agencies (IDAs) and/or donor agencies, and the private sector.



### Partners

Various resource partners include, the government, donors or IDAs, NGOs, the corporate sector and the community. These partners can provide financial resources, as well as support NTP efforts in delivering TB care services. The corporate sector can be involved in TB control efforts through workplace programmes or corporate social responsibility initiatives. The community could also be mobilized as a key resource partner.

### Planning and budgeting tool

To help countries develop plans and budgets for TB control at national and sub-national level within the framework provided by the Global Plan and the Stop TB Strategy, the WHO Stop TB Department has developed a planning and budgeting tool. The tool is in the form of an excel based spread sheet, and facilitates development of budgets for all components of the Stop TB Strategy, including PPM. The budget developed with this tool can be used as the basis for resource mobilization from national governments and donor agencies. Specifically the tool outputs are in line with the Global Fund proposal development requirements. To download the tool please access the WHO website at: [http://www.who.int/tb/dots/planning\\_budgeting\\_tool/en/index.html](http://www.who.int/tb/dots/planning_budgeting_tool/en/index.html)

### Proposal development

Countries should secure domestic as well as external funding to conduct assessments, and scale up countrywide implementation of PPM interventions. The WHO policy on engaging all care providers in TB care and control provides guidance on practical steps that countries should undertake to involve various providers in TB control efforts. Each of these steps



requires provision of adequate human and financial resources. A proposal or plan should be developed based on these steps and budgeted. The planning and budgeting tool mentioned above could help support this process. The development of the plan could also be supported by PPM consultants or other experts. Table 1 provides a generic format for the budgeting of PPM activities. The plan/proposal may need to be incorporated into templates provided by the donor agencies, as in the case of the Global Fund. Budgeted programme implementation plans should also be integrated into the National Health Sector Plans to enhance sustainability.

### Key background reading

- Stop TB Planning Matrix and Framework: for Global Fund TB proposal preparation  
[http://www.who.int/entity/tb/dots/planningframeworks/r9\\_planning\\_matrix\\_framework\\_en.d](http://www.who.int/entity/tb/dots/planningframeworks/r9_planning_matrix_framework_en.d)



## Resources and budgeting

**Table 1. Examples of PPM activities and related budget lines**

Activity area	Examples of budget items
<p><b>1. Preparations for PPM implementation</b></p> <p><b>Activity 1A:</b> Establish national PPM infrastructure</p> <p><b>Activity 1B:</b> Conduct national situation assessment</p> <p><b>Activity 1C:</b> Develop national operational guidelines</p>	<ul style="list-style-type: none"> <li>• Salary for national (and provincial) PPM focal points</li> <li>• Staff time for situation assessment and guideline development</li> <li>• Cost of PPM task force activities</li> <li>• Consultative meetings with stakeholders</li> <li>• Workshops to disseminate guidelines</li> <li>• Staff time and meeting costs for developing scale-up plan</li> <li>• External technical assistance</li> </ul>
<p><b>2. Training for PPM</b></p> <p><b>Activity 2A:</b> Training of NTP staff on PPM</p> <p><b>Activity 2B:</b> Sensitization, training, certification</p>	<ul style="list-style-type: none"> <li>• Salary for trainers</li> <li>• Training material</li> <li>• Meeting venue costs</li> <li>• Per diem</li> <li>• Transport</li> </ul>
<p><b>3. Demand creation for PPM</b></p> <p><b>Activity 3A:</b> Inform all relevant health care providers and other stakeholders about DOTS and PPM</p> <p><b>Activity 3B:</b> Inform TB suspects and patients on PPM and treatment options</p> <p><b>Activity 3C:</b> Inform the general population about TB, DOTS and PPM</p>	<ul style="list-style-type: none"> <li>• Information material / posters</li> <li>• Meetings and seminars</li> <li>• Media campaigns</li> </ul>
<p><b>4. Delivery of TB services through PPM</b></p> <p><b>Activity 4A:</b> Establish local service delivery infrastructure</p> <p><b>Activity 4B:</b> Delivery of TB services by partnering providers</p>	<ul style="list-style-type: none"> <li>• Staff time for local mapping and situation analysis</li> <li>• Local consultative meetings</li> <li>• Staff time for supervision and monitoring</li> <li>• Vehicle for supervision</li> <li>• Printing of forms and registers</li> <li>• Cost of incremental drugs</li> <li>• Cost of incremental lab supplies</li> </ul>
<p><b>5. Monitoring and evaluation</b></p> <p><b>Activity 5A:</b> Ensure appropriate recording and reporting routines</p> <p><b>Activity 5B:</b> Design and implement operation research projects</p>	<ul style="list-style-type: none"> <li>• Capacity building</li> <li>• External technical assistance</li> <li>• Staff time for evaluation</li> <li>• Funds to contract out operational research</li> </ul>

### **CASE STUDY: PPM in Global Fund grants**

The Global Fund – a major source of funding for NTPs– is a public-private partnership. It provides around 63% of all international financing for TB control globally; which between 2002 and 2009 amounted to US\$ 3.2 billion of approved funds. The Global Fund requires applicant countries to set up national level partnerships in the form of a country coordination mechanism (CCM) representing diverse stakeholders including civil society and people living with diseases. It finances grant implementation by public and private sectors in countries through a dual-track financing facility.

The number of countries with PPM activities within the active TB grants supported by the Global Fund increased from 13 in 2003, the first year of Global Fund disbursement for TB, to 58 in 2008. The proportion of Global Fund grants with PPM activities was highest in South East Asia (82%) and lowest in Sub-Saharan Africa (52%). Care providers involved in PPM varied by region. Collaboration with the for-profit private sector was greater in South Asia and East Africa while that with NGOs was common in North Africa and Middle East as well as South Asia. Linkages with prison health services were present in other regions including Eastern Europe and Central Asia, Latin America and the Caribbean as well as West and Central Africa.

Analysis of budget and expenditure data showed that by 2008, US\$ 38.3 million (4.4%) of TB funding in the budgets of Global Fund-supported grants, was allocated to PPM. For PPM activities, the investments in China, Indonesia and Ghana were US\$ 18.8 million, US\$ 6.1 million and US\$ 3.5 million respectively.



Recent experiences from countries such as China and the Philippines shows that additional funding, e.g. through the Global Fund, can contribute to the implementation and scale up of PPM efforts with impressive impact on TB programme performance.

## Engaging private practitioners

*This tool outlines the need and practical steps of engaging frontline, individual care providers in TB care and control.*



Formal and informal private practitioners play a major role in TB care provision in many countries and may offer better geographical access and more personalized care. Informal private practitioners are individuals working independently, providing health services in an unevenly regulated context (e.g. traditional healers or indigenous practitioners) or practitioners not fully qualified to provide services that they provide (e.g. non-qualified providers, village doctors, drug sellers, etc.).

### **Rationale**

- Formal and informal private practitioners are located close to, and are often trusted by the community. In many settings, a significant proportion of population seeks care from them.
- Since many TB suspects first approach a neighborhood private practitioner, this represents an opportunity to reduce diagnostic delay and disease transmission.
- There is also the potential to share service delivery with the private sector and thus moderate the workload on frontline health workers.
- Many poor patients also use services of private practitioners. Engaging them could help reduce costs of care for the poor.

### **Roles**

The basic «task-mix» approach of allocating duties according to the capacity and willingness of providers should be applied for different types of private practitioners. Qualified and trained private medical practitioners can undertake almost all the tasks from identifying suspects to making a diagnosis, notifying the patient and providing supervised treatment but may need to be supported for some tasks such as defaulter retrieval. Some private practitioners may choose to simply refer their cases or may be willing to supervise patients referred to them for that purpose by the public sector. Informal and non-qualified practitioners should not however be entrusted with medical tasks.

They may be best placed to identify TB suspects and refer them for diagnosis as well as undertake DOT for TB patients living in the neighbourhood. They may also contribute significantly to enhancing community awareness about TB.

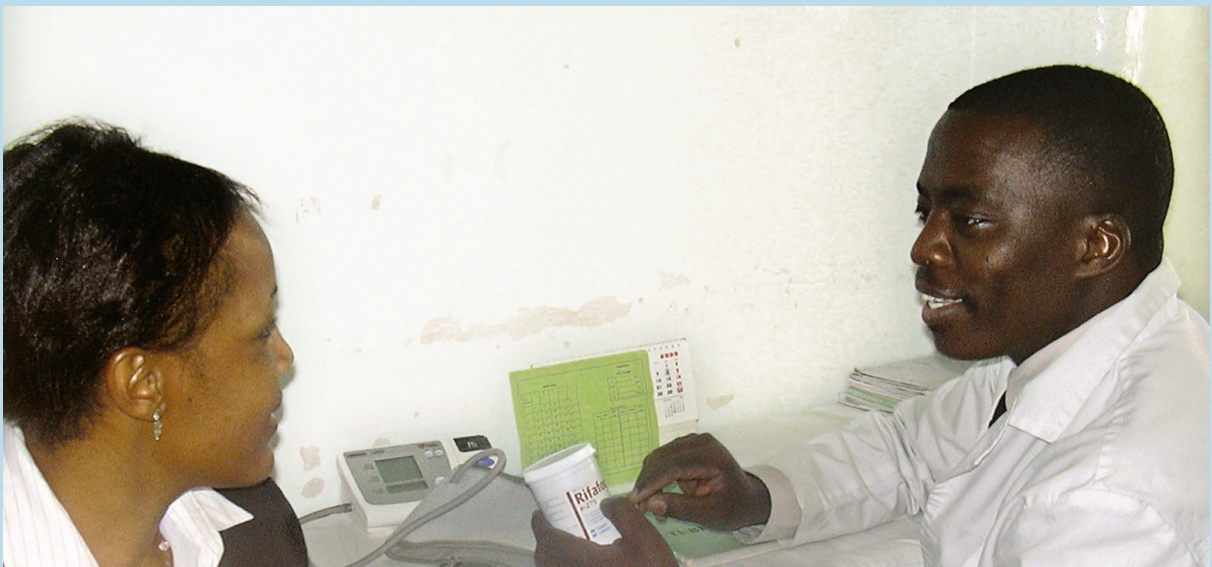
Clearly, the NTP should have the overall stewardship role, and should provide free anti-TB drugs, training, supervision and assistance with monitoring and evaluation, either directly or via intermediary organizations such as an NGO or a professional association.

