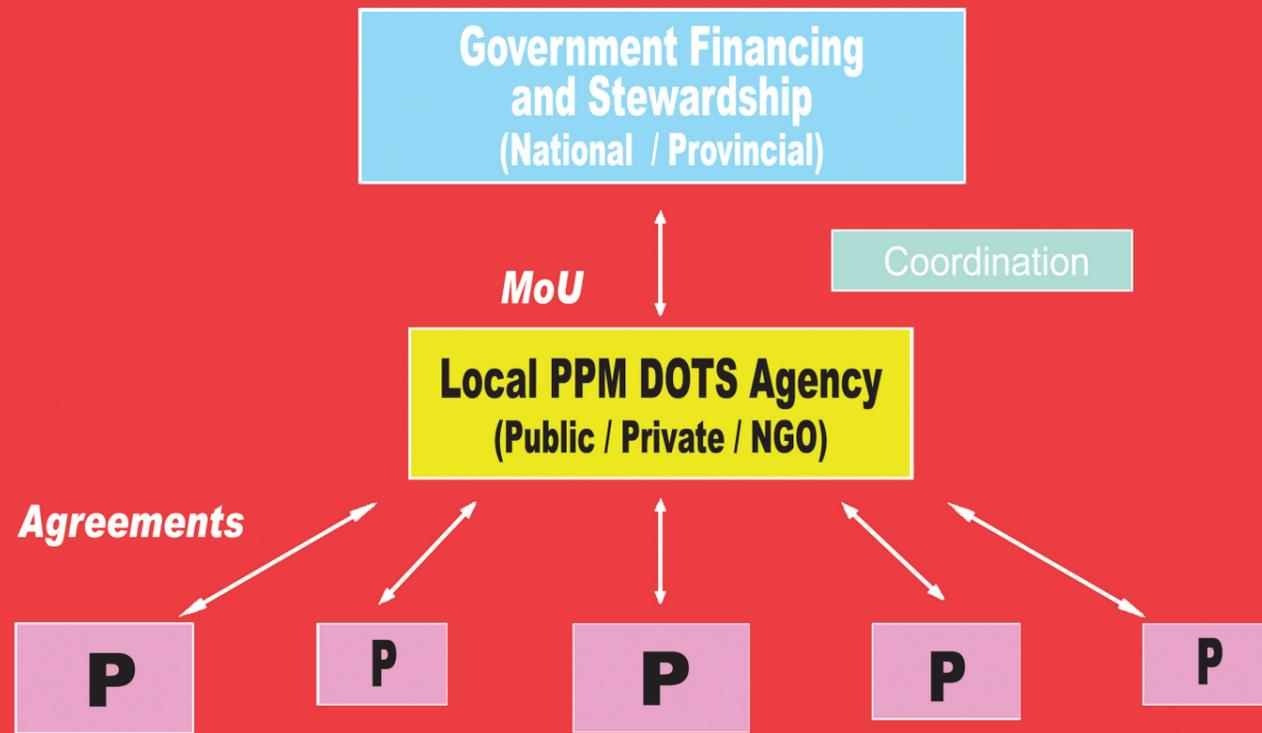


A generic PPM structure emerging from PPM DOTS field projects



The national government formulates a PPM policy in consultation with the stakeholders. A coordination mechanism helps to bring the public and the private sectors together, agree on implementation schemes and maintain dialogue. A local DOTS agency – public, private or voluntary – implements DOTS through a network of willing health care providers in an area. P indicates public, private or other providers.

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Public-Private Mix for DOTS

Global Progress

Report of the Second Meeting of the PPM Subgroup for DOTS Expansion

3-5 February 2004
 World Health Organization
 Regional Office for South-East Asia
 New Delhi, India



World Health Organization



Stop TB Partnership

DOTS EXPANSION WORKING GROUP

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STOP TB PARTNERSHIP

Stop TB Partnership

This document was prepared by Knut Lönnroth, Stuart Paynter, Mukund Uplekar, and Matteo Zignol with secretarial help from Caroline Sorel. Anne Bailey edited the document.

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Abbreviations and acronyms

ARV	Antiretroviral (drug)
BRAC	Bangladesh Rural Advancement Committee
DEWG	DOTS Expansion Working Group
DOT	Directly observed treatment
DOTS	The internationally recommended strategy for TB control
FIDELIS	Fund for Innovative DOTS Expansion through Local Initiatives to Stop TB
GDF	Global Drug Facility
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HBCs	High TB-burden countries
HIV/AIDS	Human immunodeficiency virus/acquired immunodeficiency syndrome
ISAC	Identified support and action countries
KNCV	The Royal Netherlands TB Association
MDG	Millennium Development Goal
MDR-TB	Multidrug-resistant tuberculosis
MoU	Memorandum of understanding
NGO	Nongovernmental organization
NTP	National TB programme
PP	Private provider
PPM	Public–private mix
PPM DOTS	Public–private mix for DOTS
TB	Tuberculosis
USAID	United States Agency for International Development
WHA	World Health Assembly
WHO	World Health Organization

1. Recommendations and next steps

1.1 Background

The Stop TB Partnership is leading tuberculosis (TB) control efforts worldwide through its various global working groups coordinated by the Stop TB Coordinating Board. DOTS is the internationally recommended strategy for TB control. The DOTS Expansion Working Group (DEWG) represents the national TB programmes (NTPs) of 22 high TB-burden countries (HBCs) that bear 80% of the global TB burden, international technical partners, and donor agencies engaged in global TB control. The DEWG is hosted by the World Health Organization (WHO).

Current efforts to control TB are aimed at achieving two global TB control targets by 2005 through rapid expansion of DOTS: detecting 70% of the estimated TB cases globally, and curing 85% of the detected cases. While the latter target is achievable, countries continue to struggle to find the expected number of TB cases. Though critical, these targets will only be one major step towards achieving the TB-related target of the Millennium Development Goals (MDGs) – halting the spread and beginning to reverse the incidence of TB by 2015.

One of the major constraints to achieving the 2005 targets has been the non-involvement of the private medical sector in the implementation of DOTS. If not addressed effectively, this issue will continue to remain a challenge to the achievement of the MDGs. Over the last few years, WHO has been instrumental in piloting models of collaboration with private providers in many countries. To build on the work undertaken in this area and to address the issue urgently and effectively, the DEWG established a global subgroup on Public–Private Mix for DOTS Expansion (the PPM DOTS Subgroup).

PPM DOTS is intended to promote the involvement of all private sector providers engaged in TB control. However, PPM DOTS has rapidly evolved in a logical response to the realities on the ground. In many countries, it is not only the private sector but also several public sector health providers – within and outside the ministries of health – who do not notify cases or implement DOTS. As a result, PPM DOTS now has a dual connotation – public–private mix as well as public–public mix. It now encompasses all the context-specific strategies and approaches that effectively link all the entities within the private and public sectors to the national TB programmes for DOTS expansion.

The first meeting of the Subgroup, held in Geneva in November 2002, urged regions and countries to embark on and expand PPM DOTS. Since that first meeting, efforts to help achieve the TB control targets have been further strengthened globally. Recent initiatives include accelerated DOTS expansion in a limited number of countries identified for intensified support and action (ISAC). Many of these countries need to address PPM DOTS-related issues to be able to achieve the targets.

The venue for the second meeting could not have been more appropriate. The WHO South-East Asia Region has the greatest burden of TB and the largest private medical sector, as well as several successful initiatives of public–private collaboration for DOTS expansion. It was thus appropriate and timely that the Stop TB Unit of the WHO Regional Office for South-East Asia hosted the second meeting of the PPM DOTS Subgroup. The meeting was held in New Delhi on 3–5 February 2004, allowing participants to benefit from first-hand exposure to the realities on the ground. Meeting presentations and discussions are summarized in Section 3 of this report. Group work on key areas for future work is summarized in Section 4. Details of the group work output are included as Annex 1. The agenda of the meeting and the list of participants are reproduced in Annexes 2 and 3 respectively. After extensive deliberations, field visits to two successful PPM DOTS initiatives, and group work, the Subgroup made the following recommendations.

1.2 Recommendations to the global DOTS Expansion Working Group

- Within the context of the Millennium Development Goals, advocate the importance of involving the private medical sector to help achieve the global TB control targets by improving access, raising quality and reducing costs of care to the poor.
- Mobilize resources to initiate and scale-up PPM DOTS as well as to provide technical assistance to regions and countries.
- Ensure inclusion of PPM DOTS in the terms of reference for country reviews and missions, and in action plans for intensified support and action countries (ISAC).
- Promote incorporation of PPM DOTS into proposals to the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and other donor agencies.
- Broaden the terms of reference for the Subgroup to include: “Develop strategies for involving all groups and entities that are not part of NTPs in DOTS expansion”.

1.3 Recommendations to national TB programmes

- NTPs that have yet to begin addressing the private sector related issues should consider implementing the recommendations of the first meeting of the Subgroup.
- Seek support for the necessary human, financial and technical resources for initiation and scaling-up of PPM DOTS.
- Consider utilizing available GFATM resources to initiate and scale-up PPM DOTS.
- Adapt existing training strategies and tools to help implement and monitor PPM DOTS.
- Adapt and implement PPM DOTS strategies to involve all public sector health care providers in TB control.
- Use appropriate mechanisms for certification and accreditation of various types of health care providers to formalize collaboration and ensure the quality of TB care provision.

1.4 Next steps for the PPM DOTS Subgroup

- Prepare a global inventory of PPM DOTS initiatives to help provide better guidance for implementation of PPM DOTS in countries.
- Develop or adapt tools for training, implementation, monitoring and evaluation of PPM DOTS initiatives.
- Provide technical assistance to countries for the preparation of PPM strategies and action plans.
- Encourage research on key issues for PPM DOTS, such as equity in access to care, incentive structures, and regulatory mechanisms.
- Participate in development and testing of new approaches such as social marketing and health franchising.
- Assist in mobilizing resources at all levels to foster private sector involvement in DOTS implementation.