### Evidence

Compelling evidence is now available on the benefits of engaging private practitioners in TB care and control activities. In Pakistan, the involvement of GPs via NTP collaboration with a social marketing firm led to the detection of 16,603 ss+ cases from January 2005 to June 2008. Village doctors in Bangladesh refer TB suspects and also provide treatment to patients in Damien Foundation programme areas. In 2006, village doctors referred close to 30,000 suspects for microscopy. Between 1998 and 2003, DOT was provided by village doctors for between 20% and 45% of patients on treatment with a high cure rate (90%). Village doctors are also currently contributing to MDR-TB care. The engagement of traditional healers as treatment supervisors in Hlabisa, South Africa, lead to good treatment outcomes, with an 88% treatment success rate.

### The process

- **Selection and prioritization:** Once private practitioners have been identified as important providers in the PPM national situation assessment, local mapping of these providers should be undertaken. Practitioners interested in learning about TB and willing to work with the NTP should be selected first.
- **Linking with intermediary organizations:** In several settings, local NGOs or professional associations may be effective intermediaries between the NTP and private practitioners. There exist associations for formal practitioners, as well as for informal practitioners. NTP collaboration with these associations could help build effective linkages.
- **Training:** Training of selected practitioners should be conducted in a participatory manner, and tailored to physician working hours, task-mix and local realities. Participation and contribution should be recognized through certification and/or accreditation as appropriate, and possible under existing health regulations.
- **Incentives and enablers:** Country experiences have demonstrated that private practitioners can be successfully motivated to participate in TB care and control activities, through a combination of non-monetary incentives (access to free anti-TB drugs), certification or other recognition, and/or com-



## Engaging private practitioners

modities such as clinic equipment) and enabling structures such as tailored training and on-the-job supervision and support. Countries may also offer direct financial incentives, provided mechanisms to prevent any financial malpractices are put in place. Compensation of private practitioners may also be linked to existing or newly introduced health insurance schemes.

- **Monitoring and supervision:** Support and supervision to participating private practitioners is of vital importance for productive and sustainable collaboration. It is often not possible for the limited public sector staff to engage numerous private practitioners and provide supportive supervision to them. It may therefore help to use local intermediary NGOs or professional associations for the purpose. In the absence of such intermediaries, it may be advisable to be selective in prioritizing practitioners who are known to manage relatively large numbers of TB suspects and cases.



### Key background readings

- WHO. Involving private medical practitioners in tuberculosis control. Issues, interventions and emerging framework. World Health Organization, Geneva, 2001.  
[http://whqlibdoc.who.int/hq/2001/WHO\\_CDS\\_TB\\_2001.285.pdf](http://whqlibdoc.who.int/hq/2001/WHO_CDS_TB_2001.285.pdf)
- Uplekar M, Patahnia V, Raviglione M. Private practitioners and public health: weak links in tuberculosis control. *Lancet*; 2001; 358: 912-16.
- Engaging all health care providers in TB control - guidance on implementing public-private mix approaches. Geneva: World Health Organization, 2006 (WHO/HTM/TB/2006.360).

### **CASE STUDY: Engaging private practitioners through the Myanmar Medical Association (MMA)**

The MMA PPM project was launched in 2006. From just 13 townships in 2006, the project has expanded to cover 26 townships of 9 states / divisions of Myanmar with a total population of 6.4 million people. The project operates through a network of 594 private practitioners which is 42% of the total private general practitioners in 26 townships.

A training manual for private practitioners was developed jointly by the NTP, MMA, WHO and other key partners such as Population Services International. The ISTC were also endorsed by the MMA. A simplified version of the ISTC was developed by the MMA and distributed to all its members.

The practical tools used to facilitate collaboration between the NTP and private practitioners included Letters of Agreement and referral tools such as the referral and feedback form and laboratory requisition forms.

Till August 2009, the participating private practitioners screened 14,601 suspects leading to the detection of 23.4% of total new smear positive cases detected in the project implementing townships.



More than 550 patients are being provided with DOT through the partnership network. The total number of notified cases diagnosed by the MMA PPM project was 8526, this represents 21% of total notified cases of NTP detected in the implementation areas.

*This tool presents a summary of involving hospitals in TB care describing key steps in facilitating internal coordination and networking with peripheral health centres.*



A significant proportion of people with symptoms of TB tend to visit hospitals that may be located far away from their homes. People do so often with a belief that long-standing illnesses of serious nature are better taken care of at hospitals. Hospitals, however, are not always well placed to provide closely supervised care for all patients with TB. Optimal care of TB patients in a hospital setting requires close coordination among various internal departments and strong networking with peripheral health centres. While this is essential to ensure continuum of care for TB patients, achieving it may pose distinct challenges. This brief describes the strategies and steps to facilitate involvement of hospitals in TB care and control.

### **Rationale**

- A large number of TB patients diagnosed in hospitals may not get notified to NTPs. Hospital-based specialists often do not follow the national guidelines which may result in under- and over-diagnosis of TB. Inadequate follow up of patients by hospitals may result in poor treatment outcomes.
- The high drop-out rate of TB patients treated in hospitals poses a significant risk for increased morbidity, mortality and development of drug resistance.
- Hospital-based specialists may manage MDR-TB patients in many countries and often it is sub-optimal.
- Engagement of hospitals may facilitate case finding among high-risk groups and management of co-morbidities such as HIV, diabetes, and alcoholism.
- In places where hospital-based doctors and specialists are active in private practice, engaging them may have a positive spill-over effect.

## Evidence

The Hospital-DOTS Linkage project in Indonesia was the first to demonstrate benefits of systematically engaging hospitals in TB care and control. Over a period of four years, involving public and private hospitals in Yogyakarta province tripled TB case notification from 722 to 2356 with a 41-fold increase in notifications from hospitals. Introducing a mandatory, web-based, TB notification system helped hospitals in China contribute over 37% of all cases notified in 2009. In two states in Nigeria, 60% of all TB cases notified came from private hospitals collaborating with the TB programme. In Pakistan, just one large, non-profit hospital when engaged by the TB programme began contributing over a third of all new smear-positive TB cases detected in a district.

## Challenges

1. Hospitals have large catchment areas and patients may come from far away places to seek care. Time and financial constraints may not allow following recommended diagnostic and treatment protocols.
2. Hospital-based specialists who often treat complicated cases tend to individualize treatments rather than follow standardized guidelines essential in TB management.
3. TB patients may be managed in different departments of a hospital. TB management guidelines must therefore be followed by all and not just a few concerned specialists.
4. Ensuring that all concerned specialists follow recommended protocols and coordination among hospital departments may require clear instructions and continuous monitoring from the hospital management
5. Some hospitals may need to create new infrastructure and mobilize human and financial resources for setting-up a TB clinic or a DOTS corner within hospitals and offer free services to TB patients.
6. Eliciting collaboration from hospital managements and specialists may require commitment and support from higher authorities such as directorates managing hospitals or secretariats of hospital associations.
7. Intermediary organizations may be required to help facilitate collaboration between the TB programme and hospitals and may not be available in all settings.

## Steps to involve hospitals

A strategic approach to hospital engagement involves three distinct steps: planning and preparation, internal coordination, and external networking.

**(a) Planning and preparation:** Commitment of the hospital management and willingness and capacity on the part of the NTP to support hospitals are important prerequisites to begin planning and preparation. This may be facilitated by involvement of an intermediary organization such as the hospital association or a local NGO. A situation assessment should be first conducted to understand the working of the hospital with regards to managing TB patients. The tasks related to TB care that the hospital could undertake should be spelt out. Hospital management may take a considered decision to simply refer all TB suspects or diagnosed TB cases to health centres for treatment and follow up. Some hospitals may take on the responsibility of managing only those patients who reside in the vicinity and decide to refer the rest to peripheral health centres. Depending on the hospital policy, resources required to streamline TB management may need to be assessed. Plans for any reorganization of services may then be prepared in close consultation with the hospital management. Identifying champion(s) within the hospital, offering them the leadership role or training responsibilities and setting up an in-hospital coordination team could greatly facilitate further implementation.