2. Objectives and expected outcomes

At the first meeting of the Subgroup in November 2002, generic regional and national strategies for PPM DOTS were developed and endorsed. The meeting recommended that WHO Regional Offices should secure sufficient personnel and resources for adapting regional PPM DOTS strategies, preparing action plans, and providing technical assistance to countries. The meeting advised countries to develop a national strategy for PPM DOTS based, where possible, on evidence emerging from ongoing or new initiatives set up for the purpose.

The general objective of the second meeting of the Subgroup was to review the progress of PPM DOTS implementation – globally, regionally, nationally, and locally – since the first meeting, and make recommendations for activities in 2004–2005. The specific objectives and outcomes expected of the meeting were as follows.

2.1 Specific objectives

1. To review the global progress on PPM DOTS.
2. To share the results of PPM DOTS field interventions.
3. To discuss opportunities and challenges for scaling-up PPM DOTS.
4. To discuss new approaches to involve the private sector in DOTS implementation.
5. To discuss the estimated impact of PPM DOTS on case detection.
6. To examine tools and indicators for surveillance and monitoring of PPM DOTS.
7. To make recommendations concerning future plans and actions.

2.2 Expected outcomes

1. A review of the global progress on PPM DOTS.
2. Identification of enablers to expand PPM DOTS in regions and countries.
3. Recommendations on monitoring and evaluation of PPM DOTS expansion.
4. Identification of approaches to involve hospitals in DOTS expansion.
5. Identification of training needs and approaches for PPM DOTS.
6. Recommendations on key areas for future work, including equity in access to care.

3. Summary of presentations and discussions

3.1 Review of PPM DOTS progress

The group reviewed and discussed global progress on PPM DOTS. They noted the significant increase in the number of local, national, and regional PPM DOTS initiatives since the first meeting of the Subgroup. Participants drew attention to the wide acceptance of PPM DOTS as a feasible strategy to achieve DOTS expansion. It was concluded that most of the actions recommended by the first meeting have indeed been implemented.

3.1.1 Global progress and potential impact

Countries in the WHO South-East Asia Region are leading in the implementation of PPM DOTS initiatives, followed by those in the Western Pacific, African, and Eastern Mediterranean Regions. As of February 2004, over 20 PPM DOTS projects have been launched in 13 countries (of which 8 are HBCs). Evaluation data are available from 16 of these projects. Two countries, India and the Philippines, have developed national PPM policies and have already embarked on the scaling-up process.

Evidence is now available on the outcomes of PPM DOTS projects in a variety of settings across countries. These initiatives have uniformly achieved increments in TB case detection while maintaining high treatment success rates within the project areas. This is evident from Figure 1 and Table 1 below. The consistency of achievements across settings suggests that PPM DOTS could be a feasible strategy for DOTS expansion. The extent of its effectiveness would depend on the local contexts and approaches.

Figure 1
Treatment success of new smear-positive cases in PPM DOTS projects where free drugs were provided to patients

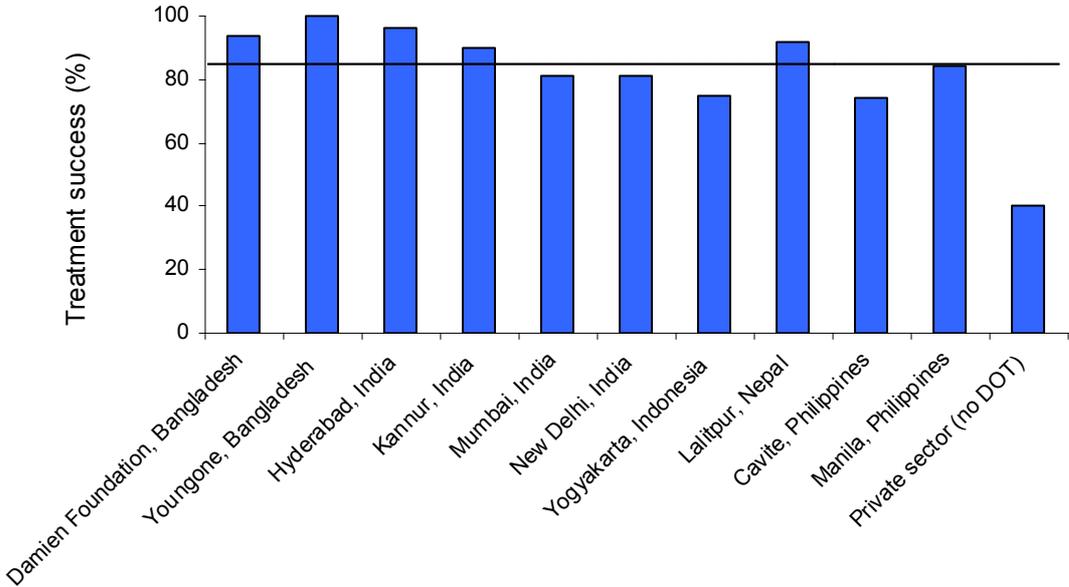


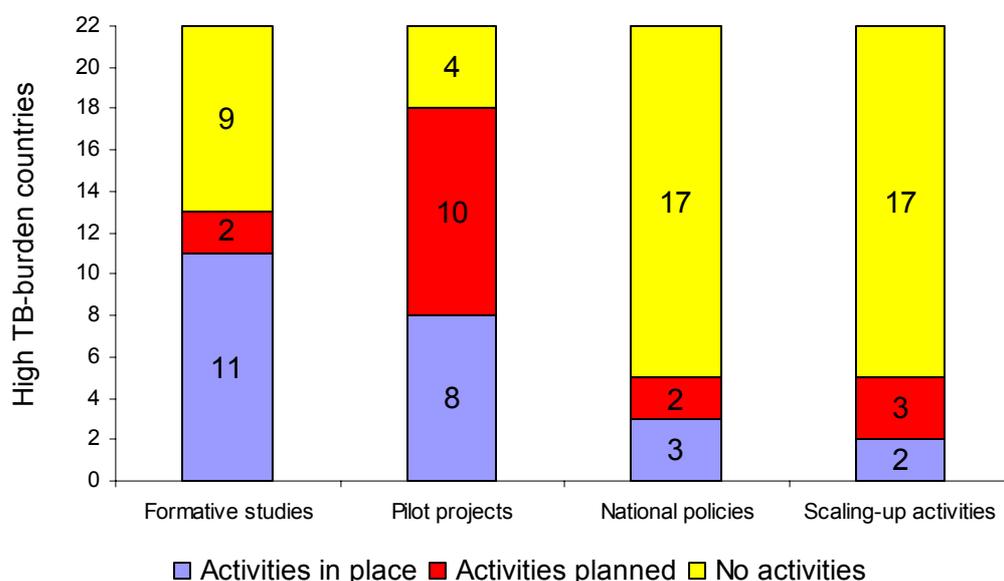
Table 1
Case detection of new smear-positive cases from eight evaluated PPM DOTS projects

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

Clearly, the extent to which benefits in terms of case detection and treatment success will be sustained when scaling-up PPM DOTS, remains to be seen. Careful documentation of scaling-up initiatives is therefore essential. Other gains of engaging with private providers – improving access, enhancing quality of diagnosis, reducing delays in diagnosis, standardizing treatment, improving surveillance, and saving costs to patients – cannot be overlooked.

Many countries have yet to embark on PPM DOTS. Figure 2 shows the current status of PPM DOTS-related activities in the 22 HBCs. The Subgroup reiterated that countries that have yet to begin addressing the private sector-related issues should at least conduct a situation analysis and, if relevant, start PPM pilot projects. Countries that have PPM pilot experiences should analyse existing data and begin developing a national policy and an action plan for scaling-up PPM DOTS in a phased manner.

Figure 2
PPM DOTS progress in 22 high TB-burden countries



3.1.2 Regional and country activities

WHO African Region

The Stop TB Unit of the WHO Regional Office for Africa has developed a regional framework for PPM DOTS. The document is under final revision and will soon be ready for dissemination. The Regional Office held a proposal-development workshop in Nairobi, Kenya, in June 2003. Eight countries – Ethiopia, Ghana, Kenya, Nigeria, South Africa, Uganda, Zambia and Zimbabwe – participated and developed proposals to initiate PPM DOTS. The Regional Office for Africa proposes to provide modest seed funds for some of these projects.

Paucity of resources is a major obstacle for PPM DOTS implementation in the region, as is the limited capacity of NTPs to take on new initiatives. To date, only Kenya has undertaken and documented PPM experiences. Following a successful PPM project involving chest specialists in Nairobi, Kenya's National Leprosy and Tuberculosis Programme is committed to launch PPM DOTS projects in 12 more cities by the end of 2004.

WHO Eastern Mediterranean Region

The Eastern Mediterranean Region uses the PPM framework to denote the comprehensiveness of DOTS implementation aimed at involving all public and private providers operating outside the NTPs. The private sector per se is not considered a major contributor to TB care except in Afghanistan and Pakistan. A recently approved GFATM proposal for Pakistan has a major component on PPM DOTS. Situational analysis at some sites is under way in Afghanistan. A detailed document on intersectoral collaboration for TB control in Egypt is ready for publication. It narrates the process of involvement of different public and private institutions and also gives the outcomes of collaboration. Lack of resources is said to be one of the reasons for the slow implementation of PPM initiatives in this region as well.