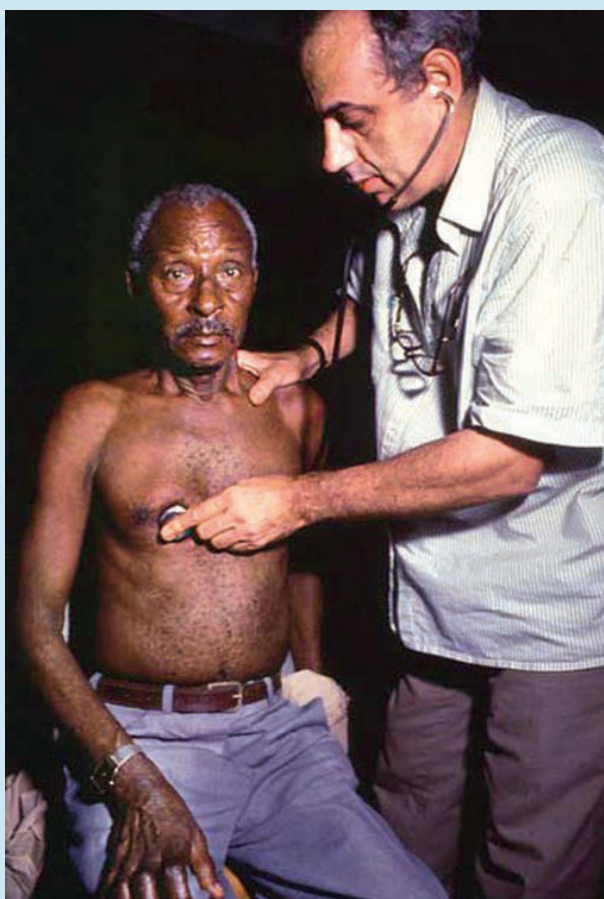


**(b) Internal coordination:** In order to ensure that every TB suspect presenting to the hospital is screened and all TB patients are properly diagnosed and treated according to national guidelines or international standards, close internal coordination is required.



## Engaging hospitals

Often, departments other than chest medicine, internal medicine and the outpatient department (which may be variously labelled in different settings), that need to be closely engaged include general administration to address issues related to patient flows and infection control, laboratory services to ensure quality-assured microscopy, and radiology services for chest X-ray facilities. In fact, all other departments will also need to be oriented to enable capturing TB cases of all types that may be managed in the hospital.



**(c) External networking:** Setting up a functioning network with peripheral health centres where patients diagnosed in the hospital would be received for supervised treatment would be the most important aspect of hospital engagement. Some of the important elements of a working external network should include: development of standard operating procedures (SOPs) on patient referral and feedback; staff training related to SOPs; preparation and distribution of relevant forms and registers; adequate supply and logistics support; periodic meetings for cross-checking data from hospitals and health centres and for preparation of quarterly reports; and jointly agreed monitoring and supervisory routines.

### *Strategic support from higher levels*

Local collaboration between hospitals and health centres may not work or sustain if it is not supported and supervised by higher provincial and national authorities. There should be a clear national policy mandating all health institutions in the country, including hospitals, to follow national guidelines based on international standards for TB care. The problems of co-ordination arise because often, within the ministries of health, different departments may be responsible for health centres and hospitals and other ministries such as the ministry of social welfare or of education may be responsible respectively for hospitals run by social insurance organizations or academic institutions. It is therefore important to constitute national and provincial mechanisms to help set up, support and supervise linkages between hospitals and health centres and sustain them. The text-box details how the TB programme of India has successfully addressed engagement of medical college hospitals through setting up national and provincial task forces and making necessary resources available to them.

### **CASE STUDY: Engaging medical college hospitals in India**

To facilitate engagement of around 300 medical college hospitals in the country, India's Revised National TB Control Programme (RNTCP) organized a national-level workshop in 2002. Based on its recommendations, one national, five regional and several state task forces were formed, with key stakeholders as their members. Under the guidance of regional and national task forces, the state task forces are responsible for implementing activities such as establishing DOT centres within all medical college hospitals in the respective states.

The task forces, supported by the RNTCP, provide the necessary human resources and logistics support to implement and coordinate activities related to engaging academic hospitals. The RNTCP also provides at no cost to the institutions, laboratory consumables and supplies, drugs as well as funds for civil works for upgrade of infrastructure where required. The hospitals are expected to provide space for the microscopy and DOT centre within the hospital, designate faculty members to supervise the functioning of the centre and arrange sensitization and training of hospital staff jointly with respective district-level programme staff. Referral management and follow-up of patients is also coordinated jointly by the hospital and programme staff. Activities of the task forces and local committees are funded by the RNTCP.



By 2008, over 271 medical college hospitals have been engaged by the RNTCP. Data from a scaled up PPM project in 14 cities covering a population of about 50 million show that in 2008, medical college hospitals detected 23% (7933) new sputum-smear positive TB patients. Expectedly, the hospitals provided DOT only to 8% of them, referring the rest to health centres for treatment and follow up and achieved impressive treatment success rates overall.

## Engaging nongovernmental organizations

*The purpose of this tool is to elaborate the different roles nongovernmental organizations can play in TB care and control and outline steps for their engagement.*



Over the past decades, nongovernmental organizations (NGOs) have been contributing in diverse ways to TB care and control. Their engagement has been and continues to be crucial in furthering the cause of TB control. The purpose of this brief is to elaborate the different roles NGOs can play in TB care and control and to outline steps for their engagement.

### **Rationale**

NGOs are well suited to participate in TB care and control activities as they are credible, have access to communities and vulnerable populations and show greater flexibility of work. Collaboration with NGOs can benefit NTPs in the following ways:

- in some settings, NGOs are major non-NTP providers of TB care and control and serve a large number of TB suspects and cases. Their involvement will ensure that TB suspects or patients, particularly among marginal communities and in remote areas, have access to standardized TB services in line with international standards,
- the strengths of NGOs in reaching communities through advocacy, communication and social mobilization, can be capitalized on to expand awareness and access to high-quality TB care and control,
- NTPs can also benefit from the introduction of new perspectives, technical expertise, capacities and human resources, and networks.

### **Roles**

NGOs can contribute in different ways to TB care and control, as summarized in Table 1 below.

### **The process: Steps to engage NGOs**

There is no single model for NGO involvement in TB control. Many approaches can be adopted and the most suitable one will depend on the local context and nature of the organization. NTPs should play a stewardship role to facilitate the engagement of these organizations, building on their current strengths, skills and experience. Practical steps to engage NGOs are outlined below.

# Engaging nongovernmental organizations

**Table 1. NGO roles in TB care and control**

<b>TB service delivery</b>	<ul style="list-style-type: none"> <li>• Service provision: TB referral, diagnosis, treatment, supervision and follow up.</li> <li>• Facilitating community interactions with TB services.</li> <li>• Distributing health resources such as anti-TB drugs and laboratory supplies.</li> <li>• Building health worker moral and support.</li> </ul>
<b>Health promotion and information exchange</b>	<ul style="list-style-type: none"> <li>• Obtaining and disseminating information on TB.</li> <li>• Creating appropriate demand for TB care so that populations use public as well as private facilities that follow guidelines;</li> <li>• Helping to shift social attitudes.</li> <li>• Helping address social determinants of TB.</li> <li>• Mobilizing and organizing communities and other partners for TB care and control.</li> </ul>
<b>Policy setting</b>	<ul style="list-style-type: none"> <li>• Representing public and community interests in TB policy.</li> <li>• Promoting equity and pro-poor policies.</li> <li>• Negotiating public health standards, regulations, and approaches.</li> <li>• Building policy consensus, disseminating policy positions.</li> <li>• Enhancing public support for TB policies.</li> </ul>
<b>Resource mobilization and allocation</b>	<ul style="list-style-type: none"> <li>• Promoting pro-poor and equity concerns in resource allocation.</li> <li>• Building public accountability and transparency in raising, allocating and managing resources.</li> </ul>
<b>Monitoring quality of care and responsiveness</b>	<ul style="list-style-type: none"> <li>• Monitoring responsiveness and quality of TB services.</li> <li>• Giving voice to marginalized groups, promoting equity.</li> <li>• Representing patient rights in quality of TB care issues.</li> </ul>

- Conduct a situation assessment (or use a recent one) of TB service delivery and identify how NGO contribution can complement the TB programme capacity.
- Map all interested NGO partners on the ground, identify key partners, and define their roles. Many NGOs are active in other health areas such as HIV, so NTPs should explore the possibility of integrating TB control into their ongoing programmes.
- Develop an implementation plan in collaboration with identified NGO partners, ensuring synergy with existing NGO initiatives. The plan should include detailed activities, geographical coverage, timeline and required resources. Involvement in TB control may necessitate building the capacity of these organizations.
- Publicly launch the initiative with the participation of national and local authorities. This is very helpful to gain public and political support, to share useful information and to create demand for NGO-based services.
- Start implementation on a limited scale under close supervision and evaluation, before scaling up further. Lessons learned in demonstration areas will contribute to improving the initial model to scale up to all regions and administrative health units of the country.
- Develop and implement a joint monitoring and evaluation plan. NTP recommended recording and reporting tools should be used by all NGOs.

## Engaging nongovernmental organizations

### Key background readings

- Engaging all health care providers in TB control - guidance on implementing public-private mix approaches. Geneva: World Health Organization, 2006.(WHO/HTM/TB/2006.360).  
[http://whqlibdoc.who.int/hq/2006/WHO\\_HTM\\_TB\\_2006.360\\_eng.pdf](http://whqlibdoc.who.int/hq/2006/WHO_HTM_TB_2006.360_eng.pdf)
- Community involvement in tuberculosis care and prevention: towards partnerships for health : guiding principles and recommendations based on a WHO review. Geneva: World Health Organization, 2008 (WHO/HTM/TB/2008.397).  
[http://whqlibdoc.who.int/publications/2008/9789241596404\\_eng.pdf](http://whqlibdoc.who.int/publications/2008/9789241596404_eng.pdf)
- WHO, Regional Office for South-East Asia. NGOs & TB control: principles and examples for organizations joining the fight against TB. World Health Organization. 1999.

### CASE STUDY: NGO collaboration for TB care and control in Bangladesh

Bangladesh has a long history of collaborating with NGOs, particularly on issues related to poverty and health. NGOs and the private sector jointly cover more than half of the NTP activities in both urban and rural areas. This collaboration is based on a Memorandum of Understanding (MOU) signed in 1995 between the government and six NGOs, namely, Bangladesh Rural Advancement Committee (BRAC); the Damien Foundation; the Danish Bangladesh Leprosy Mission; Health, Education and Economic Development; Rangpur Dinajpur Rural Services; and Lutheran Aid to Medicine Bangladesh. The MOU was designed to clearly outline specific tasks for the government and partner NGOs (see table 2) in the delivery of TB services in defined areas. The list of NGOs collaborating with the government has since expanded.