WHO South-East Asia Region

The South-East Asia Region has the highest TB burden and the largest private sector. In 1995, the first pilot project was launched in India. Several additional pilot projects followed and many other countries have now implemented PPM DOTS initiatives. India, Indonesia and Nepal have formulated national policies on private sector involvement. Box 1 shows the current status of PPM DOTS implementation in Member States of the WHO South-East Asia Region.

Box 1

PPM progress in Member States of the WHO South-East Asia Region

National policy and guidelines in place, scaling-up: India, Indonesia, and Nepal

National policy in place, pilot projects: Bangladesh and Myanmar

In planning stage: Sri Lanka, Thailand, and Timor-Leste

Ban on retail sale of anti-TB drugs: Bhutan and Maldives

No private health care sector: Democratic People's Republic of Korea.

Bangladesh has a large private sector. PPM initiatives are in place or being launched in both urban and rural settings. In Dhaka, a PPM pilot project was initiated in 2000; preliminary results are encouraging. The Bangladesh Rural Advancement Committee (BRAC), a large national nongovernmental organization (NGO) primarily engaged in rural health and development work is launching a PPM DOTS project in the suburban area of Dhaka. The Damien Foundation has involved private village doctors in their TB programme since 1997. More than 11 000 village doctors have been trained so far. These village doctors contributed to the diagnosis of 1358 new smear-positive patients in 2002, and acted as the DOTS provider in 50% of these cases, achieving a cure rate of 94%.

PPM in Indonesia also has a double connotation: public–private mix as well as public–public mix. Within the Ministry of Health, there are three separate directorates responsible for health care provision: one each for health centres, hospitals, and lung clinics. But implementation of DOTS has long been restricted to the health centres only. Efforts are now under way to link all the public sector providers – within and outside the Ministry of Health – to the national TB programme. In Yogyakarta, a “Hospital DOTS Linkage” project, sponsored by the Royal Netherlands TB Association (KNCV) and the University of Alabama, has shown the way forward to involving private and public hospitals in DOTS implementation. Over a period of three years, this initiative has resulted in a fivefold increase in case detection. The surveillance and referral systems, limited in the early stages, improved substantially later. The NTP is now working to involve 34 lung clinics and 9 lung hospitals as a priority. This has already resulted in impressive improvements in case detection.

Several local intervention projects have led to a national PPM initiative in India. Seven PPM projects engaging private for-profit providers have so far been evaluated. All these projects have demonstrated the positive impact of PPM in terms of an increase in case detection and high treatment success rates. India is currently scaling-up PPM DOTS in 14 cities on a pilot basis with technical support from WHO. Also in India, PPM has a more comprehensive connotation that encompasses the private sector, NGOs, the public sector outside the Ministry of Health, medical colleges, and the insurance organization for employees, as well as the corporate private and public sector.

WHO Western Pacific Region

Although leading the way to achieving the 2005 targets, the Western Pacific Region lags behind in case detection. Mongolia and Viet Nam have reached the case detection targets established by the World Health Assembly. Cambodia and the Philippines are close to reaching the targets. China, the Lao People’s Democratic Republic, and Papua New Guinea lag far behind. An estimated 285 000 cases need to be detected yearly in order to reach the case detection target of 70% in the region. Of these cases, 91% are in China, and a further 5% are in the Philippines.

PPM projects have been launched in the Philippines, the Republic of Korea and Viet Nam. Based on the experience of some pilot initiatives, the Philippines is scaling-up PPM through collaborative efforts of the Department of Health, the Philippines Coalition against TB (PhilCAT) and the state social insurance system (PhilHealth) with additional funding and support from GFATM and USAID’s Philippine TB Initiatives for the Private Sector (PhilTIPS) project.

In China (where case detection is currently 36%), hospital linkage is potentially the most important mechanism to increase case detection. Data from the prevalence survey conducted in 2000 indicate that approximately 60% of smear-positive cases are managed in either general or township hospitals in China.

The recent introduction of an Internet-based case-notification system in the Republic of Korea has led to a marked increase of over 30% in notification by private physicians. Measures to introduce other elements of DOTS are now required.

3.1.3 Lessons learnt from documented PPM DOTS initiatives

The regional and country presentations included many new process and outcome data from ongoing PPM projects. Some of these data have been compiled in project evaluation reports that are available from at least nine projects. In addition, at least eleven PPM project evaluations (of which eight are from 2003–2004) have been published in peer-review journals.

Existing project evaluations indicate that PPM DOTS can improve case detection by 25–30%, while sustaining treatment outcomes which are far better than in the conventional private health care sector and on a par with those in the public sector (80–90%). Cost-effectiveness data from two projects employing diverse approaches indicate that PPM DOTS is as cost-effective as DOTS implementation in the public sector. An added benefit is that free or heavily subsidized treatment substantially reduces the financial burden on patients, as compared to costs for patient-financed TB treatment in the private sector.

Lessons learnt from existing PPM DOTS projects suggest that the following elements are important contributors to success:

- government commitment, stewardship and funding;
- sufficient time for dialogue and planning with all relevant stakeholders;
- clearly defined role division and responsibilities;
- supply of anti-TB drugs to be dispensed free of charge to TB patients;
- initial "hand-holding" and ongoing supervision by the NTP;
- simple tools to improve referral and information systems;
- availability of an interface, such as a local NGO or professional organization.

The consistency of the above findings needs to be tested, especially when PPM DOTS is scaled-up.

3.2 New approaches

PPM DOTS has useful lessons for private sector involvement in other public health programmes, such as control of HIV/AIDS and malaria. Moreover, PPM DOTS can also benefit from the recent global *3 by 5 Initiative* for HIV/AIDS. An immediate extension of PPM DOTS in the African context in particular would be PPM for TB/HIV. The session on new approaches covered some of these and other aspects.

3.2.1 PPM and the 3 by 5 Initiative

South Africa, one of the countries with the highest HIV burden, has recently prepared and published a comprehensive national plan for HIV/AIDS control which includes countrywide delivery of antiretroviral drugs (ARVs) to all patients presenting with low CD4 counts. This plan will contribute to the global *3 by 5 Initiative*. The presentation on ARV delivery for HIV/AIDS elaborated on South Africa's national plan. The guiding principles included accreditation of public as well as private facilities, training and certification of health professionals, and ongoing monitoring, evaluation and research. Setting up an elaborate accreditation system is very complex. Twenty-one criteria for accreditation of facilities were discussed in the presentation. It was emphasized that the early focus on public sector facilities, and demands of accreditation on the capacity and quality of services, might not allow inclusion of private facilities in the initial phases of the implementation plan.

Appropriate input to and support for PPM DOTS projects could well help extend TB care to HIV/AIDS care including delivery of ARVs. At the same time, programmes for the *3 by 5*

Initiative may benefit by applying PPM DOTS strategies and approaches to involve the private sector in the delivery of ARVs.

3.2.2 Franchising and PPM DOTS

PPM DOTS lends itself very well to the concept of franchising with a “brand”, with its clearly defined task-mix, specific guidelines on procedures, standard indicators for monitoring and evaluation, built-in quality assurance, and well-defined output. Since standardization minimizes the need for a high level of expertise, franchising is also seen as a potential tool to address the health workforce crisis in managing the dual epidemic of TB/HIV in sub-Saharan Africa. One presentation on health franchising gave a detailed business plan concerning this approach. An international franchiser could contract out TB/HIV care for defined populations to one or more national franchisers who could deliver DOTS services through trained mid-level health care providers (such as nurses and clinical officers) acting as franchisees. For the operations to be largely self-sustaining, this plan proposes that the users themselves pay for treatment, although fees would be highly subsidized as compared to the market prices of drugs and services. The ability to reach the poor with such a scheme was discussed.

A second presentation on social franchising detailed a distinct approach, fully dependent on external resources, that could well be provided by governments acting as the franchiser. This approach is currently being tested in Myanmar. The presentation detailed how DOTS services will be introduced in the private sector through franchised clinics already participating in successful delivery of reproductive health services. The activities will include not only training and setting up a well coordinated, quality-assured DOTS programme, but also social marketing to increase awareness of the services among the population. The project recognizes the inability of most TB patients to bear the costs of treatment and the need to provide drugs free of charge. The project will be financed with support from the GFATM and will use drugs obtained from the Global Drug Facility (GDF). It does not expect to be self-reliant.

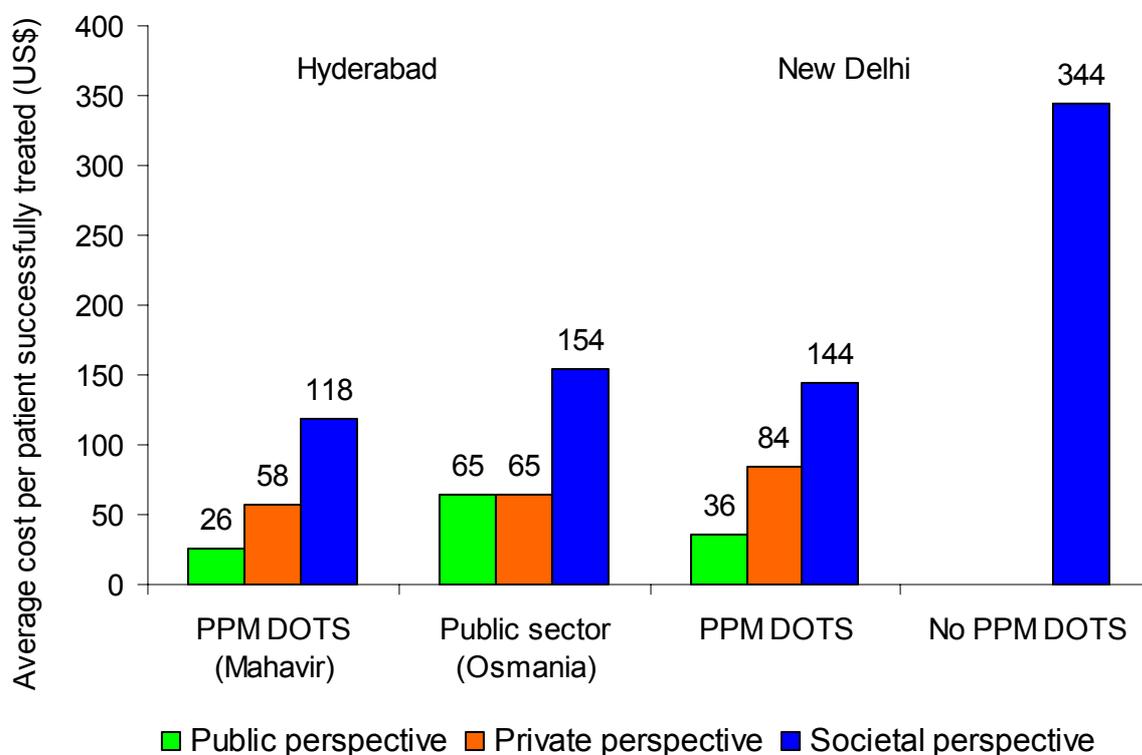
3.3 Economic analysis of PPM DOTS

Questions are frequently raised about the costs and cost-effectiveness of PPM DOTS. It is generally believed that PPM DOTS is likely to be expensive. Detailed economic evaluations undertaken for the first time on two PPM DOTS projects operating in diverse settings and employing distinct approaches suggest that these fears are unfounded.

The presentation on economic analysis discussed the findings arising from the cost-effectiveness studies on PPM DOTS projects in Hyderabad and New Delhi, India. The study revealed that the societal cost per patient cured was slightly lower and the public sector costs were considerably lower in PPM DOTS compared with public sector DOTS delivery (the Hyderabad case). The latter was due chiefly to the private sector contribution – staff time and clinic space – being provided free of charge. The study also showed that the cost of treatment for patients decreased considerably in PPM DOTS compared with conventional, non-DOTS, private sector treatment (the New Delhi case). The study concluded that PPM DOTS could be affordable and cost-effective and reduce the financial burden on patients and society. The findings make a strong economic case for expansion of PPM DOTS projects such as those in Hyderabad and New Delhi. However, it should be emphasized that PPM DOTS is not a self-sustaining approach, but is dependent on public sector financing. It was recommended that economic evaluations of PPM projects using different approaches, and of scaling-up, are essential, and could be linked to studies on motivation and incentives structures for providers.

Figure 3

Average cost per patient successfully treated in two PPM DOTS projects in Hyderabad and New Delhi, India



4. Summary of group work

Participants broke into groups for in-depth discussion of some of the specific and important issues related to the present actions of and future plans for PPM DOTS. Six major themes were identified. Facilitators helped to maintain the focus on key points of relevance. Each group made suggestions to the NTPs and to the Secretariat of the Subgroup. The group work is summarized in the following paragraphs. Details of the output from that group work are presented in Annex 1.

4.1 Scaling-up and sustaining PPM DOTS

This group deliberated on prerequisites for scaling-up PPM DOTS, the approaches to scaling-up, roles of various stakeholders in scaling-up activities, and key indicators for monitoring scaling-up. The group identified the following prerequisites for scaling-up:

- political commitment from the NTP, ministry of health and other relevant authorities;
- availability of a policy framework with clear guidelines;
- functional pilot projects demonstrating desirable outcomes;
- secured funding for at least two years; and
- dedicated human resources in the form of at least a focal point at the national level.

Two broad routes to scaling-up were suggested: through the NTP, or through large private or voluntary organizations with the NTP facilitating the process. All relevant stakeholders would be involved nationally as well as locally. A few indicators for the monitoring and evaluation of scaling-up were proposed.

The group recommended that NTPs should begin mobilizing resources and constitute a national advisory committee. The Subgroup was expected to offer technical support and ensure proper documentation. Convincing documentation of benefits including cost-effectiveness and an understanding and application of determinants of success could, the group felt, help sustain scaling-up of PPM DOTS.

4.2 Monitoring and evaluation of PPM DOTS

Recognizing that monitoring and evaluation are intended to improve programme implementation through measurement of programme effectiveness, this group expressed the view that the current TB surveillance structure and programme indicators might be sufficient to judge the impact of public–private collaboration. Also, the group emphasized that the absence of a monitoring and evaluation framework should not discourage NTPs from involving the private sector in DOTS implementation. Clear definitions needed to be developed with regard to broad terms such as "private sector".

Three key monitoring indicators emerged and the group elaborated on their definitions, measurement, data source, frequency, and impact. These indicators were:

- proportion of TB suspects referred to a laboratory from the private sector;
- proportion of new smear-positive cases detected/diagnosed by the private sector; and
- proportion of patients registered for treatment in the private sector, with outcomes of that treatment.

The group recommended undertaking a baseline situational analysis prior to PPM DOTS initiation, applying a uniform recording and reporting system, capturing referral information from laboratory registers, collaborating with private laboratories, and monitoring of the process and quality of PPM DOTS.

4.3 Hospital DOTS linkage

This group discussed the various elements of linking hospitals to DOTS implementation, highlighting the fact that hospitals in most settings manage a large proportion of TB cases but neither notify these cases nor undertake DOT. The group identified the following preconditions to hospital involvement in DOTS: a well-functioning local DOTS programme and strong commitment from both the local TB authorities and the hospital management; capacity for monitoring and supervision of collaborating hospitals; and adequate human and financial resources.

The group proposed four elements of the hospital DOTS framework:

- establishment of a hospital linkage committee involving relevant stakeholders;
- hospital-based diagnosis by sputum microscopy after training and quality assurance have been provided by the NTP;
- DOT at the DOTS clinic set up in the hospital or at a DOT facility most convenient to the patient; and
- systematic recording and reporting monitored by the NTP.

The group recommended that NTPs should begin involving hospitals in DOTS implementation as a priority and in a phased manner, and suggested that the Subgroup provide careful documentation, facilitate sharing of experiences, develop common indicators, and conduct cost-effectiveness studies for hospital linkage projects.

4.4 Training for PPM DOTS

This group centred the discussion on training needs, materials, approaches, and organization. The importance of addressing training needs in a preparatory phase before implementing PPM DOTS was emphasized. Attention was drawn to the often-overlooked need for training public sector staff to work with the private sector. Training for NTP staff should begin with the offices of national managers and extend down to field-level workers and supervisors. The group identified the wide range of providers within the private sector, their characteristics, their diverse training needs, and the profile of potential trainers for the various target groups.

The group recommended that NTPs should begin with training in situational analysis using a standardized framework. Findings of the situational analysis could be used to develop plans for training at different levels. The group favoured creation of a special team of trainers incorporating expertise from NGOs and the private sector. It was suggested that the Secretariat of the Subgroup should develop a catalogue of existing training materials and methods used by different sites, and also act as a "clearing house" for training experiences which have been carefully compiled.

4.5 Accreditation and contracting

This group first defined the terms "certification", "re-certification" and "accreditation", and then elaborated upon their implications for NTPs and providers. The group noted that the criteria for certification of facilities and providers should be used in both public and private sectors and that these criteria should be equivalent. It was also noted that in countries where TB is not a "notifiable" disease, relevant legislation should be promulgated. Recognizing that accreditation programmes are costly and complicated, the group suggested that, where feasible, accreditation should be undertaken by an independent or a semi-autonomous agency, such as a national medical licensing council.

Next, the group discussed incentives and disincentives for PPM DOTS programmes. Incentives might often, and perhaps most effectively, be non-financial and might include access to free drugs, free training and continued medical education, and free laboratory/diagnostic equipment, such as microscopes. Disincentives might include conditioned performance-based payments, reduction in subsidies, de-certification, stopping drug supply, and in extreme cases, newspaper announcements of provider de-certification.

The group recommended that NTPs consider appropriate forms of certification and accreditation as a part of PPM DOTS to both formalize collaboration and ensure quality of care. The group also recommended that the Subgroup provide technical support to countries on this issue, undertake operational research, and facilitate sharing of information on accreditation and contracting.

4.6 Millennium Development Goals, equity and PPM DOTS

This group assessed the contribution of PPM DOTS to meeting the MDGs and targets. The group also looked at how PPM DOTS might promote equity and financial protection, and how the contribution of PPM DOTS to these goals could be measured.

The group noted that the MDG to halt and begin to reverse the incidence of TB by 2015 can be met if TB control efforts approach as closely as possible the global goals for case detection and cure rates. The group felt that increasing case detection will depend on involving the private sector to a much greater extent. Countries with high levels of private sector utilization should aim to increase case detection by 20–30% through continuing to work with that sector.

The group emphasized that PPM DOTS can contribute to improved equity of access and to achievement of the poverty-related MDGs by reducing the costs of illness and care to patients in several ways. It can:

- reduce the time from diagnosis to treatment;
- reduce costs of treatment to patients by eliminating or reducing the common practice of "shopping" for care;
- also reduce costs to patients by reducing transport expenses and ensuring free diagnosis and drugs.

The group suggested a number of steps for advancing the PPM DOTS agenda. Focusing on the medium- and long-term achievements of the MDGs will require that PPM DOTS is given more prominence, promoted more effectively, and adopted more widely, and that the lessons learnt from experiences with PPM DOTS continue to be disseminated. NTPs should engage more with professional societies and associations and scale-up PPM DOTS more rapidly. PPM DOTS will also benefit by establishing horizontal linkages with the global *3 by 5 Initiative*.