NGOs play a vital role in assisting the NTP in TB service delivery, management support, operations research and social mobilization. The NTP provides treatment protocols, policy guidelines, logistic supplies (drugs, reagents and equipment) and training, while NGOs provide supervised treatment at the community level, promote active case finding and raise awareness about TB among the general population. Monitoring and supervision is done jointly by the NTP and NGOs.



The collaborating NGOs were able to achieve highly satisfactory results both in terms of output achieved and cost effectiveness, particularly in rural areas. For example, BRAC, which is the single largest NTP contractor for community-based DOTS services, has consistently achieved a treatment success rate at or above the global treatment success target of 85 per cent.

**Table 2. Areas of government–NGO collaboration in TB control in Bangladesh**

<i>Area of collaboration</i>	<i>Government</i>	<i>NGOs</i>
Policy	<ul style="list-style-type: none"> <li>• National policies and strategies supporting collaboration</li> <li>• National TB guidelines and protocols</li> </ul>	<ul style="list-style-type: none"> <li>• Programme and management policies based on national guidelines</li> <li>• Utilization of resources</li> </ul>
Implementation	<ul style="list-style-type: none"> <li>• Equipment and lab supplies</li> <li>• Overall coordination</li> </ul>	<ul style="list-style-type: none"> <li>• Specific areas</li> </ul>
Case finding and case bolding	<ul style="list-style-type: none"> <li>• Referral centres</li> <li>• Reference laboratory</li> </ul>	<ul style="list-style-type: none"> <li>• Diagnosis, treatment and follow-up</li> <li>• Late patient tracing</li> </ul>
Training	<ul style="list-style-type: none"> <li>• Training materials</li> <li>• Training of trainers (TOT)</li> </ul>	<ul style="list-style-type: none"> <li>• Local training</li> </ul>
Drug supply	<ul style="list-style-type: none"> <li>• Central procurement</li> <li>• Distribution</li> </ul>	<ul style="list-style-type: none"> <li>• Local storage and distribution</li> <li>• Supply indent</li> </ul>
Monitoring and supervision	<ul style="list-style-type: none"> <li>• Registers/forms</li> <li>• Overall monitoring and supervision</li> </ul>	<ul style="list-style-type: none"> <li>• Registration/reporting</li> <li>• Local monitoring and supervision</li> </ul>
Behavioural change communication	<ul style="list-style-type: none"> <li>• National campaigns</li> </ul>	<ul style="list-style-type: none"> <li>• Local campaigns</li> </ul>

*This tool provides broad guidance on how businesses, in collaboration with NTPs and other partners, can initiate and implement TB and TB/HIV workplace programmes.*



Recognizing the impact of TB and HIV on company productivity and profitability, businesses are increasingly participating in interventions aimed at improving the health of their workforce or even the community, as part of their corporate social responsibility. Business-led initiatives have demonstrated their potential to play a useful role in the care and control of TB. This brief provides broad guidance on how businesses, in collaboration with the NTP and other partners, can initiate, implement and manage TB workplace programmes.

### **Rationale**

Nearly two-thirds of those affected by TB are adult men and women in their productive years of life. Impacts of TB on workers are many, ranging from disease transmission to loss of productivity, diminishing income or even loss of job. Furthermore, barriers to accessing TB- and HIV- associated services are often linked to work-related concerns such as clash of work-hours and clinic opening hours, loss of wages, job discrimination, and job transfers. Addressing TB in the workplace can help control the spread of TB, overcome barriers and also facilitate access to essential health services.

For businesses, evidence indicates that TB has a direct detrimental effect on company productivity and profitability, especially in high prevalence areas. Globally, TB is known to cause a decline in worker productivity to the order of US\$ 13 billion every year. An estimated 4-7% loss in GDP is due to TB in several Asian countries.

### **Role of businesses in TB control**

Businesses across the board- small and big can contribute in diverse ways to TB care and control. While multinational companies (MNCs) may be able to provide a wider range of TB and HIV services to their workers, small and medium-sized enterprises (SMEs) and informal economy operators are likely to offer limited TB care services such as identifying and referring cases and providing them support while on treatment. Workplace programmes should be gender-sensitive, and enshrine the principles of non-discrimination and confidentiality. It must ensure that no one experiences discrimination on the basis of their TB or HIV status, whether in terms of continuing employment relationships or access to health insurance, occupational safety, and health care schemes.

## Menu of options

Outlined below and in the figure are a «menu of options» describing the various essential activities companies can be engaged in to address some of the current constraints of global TB care and control. These activities are based on working examples at the country level. Some of these require little or no investment and may prove cost-effective for the company, community and the country as a whole.

**Increase awareness:** Improved awareness and knowledge of TB can contribute to early case detection, reducing stigma and discrimination. This can be carried out at little to no cost by companies of any size, in collaboration with the NTP and other partners.

**Referral and treatment support:** Referral of TB symptomatics, intensified TB case-finding and treatment support are simple activities that workplaces could contribute to, with very little investment or effort. Medical, paramedical staff or even workers (peer educators/counsellors) with appropriate training, can easily identify TB symptoms, refer symptomatics for diagnosis or provide treatment support.

**Diagnosis:** Workplaces can greatly facilitate the identification of TB cases and significantly reduce the delays that exist between the onset of symptoms and diagnosis.

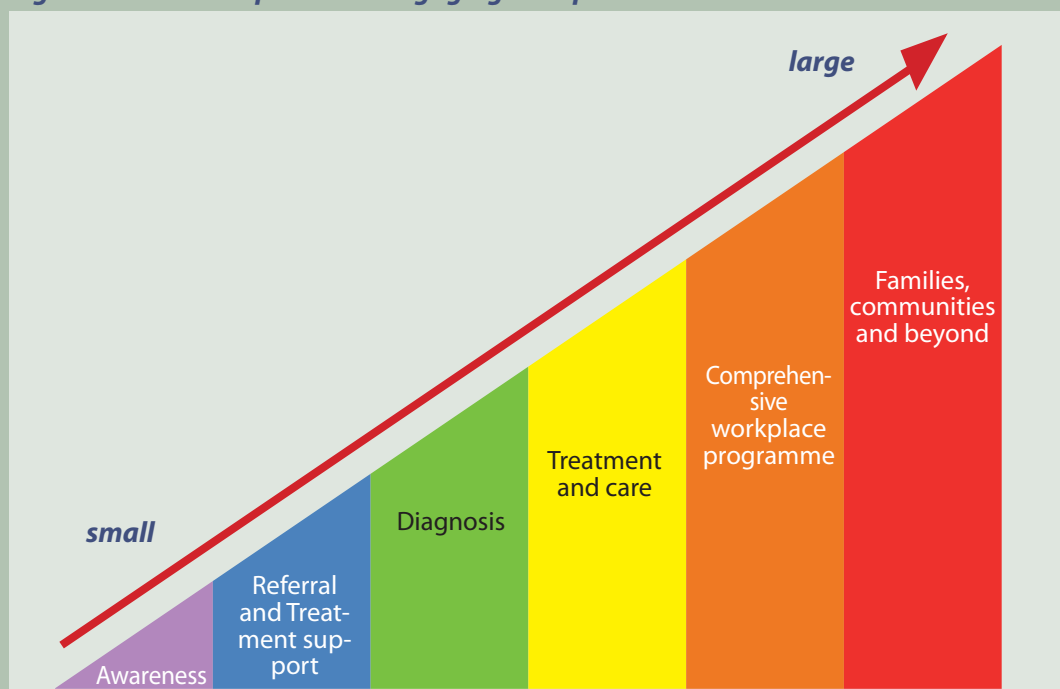
Businesses could contribute to the early detection of TB by facilitating access to testing and counseling services for their employees, and/or dependents - on-site or in collaboration with public or private institutions.

**Treatment and care:** Workplaces can also facilitate access to TB treatment and care through provision of treatment support on-site or external referral, provision of time for treatment and by maintaining and following up on treatment records. Workers who are able to easily access treatment at the workplace tend not to default as evidenced by site visits to Bangladesh, Cambodia, Kenya and the Philippines.

**Comprehensive workplace programme:** Large companies, especially those operating in high-TB or HIV prevalent settings can set up their own workplace TB programmes or can incorporate TB control activities into existent HIV workplace programmes or Occupational Safety and Health (OSH) programmes. Table 1 provides for possible entry points for TB/HIV programming within the workplace.

**Families, communities and beyond:** Large companies can go beyond the workplace to the families, dependents and surrounding communities by providing them TB services. They can also support smaller business in their supply chain to initiate and implement TB workplace programmes.