5. Areas for priority action and research

Several issues crucial to the future development of PPM DOTS were deliberated upon by the Subgroup during the full agenda of presentations, discussions, group work, plenary sessions and field visits. Most of these issues are discussed above. This section seeks to summarize the perceived needs for priority action and research that emerged. Hopefully, work in these areas could help steer the PPM DOTS agenda in the near future, and guide action on some of the recommendations made by the Subgroup.

5.1 Better guidance on PPM DOTS

It is evident that a reasonably large body of information – qualitative and quantitative – now exists on planning, initiation, development, monitoring, and evaluation of PPM DOTS in diverse settings. The similarities in approaches to involve private sector providers and non-NTP public sector institutions in DOTS implementation have also become apparent. Even with the availability of a global policy framework and information from field projects, countries might still have to struggle for swift initiation and implementation of PPM DOTS. It was therefore felt that preparation of a global inventory of PPM DOTS projects and encapsulation of emerging information into global generic guidelines could further help countries and regions to implement and expand PPM DOTS. It would be easier for countries to adapt generic global guidelines to their local contexts, than to prepare from the beginning their own set of guidelines.

Successful field projects on PPM DOTS have developed local strategies and tools for:

- situational assessment, census, and mapping of providers;
- training of various cadres within the public and private sectors;
- recording, reporting, monitoring, and evaluation; and
- certification and accreditation for formalizing collaboration and ensuring the quality of care.

Documenting such strategies and tools and making them readily available to countries could serve the dual purpose of evolving local strategies for action as well as adapting and testing their utility in different contexts. It was suggested that, armed with the knowledge of the various dimensions of PPM DOTS implementation, members of the Subgroup and its Secretariat should be proactive in offering technical assistance to countries to help them to embark on and expand PPM DOTS. The assistance of the DEWG should be sought for this

purpose. An immediate opportunity would lie in addressing and meeting the PPM DOTS-related needs and support requirements of countries identified under the ISAC initiative.

5.2 Operational research

Notwithstanding the availability of the current knowledge base emerging from field-based intervention projects, the development and promotion of PPM DOTS pose as many questions as they provide answers. Many of these questions would be addressed only through careful documentation of PPM programme implementation and scale-up, coupled with some special research studies at multiple sites, using generic protocols if required.

Some key areas of research necessary to widen the knowledge base will include:

- feasibility and sustainability of PPM DOTS when going to scale;
- cost-effectiveness in various contexts and with alternative strategies for DOTS delivery;
- appropriate financial and non-financial incentive structures for private providers;
- regulatory mechanisms for PPM DOTS;
- impact of PPM DOTS on providing access to treatment and financial protection for the poor; and
- impact of PPM DOTS on reducing delays in diagnosis.

The Subgroup should inform others of, and be informed by, innovative strategies under development to involve the private sector, such as social marketing and health franchising. This information function can be undertaken by participating in carefully prepared documentation and evaluation of new approaches, and by sharing the results of such interventions.

5.3 Resource mobilization

During the discussion, several participants highlighted the constraints on mobilizing resources for PPM DOTS, particularly when launching new initiatives. It might be easier to get local and donor support when pilot initiatives are ongoing and early results are available. In some countries, there are complex and inflexible processes for internal funding approval, which limit the possibilities for beginning new projects and continuing old ones. Countries could be persuaded to simplify local approval and funding mechanisms.

As discussed above, the ISAC initiative offers an opportunity to seek resources for PPM DOTS. Another major facility would be the GFATM. Two concrete suggestions were made. Firstly, GFATM might be persuaded to identify private sector involvement as an issue to be addressed by applicants when relevant. This approach might prompt countries to embark on PPM. GFATM now allows countries to re-programme grant requirements to suit their needs. Secondly, countries with approved GFATM proposals might be asked to consider initiating and expanding PPM DOTS with GFATM resources already available to them. Countries should also examine simple ways of re-programming the use of existing funds from multilateral and bilateral institutions to enhance PPM DOTS efforts.

The Fund for Innovative DOTS Expansion through Local Initiatives to Stop TB (FIDELIS), managed by the International Union Against Tuberculosis and Lung Disease, could be another source of funding for PPM DOTS projects. However, their preconditions could be too restrictive. It is widely appreciated that for PPM DOTS to work, sufficient investments in time, dialogue, and initial 'hand-holding' are often necessary.

Annex 1. Group work output

During the afternoon of the second day of the meeting, the participants were divided into groups to discuss the following six topics, important for future work.

Group 1. Scaling-up and sustainability.

Group 2. Monitoring and evaluation.

Group 3. Hospital DOTS linkage.

Group 4. Training.

Group 5. Accreditation and contracting

Group 6. Millennium Development Goals, equity and PPM DOTS.

The groups were supplied with suggested points for discussion, and were asked to conclude their discussions with recommendations both to the NTPs and to the PPM DOTS Subgroup. The suggested discussion points and the reports from each of the groups are given below.

A1.1 Scaling-up and sustaining PPM DOTS

Points for discussion

1. When should a country scale-up PPM DOTS? Are there any fundamental prerequisites for scaling-up PPM DOTS?
2. How should countries scale-up? What options for scaling-up strategy exist, and what are the advantages and disadvantages of these?
3. Who should be involved in scaling-up? What should be the role of the different stakeholders, such as NTPs, health insurance offices, NGOs, private sector organizations, WHO, donors, etc.?
4. What indicators should be monitored and evaluated when scaling-up?

1. When should a country scale-up PPM DOTS? Are there any fundamental prerequisites?

Prerequisites are as follows.

- Political commitment from the ministry of health, NTP, and other relevant authorities.
- A policy framework with clear guidelines on:
 - drug supply to private providers
 - quality control of microscopy
 - referral systems
 - financial incentives, if any.
- Functional PPM DOTS pilots/projects of reasonable size and duration that have demonstrated high treatment success rates and are judged to have aided case detection.
- Funding for at least two years.
- Dedicated human resources (at least a focal point at the national level).
- Expression of commitment and support from leading private professional association(s) and other relevant private entities.

2. How should countries scale-up? What options exist?

There are two broad routes to scaling-up.

- Through the NTP:
 - centrally planned and coordinated; the national unit identifies the sites for scale-up, trains and directs staff on how to start PPM DOTS activities, and maintains a firm "hands-on" approach in the initial phase;
 - locally initiated with central guidance; the national unit disseminates information on PPM DOTS pilots and policy framework to local staff, and encourages submission of proposals for funding, training, and launching of PPM DOTS projects.
- Through a memorandum of understanding (MoU) with a large private organization having national/widespread presence and relevant competencies.

The NTP has a collaborating and facilitating role but the detailed plans are prepared and implemented by the staff of the contractor. Local NTP units should be involved early during the planning process.

Scale-up sites should be selected according to the following criteria:

- similar to pilot sites;
- large private sector, low case detection;
- enthusiastic NTP staff and one or more eminent private practitioner(s) committed to PPM DOTS.

3. Who should be involved and what should be their roles?

The relevant stakeholders and their roles will depend on the PPM DOTS model, the scale-up strategy, and possibly the country. Generally, however, the expected roles of the NTP and of WHO are as follows.

- NTP: stewardship, monitoring and evaluation
- WHO: to provide technical support, facilitate funding, document and disseminate best practices.

As one specific step, the lead organization (NTP or the private organization) should involve all relevant stakeholders and organize a series of stakeholder meetings at the national and local levels early on in the scale-up process to maximize ownership and cooperation. Further, a national PPM DOTS advisory committee should be constituted, with funding for meetings and a mandate to review and make recommendations.

4. What indicators should be monitored and evaluated when scaling up?

Specific indicators could be:

- the percentage of private providers participating in scale-up sites (including attrition and turnover over time);
- the number of patients referred or diagnosed per participating provider;
- all standard DOTS process and outcome indicators with a special focus on microscopy quality, sputum-positive rates, and sputum conversion rates;
- cost-effectiveness analyses in 1–2 sites, with analysis of the incidence of benefit by gender and socioeconomic status (strongly recommended).

Recommendations to NTPs

- Mobilize resources including human resources (at least a focal point), drugs, and funding.
- Initiate a scale-up plan and incorporate it into the annual or 5-year plans.
- Prepare a policy framework and guidelines.
- Constitute a national PPM DOTS advisory committee.

Recommendations to the PPM DOTS Subgroup

- Provide technical support during scale-up.
- Provide tools and indicators for monitoring and evaluation.
- Collate, analyse and disseminate data from scale-up.

Recommendations for sustainability

- Convincing documentation of relative cost-effectiveness (as compared with purely public or purely private) to satisfy donors and policy-makers.
- A better understanding of why private providers choose to participate (the incentive structure, the mix of tasks, and the appropriate workload) that can be incorporated into PPM DOTS.
- Sustained political commitment from the government and the NTP; continued support in the form of human resources, funding, and updating of guidelines to incorporate feedback from scaling-up.

A1.2 Monitoring and evaluation of PPM DOTS

Points for discussion

1. Discuss whether and how reporting of some of the suggested indicators should/could be desegregated for private sector providers (see column “level” in the table on pages 9–16 in the enclosed document*).
2. Suggest essential new indicators specifically for PPM under each indicator category, (using the same format as in the table on pages 9–16*).
3. Suggest a definition of the new indicators and provide a rough outline of the required data collection method in the way other indicators have been defined in the enclosed document (page 18*).
4. Suggest changes to the routine NTP recording and reporting system required for collecting data for these indicators.

* provided to participants in the group work.

Statement

Monitoring and evaluation are intended to improve the implementation of programmes through the measurement and assessment of programme effectiveness. These recommendations for monitoring and evaluation of PPM DOTS expansion have been developed assuming the following factors.