Figure 1. Menu of options for engaging workplaces





**Table 1: Integrating TB into existing HIV workplace structures**

<i>Assess existing HIV/AIDS Workplace programme structures</i>	<i>TB Programmatic Actions</i>
Is there a HIV Focal person/coordinator in the workplace?	Train the HIV focal person to undertake TB activities (TB/HIV focal person) or identify and train another worker to be a TB focal person
Is there a HIV steering committee?	Train the steering committee to undertake TB activities. Consider changing the name to TB/HIV Steering Committee
Is HIV education undertaken as part of the induction/orientation for new employees?	Include TB in the induction for new employees
Is there a HIV/AIDS curriculum for training peer educators and steering committee members?	Include TB into the HIV training curricula
Have IEC materials been developed for HIV and are some in the process of being developed?	Develop TB IEC material or incorporate TB information in HIV IEC material
Does the workplace programme have a Project Advisory Board (PAB) or Tripartite Advisory Board?	Include representatives from the NTP as well as from the constituency of TB patients
Is there a HIV workplace policy?	Adapt the HIV policy to address TB (TB/HIV Policy)
Are there trained peer educators and counselors (from the enterprise and community)?	Upgrade the skills of peer educators and counselors to include TB education
Have the onsite health workers been trained in HIV/AIDS issues?	Train the onsite workers in TB and related issues
Is VCT undertaken periodically in the workplace for employees?	Encourage passive case finding for TB at the workplace
Are there support groups at the workplace or in the community addressing HIV?	Include TB in the activities of the support groups
Is there a monitoring and evaluation framework for the HIV workplace programme?	Include TB indicators

Source: ILO. A step-by step approach to integrating TB into existing HIV workplace programmes. International Labour Organization. 2009

### **Linking with the informal sector**

A large proportion of the economically active population in many countries finds an income-generating source in activities outside the formal sector of the economy. In most cases these opportunities are of lower quality than the majority of formal sector jobs. Working conditions are often very poor and protection levels for employees are low. TB and HIV thrive in such environments and it is thus essential to also engage this sector in TB and HIV

control efforts. In general, health facilities or services are not provided in the informal sector to employees, due to the often-low margins that companies operate under. Referral of employees to public health centres where free TB treatment and diagnosis is available could be a suitable option for these companies. Alternatively employees of this sector could join together in the form of “organized associations” to access health services.

## Steps to initiate and implement TB workplace programmes at the country level

**Step 1: Form tripartite steering committee:** the NTP in each country has the mandate and responsibility for coordinating TB control activities. At the central level and through their network, NTPs can facilitate partnerships and set up a committee to help businesses initiate and implement TB workplace programmes. Tripartite partners namely the Ministry of Labour, Ministry of Health and the employers and workers' unions should be engaged to get buy-in, and for the programmes to be effective and sustainable. The committee could also consist of partners already involved in engaging workplaces, such as HIV programmes, employers (public and private sector), business coalitions, employer federations, nongovernmental organizations and private practitioners.

**Step 2: Conduct a situation assessment and review legislative framework:** this step involves two distinct activities to be conducted by the committee:

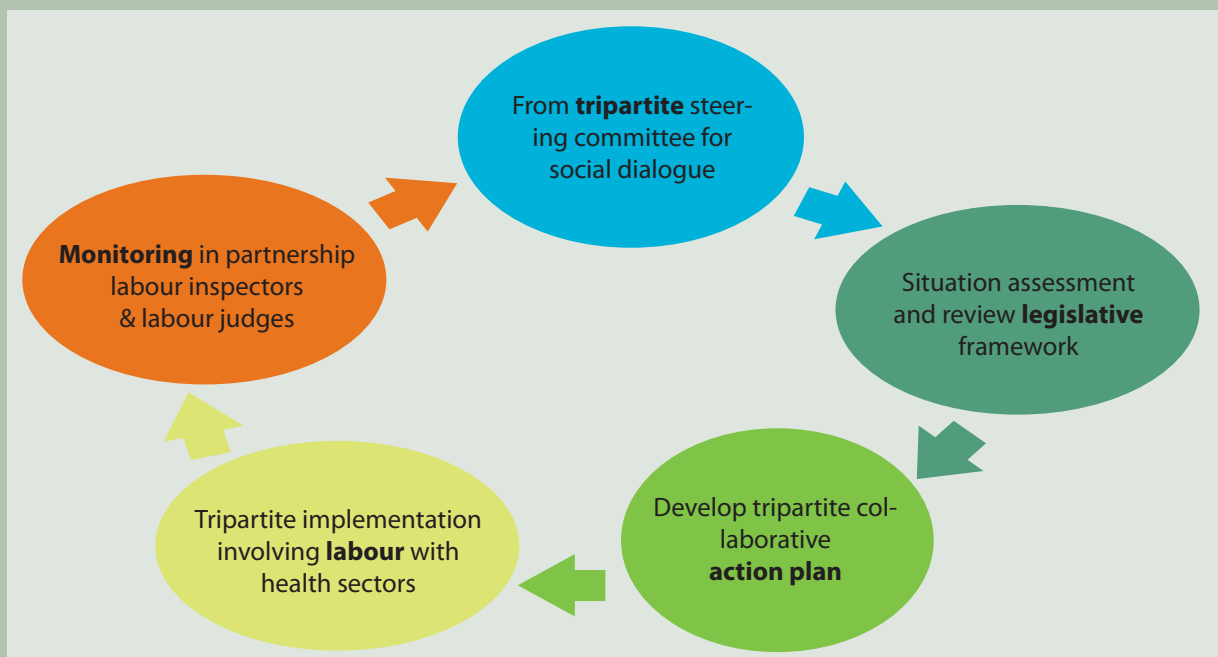
- Mapping and prioritization of various companies in the labour sector. A list could be developed or procured from business associations, employers' or workers' organizations, or the Department of Labour on the companies in the country. This list could be analyzed to prioritize occupational sectors which are labour intensive or have a high prevalence of TB or HIV such as mines, construction, garment factories, etc.

- Reviewing the regulatory environment of the labour sector, including labour laws and worker protection acts, and the role of trade unions. An assessment of international conventions can also help understand what standards (e.g. concerning work environment, workers health and social protection) are enforced by the Ministry of Labour for ensuring businesses are able to trade outside the country.

**Step 3: Develop tripartite collaborative plan:** the various elements under this step include:

- defining goals, setting objectives and a possible timeline for implementation of the work plan.
- mapping the roles and responsibilities of various tripartite and collaborating partners, including the national programmes.
- designing incentives to motivate companies to be engaged in workplace programmes, e.g. provision of drugs or support in training.
- facilitating training to ensure that all players involved in the implementation of the workplace programme have the necessary skills and know-how in relation to their assigned tasks.
- developing and providing necessary material for increasing awareness and decreasing stigma among workers.
- providing monitoring tools, e.g. TB registers, and/or placement of monitoring mechanisms.

**Figure 2 . Tripartite partnership to engage workplaces (government + employers + workers)**



**Step 4: Tripartite implementation involving labour and health sectors:** The collaborative plan should be implemented jointly with the identified partners and stakeholders. The steering committee, through its partners, should supply technical information and advice to employers, whether public or private, and to workers and their representatives. Workplaces should be encouraged to develop TB/HIV workplace policies. Furthermore companies should be assisted in setting up a TB or TB/HIV steering committee in the workplace to coordinate related activities and for jointly planning and ensuring the monitoring of the programme. The committee should meet periodically to review programme activities and propose corrective measures if necessary.



**Step 5: Monitoring:** The steering committee should work together and with relevant parties to ensure that properly funded OSH inspectorates exist to advise on and enforce OSH legislation. Specifically labour inspectors should be trained and capacitated to include TB/HIV in their inspections. At the workplace level, employers should regularly monitor and evaluate work practices and ensure that action is taken to modify them when indicated. A person or a group of people should be identified in the workplace to carry out monitoring and evaluation.

### *Key background readings*

- WHO, ILO. Guidelines for workplace TB control activities. The contribution of workplace TB control activities to TB control in the community. World Health Organization. 2003.
- WHO, Regional Office for South-East Asia. DOTS at the workplace: Guidelines for TB Control Activities at the Workplace. World Health Organization. 2003.
- ILO. A step-by step approach to integrating TB into existing HIV workplace programmes. International Labour Organization. 2009
- For detailed guidance and supporting documents please access the WHO PPM and ILO websites at <http://www.who.int/tb/careproviders/ppm/en/> and [www.ilo.org/ilolex](http://www.ilo.org/ilolex)

### **CASE STUDY: Kenya tea estates**

In 2007, Kenya was ranked 13<sup>th</sup> out of the top 22 high TB-burden countries and fifth in the African region. With 116,723 TB cases the TB burden has increased ten-fold from the situation in 1990. This increase was largely driven by the HIV epidemic - an estimated 1.5 million people are living with HIV in the country and approximately half of the TB patients in Kenya are HIV positive. Companies in Kenya are slowly taking a lead in providing health services to their employees. Due to the intensity of advocacy efforts by the HIV community most companies are engaged in some form of HIV activities, and TB control efforts feature as part of HIV workplace programmes in some places. The National TB and Leprosy programme (NTLP) is working closely with the Kenya Association of for the Prevention of Tuberculosis and Lung Diseases (KAPTLD) and other partners to encourage, engage and support companies in TB control efforts.

Nearly two-thirds of Kenya's working population are employed in the agricultural sector especially in tea production, which is one of the country's top exports. The tea plantations employ large numbers of workers. Health services, especially in the bigger plantations are provided to workers and their families at the workplace. One of the biggest tea plantations in the country has 22 dispensaries across the plantation to attend to workers' health needs with one main hospital. This medical centre has diagnostic facilities in place for TB and HIV testing with external quality assessment done every month in collaboration with the district coordinator. Anti-TB drugs, laboratory reagents and slides are provided to the company health centre free of charge by the NTLP. TB diagnosis and drugs are



given to the workers and their dependents free of charge, and, workers and dependents diagnosed with TB are counselled to test for HIV and vice versa. In addition to this mobile-clinics are regularly deployed to the communities to conduct voluntary counselling and testing (VCT).

In 2007, 197 TB cases were detected at the tea plantation health centre, nearly half of them were co-infected with HIV. The plantation had high cure rates (85-90%) and very low default rates (close to 0).