- As the ultimate impact of PPM is measured by improvements in TB control, existing TB surveillance structure and programme indicators may be sufficient to judge the impact of public–private collaborations. The absence of a separate monitoring and evaluation framework should not discourage a programme from involving the private sector in TB control. Additional monitoring may be useful for programmes that seek the best possible opportunity to improve PPM effectiveness.
- Clear definitions need to be developed for the private sector by either the core working group or national TB programmes. Although health care delivery is not dichotomous, meaningful monitoring and evaluation necessitates consistent application of a case definition.
- These recommendations are intended for an audience of local and NTP managers who plan to apply PPM monitoring and evaluation routinely or periodically. External evaluators or researchers may choose different or expanded indicators.

Recommendations to the PPM DOTS Subgroup

- A baseline situational analysis, such as surveys of health-seeking behaviour or implementation of surveillance for smear-positive patients at private laboratories, may help with PPM development and inform expectations for key indicators. Such an approach should be carefully considered prior to PPM initiation.
- Uniform recording and reporting are strongly encouraged. Participating private sector providers should use the same forms, registers, and reporting practices as the TB programme.
- A programme may choose to maintain existing TB surveillance and programme monitoring, but pursue more intensive monitoring and evaluation at select sites or through simple operational research to guide ongoing PPM activities.
- The laboratory registers should be structured to capture referral information. This may necessitate addition of a “referred by” column, if not currently present.
- Collaborations with private sector laboratories are strongly encouraged to improve surveillance of DOTS uptake by private sector providers.
- Monitoring and assessment of PPM process and quality are recognized as important. Specific indicators have been previously proposed, and expanded recommendations are in preparation.¹

¹ *Public-Private Mix for DOTS: practical tools to help implementation*. Geneva, World Health Organization, 2003 (WHO/CDS/TB/2003:24–25; http://whqlibdoc.who.int/hq/2003/WHO_CDS_TB/2003.325.pdf).

Recommended key PPM DOTS monitoring and evaluation indicators

- Proportion of TB suspects referred to a laboratory from private sector providers.

Definition. The number of patients referred to a designated microscopy centre (in either the public or private sector) for sputum smear microscopy **from** a private sector provider, relative to the total number of patients evaluated by sputum smear microscopy.

What the indicator measures. This indicator may provide quantitative information about the degree of participation and cooperation from all private providers, including providers of both western and traditional/alternative forms of medicine.

How to measure the indicator. For each TB suspect, microscopy centre staff should determine who referred the person. The information may come from a paper source, such as a laboratory referral form, or by direct questioning of the patient. A designated column in the laboratory register, such as the “remarks” column or (if it exists) the “referred by” column, can be used to record this information. Decisions as to the sector (public or private) can be made by either programme or microscopy centre staff, but these decisions should be standardized across microscopy centres. Senior district supervisors may assist with this decision-making process.

Data source. Laboratory registers.

Frequency. Quarterly.

Impact of the indicator. The proportion of private sector referrals may inform programme managers of the extent of private sector collaboration. Low or shrinking private sector referrals may indicate the need for intervention. Collection of this indicator, which entails a substantial addition to the responsibilities of a large number of staff, should be carefully planned.

- Proportion of new smear-positive cases detected by the private sector.

Definition. The number of new smear-positive cases detected by private sector providers relative to the total number of new smear-positive cases.² A private sector case detection is defined as a new smear-positive patient who was referred by a private sector provider or whose diagnostic sputum smear is evaluated at a private sector laboratory.

What the indicator measures. This indicator informs the TB programme about the actual contribution of the private sector to case detection.

How to measure the indicator. Programme staff may stratify new smear-positive case detection based on the sector of case detection. Laboratories (public or private sector) can usually be found in the TB register. If collected, private sector referral information can be routinely transferred from the laboratory to the TB register.

Data source. Laboratory and/or TB register.

Frequency. Quarterly.

Impact of the indicator. This is perhaps the key indicator of PPM effectiveness; a less-than-expected private sector contribution to new smear-positive case detection may indicate a need for adjustment or expansion of PPM activities. If collection of referral information is not feasible, use of surrogate measures, such as private-laboratory-only case detection or private sector treatment centres, may be considered as an approximation of the overall private sector contribution to case detection.

² Ambiguity about the patient population is intentional. The group failed to agree whether this indicator should be limited to registered TB patients, or should include all smear-positive patients including those subsequently unregistered with the TB programme.

- Proportion of patients registered for treatment in the private sector, with private sector treatment outcomes.

Definition. Registered TB patients (all types) who receive treatment at a private sector DOTS centre.

What the indicator measures. This indicator shows the utilization of DOTS by private sector providers.

How to measure the indicator. Programme staff may count the numbers of patients treated at private sector DOTS centres based on the “treatment facility” column in a standard TB register. The group recommend stratification by patient type (e.g. new and re-treatment).

Data source. TB registers.

Frequency. Quarterly

Impact of the indicator. Collection of this indicator will measure the uptake of treatment by DOTS among private sector providers. Furthermore, this approach is necessary for quality assessment of private sector case management.

- Additional indicators that may be considered

Political commitment indicators

- national guidelines for PPM prepared (yes/no);
- plan or strategy for PPM implementation developed (yes/no);
- involvement of stakeholders from non-public sectors (yes/no).

Process indicators

- number and proportion of targeted private sector partners who have been trained, recruited for participation, signed MoU/letter of agreement.
- number of supervision visits by programme staff to private sector facility;
- utilization of feedback to private providers.

Quality of private sector diagnostic and care services

- proportion of private laboratories participating in TB programme quality-assurance activities.

A1.3 Hospital DOTS linkage (public and private)

Points for discussion

1. What functions of TB control are hospitals currently carrying out (e.g. identification of suspects, diagnosis, classification/treatment initiation/drug prescription, health education, case management, default retrieval, contact tracing, recording and reporting)?
2. What are the current problems/challenges for each of these functions?
3. What is the potential future role of hospitals with regard to the above functions?
4. What input, support, administrative changes and incentives are required for hospitals to successfully fulfil these potential roles?
5. What could be the appropriate incentives and the regulatory environment for effective hospital linkage?
6. What is the appropriate sequence of actions?
7. How should the implementation of these functions be monitored and how should the feasibility and effectiveness of different strategies for hospital linkage be evaluated?

Background

Hospitals manage a large proportion of TB patients in most settings, and hospitals are often the preferred provider of TB suspects/cases. Despite these circumstances, case notification from hospitals is low in most settings.

In general, hospitals have high potential for diagnosis consistent with DOTS (but currently use chest X-rays rather than sputum microscopy).

In general, hospitals are less effective at:

- using appropriate treatment regimens (i.e. consistent with WHO guidelines)
- DOT
- defaulter tracing
- reporting/recording.

In general, hospitals are limited by lack of community-based staff, and geographical locations far from the residence of patients (although in some settings hospitals have better access than dispensaries).

In private hospitals in some settings, TB diagnosis and treatment provide substantial income for practitioners, and thus incentives for practitioners must be considered.

Preconditions for hospital involvement in DOTS

Expansion of DOTS into a hospital should occur only in those districts that have:

- an already well-functioning public health (i.e. NTP) DOTS programme, including a conversion rate of more than 80% or a success rate of more than 85%, and a well-functioning monitoring and supervision system (with complete and timely reporting);
- strong commitment from the local health authority and hospital management;
- adequate resources (human and financial) to implement DOTS in hospitals without weakening the existing DOTS systems.

The proposed elements of the hospital DOTS framework, with required inputs, are outlined below.

1. *Establishment of a hospital linkage committee*

- This is a team with input from the hospital, public health, and professional associations (as appropriate) to plan, monitor and evaluate implementation of linkage, and monitor referrals.

2. *Diagnosis*

- Diagnosis can be hospital-based, but must be consistent with DOTS.
- The NTP should be responsible for inputs to improve diagnostic capacity in hospitals.
- Inputs required by the hospital include trained staff, equipment (e.g. binocular microscopes, reagents), and quality assurance (monitoring, supervision, and training).
- The NTP should be responsible for incentives/compensation for practitioners (diagnosis is often the most profitable area of TB control for private practitioners).

3. *Treatment/case management*

- Hospitals should adopt the NTP regimen (this commitment should come from both the hospital management and individual practitioners).
- A general principle should be that patients should be managed by the DOTS provider nearest to their home.

4. *Health service models for case management*

- For inpatients, the hospital treats with DOT until discharge.
- For outpatients, there are two options.
 - a) Hospital refers TB patients to public health services for DOT after diagnosis in hospital. (This should occur **before** the start of treatment unless inpatient treatment is required.)
 - Inputs required for the hospital include a referral coordination unit within the hospital (to coordinate the management of **all** TB patients seen in the hospital, and to ensure correct referral has occurred and communication is maintained between the hospital and the DOTS provider). This requires training of staff, and the appointment of a referral coordinator to ensure that referred patients start treatment and are traced if they default. This coordinator for referrals is essential.
NB. Public health capacity may need to expand if there are many hospital referrals.
 - Hospital practitioners can continue their role in medical reviews of patients and follow-up sputum testing. In this way, they do not completely lose contact with their patients.
 - The NTP is responsible for incentives/compensation for practitioners
 - b) The hospital establishes DOTS clinic on premises. (This option should be for patients residing nearby; those patients living too far away for regular hospital access should be managed by the DOTS provider nearest to their home.)
 - Inputs required by the hospital include space in the hospital and trained staff to deliver all elements of DOTS (staff should be provided according to local conditions and, where available, from a combination of institutions such as NTPs/public health, hospitals, NGOs, and the voluntary sector). The NTP should provide the hospital with drugs, monitoring forms, supervision, and training.
 - The public health system should remain responsible for monitoring these DOTS providers.

5. Reporting/recording

- It is important to avoid "double reporting". In some settings, notification is only from the site of treatment; in others it is the site of referral. If possible, central registers should check patient details for double notification.
- Data collection should be based at a central NTP location (or a central hospital if there is no public TB centre).
- Monitoring is the responsibility of the public health services/NTP.

Recommendations to national TB programmes

- Involvement of hospitals is necessary, because they see a large proportion of patients and are often a patient's first choice of provider.
- Hospital linkage with DOTS should be prioritized in national TB plans/annual workplans.
- Evidence should be used to adapt a hospital–public health network to the local country situation.
- There should be a plan for stepwise implementation, and monitoring and evaluation of this stepwise process.

Recommendations to the PPM DOTS Subgroup

- Evidence from various experiences of hospital linkages should be collected and analysed to best design a common framework.
- The Subgroup should examine, in particular, effective methods of coordinating and completing referrals, provision of adequate human resources, and incentives for private hospital practitioners.
- Common indicators for different programmes should be developed (e.g. success rate of referrals).
- Efforts to scale-up hospital linkage projects should be evaluated.
- Cost-effectiveness data should be examined separately for hospital linkage projects, to examine possible economies of scale.

A1.4 Training for PPM DOTS

Points for discussion

1. What are the training needs for different providers, depending on the task mix in a PPM DOTS programme?
2. What are the required training materials/tools/resources needed?
3. What is the suitable pedagogic approach?
4. What is a suitable strategy for organization and implementation of training?

NTPs which plan to implement PPM DOTS (public–private mix as well as public–public mix), should go through a preparatory phase, similar to that conducted before the implementation of DOTS programmes. This phase would include a situational analysis to identify the various groups of providers, their training needs, and the tools needed to undertake the training – followed by planning strategies to be adopted for training these various groups, starting with the NTP staff.

Several questions were raised in the course of the discussion of the points mentioned above. Given below are generic answers to these questions. These generic answers will need to be adapted to meet the needs of individual countries, which may have different/specific categories of health care providers with specific characteristics and needs.

1. What are the various groups of providers who will need to be trained from the various sectors (public, private and NGO)?

Within the public sector, training would need to start in the offices of national and local programme managers of the NTP and of other public sector health services offering TB services. The training would familiarize them with other country experiences, the contexts, outcome and impact of various strategies, and the financial implications, to help them adopt the most suitable strategy in their context. Training would extend down to the level of supervisors, laboratory staff, health workers, and outreach staff implementing PPM DOTS.

Within the private sector, there would be a range of providers, from the stand-alone general practitioner, to specialists working in small and large hospitals, and executives of professional bodies of physicians. There would also be doctors trained in indigenous systems of medicine (both recognized and unrecognized).

There would be the private corporate sector, which would need to be trained to understand the importance of identifying and treating TB among its employees. There would be management consultants and firms, which may have the potential to carry out some of the training activities on a contractual basis.

Within the NGO sector, there would be an entire range from service providers to those working as facilitators and interfacers with PPM DOTS, who may partner the NTP in the process of implementing/scaling-up PPM DOTS.

2. What are the characteristics of the different groups that need to be considered while deciding the content and type of training?

The content of the training should be oriented towards the programme and public health – rather than the academic – sectors. It should focus on building the capacity of the various providers to undertake specific tasks within PPM DOTS. Management training, including interpersonal communication skills, should be seriously considered for most NTP staff.

For example, in the case of private practitioners training time would need to be short, taking into consideration their time constraints, and should be focused on skills to be imparted based on tasks they would undertake, and should include field visits. In this context, the communication strategies used by pharmaceutical companies and medical representatives should be studied and adapted.

In the case of physicians in medical colleges, training should focus on providing technical and research evidence supporting the DOTS strategy through an interactive session rather than resorting to pedagogy. Implementing staff at the health-centre level may not willingly accept PPM DOTS since they view it as increasing their workload. This could be tackled by using a workshop technique where the participants assign responsibilities and accountability for various tasks through appropriate facilitation.

3. What should be the profile of trainers for the different groups?

Trainers should be carefully selected depending on the characteristics of the providers to be trained. For example, in the case of specialists in both the public and private sectors and programme managers, trainers should possess technical, operational, and interpersonal skills to be able to field questions in a diplomatic manner.

Health workers should be trained by trainers who are skilled in participatory training methods and can use role plays and practical sessions to equip them for the various tasks they are to undertake. Practical field training sessions may also be considered.

Recommendations for countries/NTPs

- Training to conduct situation analyses using a standardized framework should be undertaken at the central and local levels to identify the range of providers, their current role and potential contribution to NTP, and their training needs. This should be done before embarking on PPM DOTS or scaling-up existing projects/initiatives.
- The findings from the situation analyses should be used to develop a plan for PPM DOTS at the central and local levels. The plan could take into account experiences and lessons from other countries.
- A special team of trainers for PPM DOTS could be created, which would include expertise available from both within the NTP and outside (professional bodies, associations, NGOs, management consultants).

Recommendations to the PPM DOTS Subgroup

- The extensive experience from various parts of the world in implementing/scaling-up PPM DOTS, and the tools developed by these initiatives, should be collated and disseminated to all concerned countries. A catalogue of the existing training materials/framework and generic tools for training should be developed and disseminated.
- Private sector agencies could be considered for packaging and marketing this information.
- The PPM DOTS Subgroup should serve as both the Secretariat, and as a “clearing house” that countries/groups involved in PPM DOTS could freely use. This would facilitate sharing of training experiences.

A1.5. Accreditation and contracting for PPM DOTS

Points for discussion

1. What is the relevance of accreditation and contracting for PPM DOTS?
2. What providers and what main components of TB diagnosis, treatment, monitoring and reporting could/should be accredited and contracted?
3. What are the key criteria for accreditation of respective provider type, according to task mix?
4. What are the suitable mechanisms for accreditation and contracting?
5. What are suitable incentives/disincentives?
6. What basic information about providers is needed in order to design accreditation mechanisms and contracts that are relevant and feasible locally?

Any discussion of accreditation and certification must define its terms. Certification is the process by which an NTP officially documents that a provider, laboratory, or treatment institution of any size has met the appropriate criteria to provide the services being certified. For a provider, this might be training, record-keeping materials, stocks of drugs, laboratory referral access, and facilities for private meetings. For a medical institution (clinic, nursing home, hospital, etc.), the criteria for certification might include in-house or nearby laboratory services, trained technicians, DOTS-certified physicians, in-house specialists.

Accreditation implies something more. Accreditation, as the term is used here, refers to a system for regular evaluation and feedback on a number of quality measures, and quality-improvement measures, benchmarking provider or facility quality against other equivalent providers or facilities and working with the accretee to develop a strategy and implementation plan for improvement.

Certification should be a central part of any PPM DOTS programme for medical institutions, laboratories and laboratory technicians, physicians, and other medical staff involved in DOTS. While the technical requirements for certification will certainly be different for each level and component of PPM DOTS collaboration, the basic tenet should be to ensure that minimum requirements are met in order to assure the potential quality of diagnosis and treatment.

Re-certification should occur on a regular schedule – every 1-3 years, according to country norms. For institutions and individual providers specifically, the group recommended that certification requirements be increased incrementally, to assure that DOTS implementation is improved over time.

Specifically, it is suggested that, while the criterion that all patients of a DOTS-certified provider be treated exclusively with DOTS (unless clinical reasons recommend alternative regimens) cannot be implemented at the start of a PPM DOTS programme, over time the education of providers as to the effectiveness of DOTS should encourage a shift to DOTS for all patients. After some years, this should be a condition of PPM DOTS certification.

The group noted that equivalent criteria for certification of facilities and providers should be used in both the public and private sectors. In order to improve comparison of differing treatment regimens, it was also noted that in countries where TB is not a "notifiable" disease, such legislation should be promulgated.

Accreditation is desirable in many settings as an additional, and voluntary, system for achieving optimal care. Recognizing, however, that accreditation programmes are costly and complicated, the group suggested that, where feasible, accreditation be considered for PPM DOTS-certified institutions, primarily hospitals, referral centres for multidrug-resistant tuberculosis (MDR-TB) cases, and other centres of excellence, and that this accreditation be undertaken by an independent or semi-autonomous agency such as a national medical licensing council. Financial support would need to be ensured with assistance from the NTP. Accreditation is most likely to occur where external preferential financial incentives, such as insurance reimbursement for TB care, are a condition for accreditation.

For a PPM DOTS programme, support for institutions, laboratories, and providers should be conditional upon certification. Another condition for certification should be that services are available, and all patients are given education regarding the availability of DOTS in the facility. Similarly, a condition for certification of doctors should be that all patients are made aware of the availability and benefits of the DOTS regimen.

Incentives

Incentives are an important part of PPM DOTS programmes, and are particularly critical during the expansion phase. Incentives are important both for attracting and ensuring the continued motivation of providers, and as a conditional criterion linked to certification.

These incentives are possible at multiple levels, and the experience from the Philippines PPM DOTS programme shows that incentives matter both for DOTS provision sites and for DOTS-referring certified sites. It was noted that incentives might often, and perhaps most effectively, be non-financial.

Possible incentives might include:

- access to free anti-TB drugs
- access to training
- free microscopes
- trainings in superior hotels (as in the Philippines, with pharmaceutical company support).

Peer approval and the assurance of joining a programme that is supported by respected providers suggests that collaboration with relevant medical associations should be pursued, and that endorsement by medical associations, academics and specialists is likely to positively influence providers, both to join PPM DOTS programmes and to implement DOTS for all their patients. In India, the introduction of the programme by the Indian Medical Association was central to some participating members in their decision to join.

The option to charge patients for consultations may be an important incentive, assuring providers that participation will not cost them money. It was stressed that, if financial payments are used as incentives, getting the payment level right is important. In the New Delhi PPM DOTS programme, the financial incentive was set too low, which caused offence among some providers.