*This tool provides guidance on how social security organizations, health insurance schemes and NTPs can work together in strengthening TB care and control efforts.*



The primary role of social security organizations (SSOs) and health insurance schemes (HIS) is to protect affiliated members (and often their dependants) against the catastrophic effects of sickness and to compensate for the loss of income due to illness, cost of treatment or inability to work. This often encompasses the provision of health care services, including TB diagnosis and treatment, in facilities belonging to or affiliated with a SSO/HIS. The TB care provided in these facilities may not be in line with national and international standards. While in some settings, NTPs and SSOs/HIS collaborate closely to ensure better access to quality TB services, in many others inadequate attention has been paid to these providers in the planning and implementation of TB control activities. This brief provides broad guidance on how SSOs/HIS and NTPs can work together in strengthening TB care and control efforts. For the purpose of this brief, the term SSO is used to indicate different types of social security and health insurance organizations (both public and private).

### **Rationale**

The increased level of inequity in health and the rising costs of health care provision have stimulated health care reform efforts in many low- and middle-income countries moving away from out-of-pocket payments and searching for more efficient health care systems. Introducing other sources of funding, pooling financial resources to spread risks and developing prepayment mechanisms have resulted in an increasingly prominent role for SSOs. For instance, in many Latin American countries, SSOs provide health care to as much as 50% of the population (e.g. Argentina, Chile, Colombia). In contrast, less than 10% of the population are covered by SSOs in most sub-Saharan African countries.

Non-engagement of SSOs can result in inadequate TB care and under-reporting of TB cases.

By liaising with SSOs, NTPs could significantly:

- increase DOTS coverage,
- address equity of provision of TB care,
- increase case detection and notification,
- standardize TB treatment,
- ensure provision of adequate TB care,

- tap into health insurance resources, thus reducing costs to the NTP,
- better utilize human resources for health,
- facilitate the implementation of other components of the Stop TB Strategy.

### Roles

Collaboration between the NTP and SSOs are possible at different levels of implementation of TB control activities. For instance, the SSOs in Mexico and Peru are combined health insurance and social security systems which provide health care and social services through their own network. While the Philippines have only a health insurance scheme, PhilHealth, a funding mechanism that can indirectly influence health service delivery through accreditation and reimbursement conditioned upon content and quality of care.

It is crucial that SSO-delivered TB services be gender-sensitive, and enshrine the principles of non-discrimination and confidentiality. It must ensure that no one experiences discrimination on the basis of their TB or HIV status, whether in terms of continuing employment relationships or access to health insurance, occupational safety, and health care schemes. For more information on the ILO code of practice please link to: <http://www.ilo.org/ilolex/english/convdisp1.htm>.

### Evidence

Experiences in countries where NTPs have already established collaboration with SSOs – such as Mexico and the Philippines - have resulted in increased coverage of good quality TB care and improvements in case notification. The Mexican Institute of Social Security (MISS) covers over 37% of the population in Mexico.

In 2008, 23% of the new TB SS+ cases diagnosed nationwide were reported by the MISS. In the Philippines, PhilHealth accredited DOTS facilities providing high quality TB services have rapidly increased from 8 in 2003 to 663 in 2007 representing about 20% of the eligible facilities in the country. As of December 2007, 48,206 patients were treated with high success rates at the Public-Private Mix DOTS (PPMD) units, over 60% of which were accredited by PhilHealth.

### *The process: Steps to engage SSOs*

In order to build effective collaboration between NTP and SSOs, NTPs should carefully assess the opportunities and barriers to establishing collaboration with SSOs; identify possible roles and responsibilities of SSOs and the population they cover; assess the capacity of the NTP to lead the collaborative processes and ensure high-level political commitment to secure sustainability.

### *The following steps have been identified to facilitate collaborative work:*

#### **Step 1. Perform an assessment of SSOs in the country:**

In a given country there could be different SSOs covering different sections of the population and with diverse service delivery models; the NTP should take the lead to:

- assess internal NTP capacity in terms of human and financial resources to lead the SSO-NTP collaborative process. This includes identifying opportunities for synergies with other disease control programmes;
- perform a scoping exercise identifying all the different SSOs in the country, and the systems they have in place;
- plan and budget start-up operations carefully, secure sufficient funds for expected high start-up costs.

**Step 2. Prioritize SSOs with greater potential:** Once the NTP has identified the population and geographical coverage of SSOs, it is important to conduct a more detailed situational analysis of selected SSOs to prioritize those with the greatest potential for collaboration. The various activities under this step include:

- identify coverage of SSOs, the proportion of the population covered as well as any specific population groups;
- assess the services provided by SSO with particular emphasis on their infrastructure, network of health facilities and laboratory capacity;
- identify the current role of SSOs in TB diagnosis and treatment; look for areas where synergies could be built and processes could be strengthened to achieve better TB care and control;
- Document any existing ad hoc examples of good collaboration; evidence of effective collaboration could facilitate engagement of policy-makers.

## Engaging social security organizations

**Step 3. Establish a MoH/SSO Coordinating Body (separate or integrated into a general PPM coordinating body):** Identify strategic individuals within the MoH, SSO and other ministries/academic institutions or professional associations, as appropriate; and invite them to form a MoH/SSO coordinating body for TB control. Some of the key areas of work of the coordinating body should include:

- regulatory functions;
- the identification and tackling of bureaucratic, legal and organizational barriers;
- development of a certification process;
- ensuring equity in access to adequate TB care;
- support the NTP in a joint analysis of the TB situation and the way forward;
- monitoring and evaluation;
- strengthening participation of all members of the Coordinating Body through quarterly and annual M&E workshops to assess the collaborative processes, analyzing impact on TB indicators and information sharing.

**Step 4. Address human resources needs:** SSOs rarely have a central TB control programme unit. Often the central level staff responsible for supporting TB activities are limited. Staff shortages may also represent a barrier for participation of SSO staff in strategic meetings organized by the NTP. On the other hand, at the health facility level, SSO affiliated facilities could be better staffed than those of the MoH, as in the case of Mexico. Effective collaboration with SSOs may therefore require support at central SSO level for better planning and management for TB control, while better staffing in SSO facilities at peripheral level may support better coverage and service delivery.

The NTP also has a role to support training and supervision activities of SSO staff involved in TB control. NTPs are also expected to provide technical support to SSOs along with quality assurance of laboratory services. The creation of a collaborative coordinating body for TB control will facilitate the implementation of collaborative activities and eventually reduce human resources pressures on the NTP.



**Step 5. Phased implementation:** Pilot collaborative initiatives, monitor and evaluate, scale up and ensure sustainability:

- assess any existing ad hoc collaboration, if they are effective ensure they are legally recognized and sustainable;
- pilot collaborative model(s) identified in the agreed action plan and assess implementation in order to plan for expansion;
- conduct regular monitoring and evaluation visits to SSO institutions collecting information on implementation processes with emphasis on synergies, barriers and threats;
- explore different ways of ensuring sustained collaboration and adequate follow up of the norms and regulations. Carefully assess the potential incentives and disincentives for both patients and institutions to follow the collaboration pathway.

### *Key background reading*

- The role of Social Security Organizations in improving coverage, quality and sustainability of TB care - lessons from Mexico, Peru and the Philippines. TBCAP Report. World Health Organization and Management Sciences for Health, 2010

### CASE STUDY: Mexico

Mexico has a decentralized National Health System with a Federal Executive at the level of the MoH and a Local Secretariat of Health in every state. There are three main health care providers, the MoH, SSOs and the private sector. The MoH provides assistance to the non-insured population (55% coverage); SSOs consist of mainly two institutions, the Mexican Institute of Social Security (MISS) and the Institute of Social Security for Government Workers (ISSTE). MISS covers around 37% of the economically active population, while ISSTE covers approximately 6%. Both SSOs have different structures and organizational charts from the MoH. They also have parallel and dissimilar TB control systems.

Although SSOs have participated in the development of the regulatory and technical documents, their capacity to implement the guidelines on TB control is limited due to the lack of staff at central level. In spite of good technical knowledge and awareness of the importance of supervised treatment, it has been difficult for SSO services to implement DOTS as a standard.

Patients attending SSO services who are ss+ and employed are in principle allowed sick leave until the sputum smear becomes negative, however many patients prefer not to report their TB diagnosis to their employer for fear of losing their job due to stigma.

Several initiatives have been developed by the NTP to further improve collaboration including:

- shared annual seminars and workshops to update health professionals from MoH and SSOs on TB management and control;



- participation by SSOs in the development of regulatory and technical documents and guidelines for TB detection and control;
- collaborative work on guidelines for nursing staff in community action and health service facilities;
- establishment of links between MoH and SSO service suppliers in selected areas; and
- provision of sputum smear microscopy by MoH to SSO facilities lacking this service.

The NTP has also granted access to SSOs to their surveillance system - the unique platform National System for Epidemiological Surveillance. This has resulted in better notification of cases and access to timely information.

In 2008, there were 15,035 new TB ss+ cases diagnosed nationwide, around 3,438 (23%) were reported by MISS. Further, MISS manages and treats 21% of the MDR-TB cases in the country.



*This tool describes steps for effective planning, preparation, implementation and monitoring of collaborative TB/HIV activities through the engagement of all care providers.*



## **Rationale**

Collaborative TB/HIV activities are essential to ensure that HIV-positive TB patients are identified and treated appropriately; and to prevent, diagnose and treat TB in people living with HIV (PLHIV). However, scale-up of collaborative TB/HIV activities, in particular the essential interventions that are needed to reduce the burden of TB among people living with HIV, falls short of the targets of the Global Plan to Stop TB, 2006-2015. In order to effectively scale up these activities, all relevant public and private providers need to be engaged. This brief describes steps for effective planning, preparation, implementation and monitoring of collaborative TB/HIV activities through PPM approaches.

## **The process: promoting the implementation of PPM TB/HIV activities**

Before steps are taken for successfully scaling-up the implementation of collaborative PPM TB/HIV activities, close coordination and collaboration among national AIDS and TB control programmes as well as public and private service providers is required. There are a set of guiding principles, given in the box, for commencing and scaling-up the involvement of public-private providers in collaborative TB/HIV activities.

The steps to implement PPM TB/HIV activities require understanding of the country context in its response to TB/HIV, identifying a need to engage all health care providers in collaborative TB/HIV activities and assessing that the guiding principles to commence activities are present. The presence of a national policy specific to PPM TB/HIV activities or of a national authority to supervise them is not essential.

## **Planning**

The planning stage includes action steps of strategic importance that can serve to leverage effective local implementation as well as facilitate monitoring and evaluation of activities and their eventual evaluation for nationwide scale up. Among others, key steps in this stage include:

- a feasibility analysis to address whether the commencement of PPM TB/HIV activities is viable;
- identifying the package of collaborative TB/HIV activities to be implemented;
- defining types of providers and selection of implementation sites.

Planning for commencement and scale-up can be done by all interested parties such as: NGOs, professional associations or interested groups of private professionals at all levels.

## Preparation

The preparation stage is concerned with the tools, supplies and essential systems that are necessary to facilitate local implementation, as well as monitoring and evaluation of PPM TB/HIV activities. Some vital steps in this stage include:

- defining the task-mix for collaborative TB/HIV activities according to local policies and context. Table 1 lists some of the main tasks based on the 12 collaborative TB/HIV activities to provide indicative guidance for local implementation.
- preparing generic local implementation tools and training materials for relevant activities defined in the package of the implementation model, depending on national and local contexts.
- establishing effective referral mechanisms between different HIV and TB service delivery sites and ensuring that referrals are initiated.

## Local Implementation

The action steps in this stage are based on and are contingent upon the implementation model developed, and the presence of tools and systems that have been established in the preparation stage. The steps include,

- physically mapping and sensitizing providers,
- localizing the task mix,
- providing regular supervision,
- ensuring a sustainable system of commodities supply and management at the local level.

## Monitoring and Evaluation

This stage is critical in informing further scale-up and expansion of PPM TB/HIV activities. It involves defining indicators based on WHO's guidelines on monitoring and evaluation of TB/HIV activities. These indicators should be developed in line with international and national recommendations and agreed upon locally based on the local implementation model. For effective monitoring and evaluation, data quality control mechanisms should be introduced at the local level to ensure optimal data for assessing the performance of PPM TB/ HIV activities. Please refer to the PPM TB/ HIV protocol document at [http://whqlibdoc.who.int/hq/2008/WHO\\_HTM\\_TB\\_2008.408\\_eng.pdf](http://whqlibdoc.who.int/hq/2008/WHO_HTM_TB_2008.408_eng.pdf) for a detailed list of indicators.

The steps for promoting the implementation of PPM TB/HIV activities include planning, preparation, local implementation and, monitoring and evaluation. These steps encourage organizations and associations of private and public service providers working on TB and HIV to incorporate collaborative TB/HIV activities, through collaboration with national, regional and local authorities. They also offer a mechanism to enable prospective PPM TB/HIV pilot projects to generate evidence that will eventually inform global and national policies on engaging all care providers in the implementation and scale-up of collaborative TB/HIV activities.

## Way Forward

Quantitative evidence from Mumbai and qualitative evidence from Namibian studies reveal that there are opportunities for the public and private sectors to be engaged in different modalities depending on the country contexts for furthering collaborative TB/HIV activities. Therefore, public health players should consider the role of all public and private providers in their planning and implementation of TB/HIV activities.

## Box

### *Guiding principles for commencing and scaling-up the involvement of public and private providers in collaborative TB/HIV activities*

- Existence of national TB and AIDS control programmes and implementation of basic DOTS strategy and services for HIV prevention and treatment.
- Close coordination between the national AIDS and TB control programmes at all levels (state, regional, provincial, district) and among all private and public stakeholders involved in the initiatives.
- Medicines and consumables supplied at no cost to providers and extended free of charge to patients.
- Capacity building (including training and supervision) in accordance with national policies and standards.
- Provision of technical assistance (internal and/or external) ensured.

# Engagement for TB/HIV collaboration

**Table 1. indicative TB/HIV collaborative activities task mix for different provider categories**

Collaborative TB/HIV activities	Rationale	Distribution of task or involved stakeholders
<b>A. Establish the mechanisms for collaboration.</b>		
A.1 set up a coordinating body for TB/HIV activities effective at all levels	coordinating body is needed (at all levels) to ensure more effective collaboration between the two programme efforts and the private and public service providers.	National, TB and AIDS control programmes and their system at regional, state, provincial or district levels, Professional associations, service provider interest groups, other line ministries such as Ministry of Justice.
A.2 Conduct surveillance of HIV prevalence among tuberculosis patients	Surveillance is essential to inform programme planning and implementation. The method chosen will depend on the national TB and HIV situation, and the availability of resources and expertise.	National TB and HIV/AIDS control programmes.
A.3 Carry out joint TB/HIV planning	Roles and responsibilities of two programmes have to be clearly defined, and should focus on all collaborative TB/HIV activities, capacity building training, resource mobilization and advocacy. Communication and social mobilization.	National TB and HIV/AIDS control programmes and their system at regional, state, provincial or district levels. Professional associations, service provider interest groups. line ministries.
A.4 Conduct monitoring and evaluation	M&E helps ensure continuous improvement of programmes performances. It involves collaboration and referral linkages between different services and organizations.	National TB and HIV/AIDS control programmes and their system at regional, state, provincial or district levels.
<b>B. Decrease the burden of tuberculosis in people living with HIV/AIDS (the three I's).</b>		
B.1 Establish intensified TB case-finding	Screening for early signs and symptoms of TB among PLHIV increases the chance of survival, improves quality of life. And reduces the transmission of tuberculosis in the community involves suspect identification, referral or patient or family education.	All HIV treatment and care providers involved in the PPM initiative. Informal providers for patient referral.
B.2 Introduce isoniazid Preventive therapy (IPT)	Six to nine months of IPT prevents the progress of latent TB infection into TB disease in PLHIV.	All HIV care providers to be involved in the PPM initiative. Pharmacists and informal providers to assist adherence for IPT.
B.3 Ensure TB infection control in health care and congregate settings	Health care workers and their patients are at risk of being infected by TB (especially in congregate settings) if infection control is not properly maintained.	All TB and HIV treatment and care providers involved in the PPM initiative.
<b>C. Decrease the burden of HIV in tuberculosis patients.</b>		
C.1 Provide HIV testing and counselling	Testing should be offered to all TB suspects and patients as it offers an entry point of prevention, care, support and treatment of HIV/AIDS and TB.	All TB diagnosis and treatment service providers involved in the PPM initiative.
C.2 Introduce HIV prevention methods.	Providing or referring for HIV prevention services. Choice of method will depend on the type of transmission. Sexual parenteral, and/ or vertical.	All TB diagnosis and treatment service providers involved in the PPM initiative. Informal providers included.
C.3 Introduce co-trimoxazole preventive therapy (CPT).	CPT is useful to prevent several secondary bacterial and parasitic infections in adults and children with HIV/AIDS and improves mortality and morbidity in HIV positive TB patients.	All TB and HIV treatment and care providers involved in the PPM initiative.
C.4 Ensure HIV/AIDS care and support	providing or referring for comprehensive AIDS care and support services (clinical management, nursing care, palliative care, home care, counselling and social support).	All TB diagnosis and treatment service providers involved in the PPM initiative.
C.5 Introduce anti-retroviral therapy (ART).	ART improves the quality of life and greatly improves survival for PLHIV. It transforms HIV infection into a chronic condition with improved life expectancy. ART also reduces the incidence of TB in HIV positives.	All TB and HIV treatment and care providers involved in the PPM initiative.

## Key background readings

- Promoting the implementation of collaborative TB/HIV activities through public-private mix and partnerships, Report of a WHO consultation 27-28 February 2008, WHO, Geneva, Switzerland.  
[http://whqlibdoc.who.int/hq/2008/WHO\\_HTM\\_TB\\_2008.408\\_eng.pdf](http://whqlibdoc.who.int/hq/2008/WHO_HTM_TB_2008.408_eng.pdf)
- Promoting the Implementation of Collaborative TB-  
HIV Activities through Public-Private Mix and Partnerships. Evidence from two pilot projects India and Namibia. International Union Against Tuberculosis and Lung Disease (The Union).
- Interim policy on collaborative TB/HIV activities. World Health Organization, 2004. WHO, Geneva, Switzerland.  
[http://whqlibdoc.who.int/hq/2004/WHO\\_HTM\\_TB\\_2004.330\\_eng.pdf](http://whqlibdoc.who.int/hq/2004/WHO_HTM_TB_2004.330_eng.pdf)

## CASE STUDY: PPM TB/HIV pilot project, Mumbai

With the objective of “field testing” the protocol for promoting the implementation of collaborative TB/HIV activities through PPM, two pilot projects were initiated in Namibia and Mumbai, India. The pilot project in Mumbai is briefly discussed below.

The two main objectives of the Mumbai pilot project were: (1) to increase access to HIV testing and treatment services to the general population and TB patients undergoing treatment at DOTS centres run by NGOs; and (2) to increase access to DOTS for HIV/AIDS vulnerable groups by decentralizing DOTS services at the level of HIV/AIDS high risk groups through the NGOs catering to these groups.

The Mumbai pilot project was implemented over eight months and its activities included intensifying TB case finding in high-risk groups and providing them with TB services, including sensitization of patients and their families, referral for HIV testing and counseling of TB patients and development of communication material.

Findings from the pilot study show an observable increase in referral for HIV testing among TB patients and improvement in access for HIV testing among TB patients and of TB services for people living with HIV (Please refer to Table 2).

**Table 2. Referrals from DOT centers operated by TB NGOs in Mumbai/East ward**

	Baseline for 3 months	Q4 08	Q1 09	Q2 09	Total
Total on-going patients	281	213	559	670	1442
Referrals to ICTC	19 (7%)	82 (38%)	293 (52%)	149 (22%)	524 (36%)
Tested for HIV	19 (100%)	41 (49%)	190 (65%)	115 (77%)	346 (66%)
Reported back as HIV positive	6 (32%)	7 (18%)	12 (6%)	16 (14%)	37 (10%)
Reported back as HIV negative	13	31	176	97	305
HIV status not known	0	43	103	36	182
NSP HIV Pos	3	1	3	4	8
Patients started on CPT	0	0	4	19	23
Patients started on ART	1	0	4	2	6

# Engagement for programmatic management of drug-resistant TB

*This tool presents a framework for engagement of all care providers in Programmatic Management of drug-resistant TB (PMDT).*

PPM and the programmatic management of drug-resistant tuberculosis (PMDT) are among the core components of the Stop TB Strategy. The WHO recommends the integration of PPM and PMDT into routine activities of NTPs. Although a few countries have begun incorporating PMDT into efforts to engage all care providers, a large majority of the high multidrug-resistant tuberculosis (MDR-TB)-burden countries have yet to streamline PPM into their PMDT strategies. This brief presents a framework for action to guide the engagement of all care providers in PMDT. For the purpose of this brief drug-resistant TB (DR-TB) includes multidrug and extensively drug-resistant tuberculosis (M/XDR-TB).

## **Rationale**

Close to 40% of all sputum smear positive TB cases and around half of all sputum smear negative TB cases remain un-notified globally. In 2007 only 300,000 MDR-TB cases were diagnosed and notified by NTPs, accounting for only 8% of the total estimated MDR-TB cases globally. Evidence from studies, including prevalence surveys, indicate that a substantial proportion of these patients present themselves to a wide array of health care providers not linked in any way to the NTPs. Evidence also indicates that many of these patients are managed in inappropriate, non-standardized ways with anti-TB drugs of questionable quality. Most of these patients are not notified to the NTPs and their treatment outcomes are not known either.

**PPM for DR-TB can increase detection and management of MDR-TB in line with international standards, by establishing effective referral links and/or building the capacity of providers and institutions outside NTPs to adequately diagnose, treat and report drug-resistant patients, in the same way as PPM has been shown to do for drug susceptible TB.**

Furthermore, NTPs in many high TB-burden countries (HBCs) do not have the capacity or resources for treating MDR-TB patients. While NTPs are beginning to identify and manage a small number of these cases, a large proportion are left to providers outside NTPs. For instance, a network of private laboratories in India reported to have diagnosed about a thousand MDR-TB cases in 2007.



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# Engagement for programmatic management of drug-resistant TB

In the absence of any formal links with NTPs, the quality of diagnosis and management of MDR-TB by these providers remain questionable. Overall, there are reasons to believe that mismanaged TB patients unknown to NTPs could be an important source for emergence and spread of M/XDR-TB. A partnership between government and the non-NTP sector could thus be useful for making best use of existing resources, to achieve scale, while maintaining quality and positive outcomes.

## The process

PPM for DR-TB is a way to scale up PPM and PMDT activities simultaneously. The plan of action of PPM for DR-TB should depend on the existence and extent of ongoing PPM and PMDT activities at the country level (Please refer to table 1).

The logical steps for implementing PPM for DR-TB include:

### Assess country preparedness

- The first step is a baseline assessment of NTP capacity and preparedness to manage and implement PPM and PMDT activities.
- NTPs in high MDR-TB prevalent countries often have a poor history of TB control. Therefore, basic components of DOTS must be implemented and strengthened, before embarking on PPM and PMDT.

- When scaling up PPM for DR-TB, PMDT should be strong and well functioning. However, some countries have demonstrated that PMDT can start in the private sector, and then scale up in the public sector (see case studies below), when their capacity has been strengthened.

### Assess situation in the private and non-NTP sectors

- Since MDR-TB management is complex and requires various kinds of resources, both formal and informal private health care sector may need to be involved in PMDT in various capacities, but with very different types of contributions. In order to identify suitable roles, it is important to first map all healthcare providers and assess their current or potential role in PMDT. If a country has already started PPM for TB care, this basic work may already have been done, but may have to be complemented with specific information about MDR-TB diagnosis and treatment.
- The scope and task-mix for different providers in PMDT are outlined below:
  1. Referring suspected MDR-TB cases for diagnosis (private hospitals, general practitioners, NGO clinics and informal providers);
  2. Patient support, disease education, provision of DOT for MDR-TB cases and default tracing (NGOs, CBOs and informal providers);

**Table 1. Logical framework to implement PPM for DR-TB**

### Programmatic Management of DR-TB (PMDT)

		<i>In place in NTP</i>	<i>Not in place</i>
<b>PPM for TB care and control</b>	<b>In place</b>	Learn from existing PPM and PMDT while planning PPM for MDR-TB.	Start PMDT in the country context (MDR-TB epidemiology, health structure and resources).
	<b>Not in place</b>	If PPM for DR-TB is already in place, scale up according to documented experiences.	Depending on country context, and public and private sector capacities, MDR-TB may be initiated as a PPM approach from the start.
	<b>Not in place</b>	First start PPM for TB in the country context, in addition, limited scale of PPM for DR-TB activities may be started and evaluated in parallel.	Depending on country context, and public and private sector capacities MDR-TB may be initiated as a PPM approach from the start.

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3. Diagnosis and treatment of MDR-TB (large institutes, tertiary care hospitals);
4. Drug supply and drug management (NGOs, pharmaceutical industry);
5. Promotion and implementation of infection control measures in all settings (clinics, hospitals, NGOs);
6. Advocacy at all levels for resource mobilization, rational use of anti-TB drugs, addressing stigma, and legislation that reflects political commitment of government (professional associations, civil society, patient organizations and pharmaceutical industry, among others).

### **Develop national strategy and operational guidelines on PPM and/ or PMDT**

- This should be based on the assessment of capacity of the NTP and non-NTP sectors, and the decisions about the appropriate task mix of providers in a given setting.
- General PPM and PMDT strategies and guidelines may already exist, as most of the countries have started PPM and/ or PMDT. A separate guideline need not be developed, instead PPM strategies/ guidelines should be updated with a PMDT component and vice versa.



### **Resource mobilization**

Public sector should work with private providers, donors and other partners to generate resources for PPM for DR-TB.

- Apart from additional national resources and expertise, PPM for DR-TB approaches should be included in proposals to The Global Fund, which itself is a public-private partnership.

- NTPs can provide the non-programme sector access to the services of the Green Light Committee (GLC) and the Global Laboratory Initiative (GLI). Technical assistance may also be arranged through TB TEAM.

### **Implement limited scale activities**

- This involves trainings and provision of other inputs, such as second line drugs, equipment for culture and DST, as well as recording and reporting tools.
- Implementation should start in limited scale under close supervision and evaluation, before activities are scaled up further.

### **Surveillance, monitoring and evaluation of PPM for DR-TB**

- The surveillance system PPM for DR-TB should be integrated with the NTP and routine programme data management system.
- WHO's revised recording and reporting tools can track private sector contribution and MDR-TB cases.
- Third party evaluation is also recommended through international experts.

### **References and key background readings**

- WHO. Guidelines for the Programmatic Management of drug-resistance tuberculosis, emergency update. Geneva: World Health Organization, 2008

# Engagement for programmatic management of drug-resistant TB

## CASE STUDY 1: Bangladesh – Implementation of PMDT through private sector

In Bangladesh, PMDT was started with support from the public sector and the Damien Foundation-Bangladesh (DFB), an NGO. DFB is one of the main partners of the NTP in Bangladesh and provides both DOTS and PMDT through a network of NGO hospitals, and through linking with private, informal providers («village doctors») that are active in rural areas of Bangladesh. These providers refer TB suspects and supervise treatment of drug-susceptible and drug-resistant TB cases.

MDR-TB activities started in 1997 and have become completely integrated with routine programme activities. This initiative has full programmatic support from the public sector. Village doctors provide ambulatory treatment to 80% of the MDR-TB cases in the DFB catchment area, and have contributed to a remarkably high cure rate (90%) and low default rate (5%) among MDR-TB cases. After learning from this experience, the public sector recently started its first GLC-approved project for DR-TB patients in a public sector tertiary hospital.



## CASE STUDY 2: The Philippines – Scaling up PPM DR-TB in parallel with PPM DOTS

The Philippines has not waited for PPM to be fully consolidated, mainstreamed and scaled up, before embarking on PPM for PMDT. Instead PPM for PMDT has been one step ahead. The first GLC-approved initiative for PMDT was established in 2000 at Makati Medical Center (MMC), a private hospital in Manila, which hosts the Tropical Disease Foundation (TDF).

Initially all MDR-TB cases were treated in the MMC MDR treatment centre (MTC). Gradually satellite treatment centres were established within the public and private sectors. All DOTS (including PPM) units refer MDR-TB suspects directly to MTCs, while other facilities refer MDR-TB suspects to DOTS units for initial evaluation and possible onward referral to MTCs.

MDR-TB treatment outcomes have gradually improved, and the treatment success rate has stabilized around 73-74% in 2003-2005. An additional positive outcome is the decrease in the proportion of patients with a history of previous treatment with fluoroquinolones. This proportion dropped from 30% in 2001 to zero percent in 2007. Resistance to fluoroquinolones also decreased from 45% in 2006 to 12% in 2007.



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