It is also important to try to influence administrators to ensure that financial incentives associated with DOTS reach the staff in hospitals or laboratories most affected by participation in the programme. If such participation adds a burden to laboratory technicians, any financial benefit to their facility should be shared with them. DOTS-certified institutions (hospitals) might receive other privileges, e.g. facilitation of access to special funds in technical areas.

Incentives should also be linked to re-certification. As such, they should be ongoing and might involve other areas of private sector–government interaction. For example, DOTS training should count towards continuing medical education (CME). Other kinds of CME might be provided free with DOTS certification. It was suggested that a journal might be published (or a medical association journal subscription provided) to support sharing of knowledge. Individual providers could be acknowledged by inclusion of their names in annual WHO reports.

For laboratory technicians, participation should bring them training, enhanced reputation, and greater professional marketability.

Disincentives

Corresponding to programme incentives, the group looked at two kinds of disincentives. The first discourage participation, and should therefore be foreseen and avoided. These include:

- national programme drugs are not of sufficient quality at source or on site;
- lack of timeliness in supply of reagents, microscopes, slides, etc.;
- referring laboratories are not giving satisfactory results (technician or reagents not satisfactory);
- possible large volume negative effect, especially if seeing mostly poor patients; for example, what would happen to a private clinic serving the middle class, if suddenly the numbers of non-profitable patients soared without the likelihood of future profitable returns from these same patients?
- inadequate information or lack of continued interaction;
- high staff turnover; for example if institutions train people, they may become "over-qualified" and seek a better job;
- rigidity of NTP in terms of doctors' freedom to make their own diagnosis.

The second involve planned disincentives, or in some cases penalties, designed to keep participating providers in conformity with protocols. These kinds of disincentives linked to low quality might include:

- performance-based payments;
- reduction in subsidy (so that lower-quality providers might receive lower benefits than high-quality providers);
- stopping the supply of drugs (with or without de-certification of the provider or facility).

The group stressed that providers or facilities, once certified, must have disincentives which are linked to their performance in order to discourage their providing poor care. In extreme cases, and following repeated warnings, this might involve an announcement of de-certification in a journal or even a newspaper announcement of provider/facility de-certification.

Contracting

After discussion, the group concluded that contracting is likely to be politically viable primarily for expansion into areas not covered by government services. It was felt that contracting for PPM DOTS is quite desirable, particularly in light of the current cost-effectiveness estimates, but that it should be considered on a case-by-case basis.

Recommendations to NTPs

- Certification should be awarded to all institutions and providers participating in PPM DOTS schemes. Certification of this kind should be based on the PPM partner having in place the facilities and training needed to provide DOTS care appropriate to their technical level. It may or may not involve a legal document, but should recognize the achievement of a minimum level of quality.
- Certification should be for a defined time. The group recommended three years in most cases. At a minimum, re-certification should review the same criteria used for initial certification.
- Certification criteria should initially be very flexible, certifying all recruited PPM institutions. Re-certification criteria should be increased over time, while assuring that willing and motivated PPM participants are given every option for re-certification by communicating to providers and institutions, and increasing their awareness of, the criteria for, reasoning behind, and measures of certification. Nonetheless, providers or institutions that are found during the review for re-certification to lack the facilities, training, or willingness to implement DOTS, should not be re-certified.
- Incentives for providers and institutions participating in PPM DOTS programmes should be planned. The NTP should take a leading role in facilitating non-financial incentives linked to PPM DOTS certification.
- Contracting should be supported for DOTS provision through private organizations in areas where government services are not feasible.

Recommendations to the PPM DOTS Subgroup

- Support should be given to NTPs in developing appropriate criteria for PPM DOTS certification, and incremental increases in quality measures to be incorporated into re-certification criteria.
- Operations research evaluation should be initiated to clarify the factors that motivate both private practitioners and private facilities engaged in PPM DOTS.
- Information on experience in certification, accreditation, and extragovernmental PPM DOTS contracting should be collected and shared with NTPs.

A1.6. Millennium Development Goals, equity and PPM DOTS

Points for discussion

1. How can PPM DOTS contribute to achieving Millennium Development Goals (MDGs)?
2. What are the conditions for assuring equity in access through PPM DOTS?
3. What are the conditions for assuring financial protection of patients through PPM DOTS?
4. How should the impact of PPM DOTS on equity and financial protection be evaluated? What are the indicators? What data are needed?

The goals and associated targets

Countries have made important commitments to the MDGs. Two of these goals and their associated targets relate closely to TB. The first such target is to halve, by 2015, the proportion of people whose income is less than one dollar a day. The second related target is, by 2015, to have halted and begun to reverse the incidence of malaria and other major diseases. The indicators associated with this target are the prevalence and death rates associated with TB and the proportion of TB cases detected and cured under DOTS.

The working group tried to assess the contribution of PPM DOTS to achieving these goals and targets. It also looked at how PPM DOTS might promote equity and financial protection, and how the contribution of PPM DOTS to these additional goals could be measured. The group tried to assess the specific contribution of PPM DOTS, compared to that which would be the case in its absence.

The contribution of PPM DOTS to poverty reduction

TB control can help to meet the goal of reducing poverty in a number of ways. These relate largely to reducing the costs of being ill, lessening the cost of treatment for illness, limiting the period of reduced productivity due to illness, and reducing the likelihood of livelihoods being lost because of illness.

PPM DOTS can enhance these effects. Firstly, it can reduce the time between diagnosis and treatment. Secondly, it can reduce the costs of treatment to patients by eliminating or reducing the common practice of "shopping" for care. Thirdly, it can reduce costs to patients by reducing transport costs and ensuring free diagnosis and drugs.

The contribution of PPM DOTS to meeting the disease reduction goals

The MDG of reducing deaths from TB can be achieved if TB control efforts approach as closely as possible the global goals for case detection and cure rates. Globally, cure rates are approaching the global goal. However, case-finding is still very low in many countries, and considerably below the rate needed to achieve the related MDGs.

Increasing case detection, in particular, will depend on involving the private sector in TB control to a much greater extent than at present. In many countries, especially in several large HBCs, people use private sector providers when they fall ill with suspected TB. However, most of these providers are not associated with national TB control programmes and many of them do not provide appropriate treatment.

This working group believes that countries in which there are high levels of private sector involvement should aim to increase case detection by 20–30% through working with that sector. In addition, many countries have public sector entities (such as hospitals) that are also not sufficiently connected to national TB control programmes. Efforts to involve them in national TB programmes must also be intensified.

PPM DOTS is usually associated with improvements in case detection rather than cure rates. In addition, it is generally perceived that in many countries it will be difficult to maintain cure rates as TB control efforts are spread through the private sector. Nonetheless, the working group noted that in countries implementing PPM DOTS, cure rates in the private sector did improve, often substantially, compared with the case before PPM DOTS was put in place.

Related to this, there will also be some countries in which government institutions are inadequate and cannot provide effective TB services. However, they may be capable of "contracting out" a substantial part of their TB services to private or NGO agents which could maintain quality.

PPM DOTS, equity and access

PPM DOTS also has the potential to enhance access to TB control and to improve equity of access to health services. Private sector providers are usually more widespread and decentralized than those in the public sector and, thus, can enhance geographical access to services. Rural areas have been neglected by many TB control programmes. However, the PPM DOTS work of the Damien Foundation in Bangladesh appears to show one way in which TB control in rural areas can be improved through PPM DOTS.

PPM DOTS can also improve equity in other ways. Better proximity to services can reduce the time and transport costs for poor people to access TB services. In addition, by providing free diagnosis and drugs, PPM DOTS can reduce the costs of services to those unable to pay. By coupling this with an explicit subsidy for transport costs, when necessary, PPM DOTS could further reduce costs of accessing services.

Social access will also be improved by PPM DOTS through encouraging provision of services in slums and rural areas, by working with community groups to have them provide services, and by ensuring there are a sufficient number of female providers of services.

Measuring the contribution of PPM DOTS

The success of PPM DOTS efforts can be measured through operational research and by studies that compare PPM DOTS and other approaches in the achievement of standard indicators. In carrying out such research, special attention should be paid to the extent to which the provision of services relates to location, social status, and gender. Examining the contribution of PPM DOTS to reducing delays in appropriate treatment will also be useful. Model districts can also be developed.

Recommendations for moving forward

The working group suggested a number of steps for advancing the PPM DOTS agenda in a way that will contribute more effectively to achieving the MDGs. Some of these are uniquely related to PPM DOTS, while others relate equally to TB control in general.

- Those involved in TB control should focus greater attention on the medium- and long-term achievement of the MDGs that relate to TB. This will require that PPM DOTS is given more prominence, promoted more effectively, adopted more widely, and that the lessons learnt from experience with PPM DOTS continue to be disseminated. In a number of significant countries, PPM DOTS should be implemented to try to increase case detection by 20–30%. At least in these countries, it will not be possible to achieve overall case detection targets without such an effort.
- These efforts will require that the global TB movement engage more with local medical societies, that countries strengthen PPM cells at all levels, and that PPM DOTS be scaled-up more rapidly.
- Moving towards these goals will also require that TB control programmes look more rigorously for opportunities to expand PPM DOTS in settings in which the use of private medical providers is high.
- Strengthening PPM DOTS will also require better horizontal linkages with HIV/AIDS and other programmes and with the global *3 by 5 Initiative*.
- Improving the contribution of the private sector and other public sector providers will also require that greater attention be paid to reducing the social constraints on TB control, by reducing stigma and by continuing to mobilize communities towards TB control. However, having a good product will not be enough, as can be concluded from the experience of less demand than had been hoped for ARVs in some countries or for the hepatitis vaccine.
- Ultimately, therefore, it will be essential that the world dramatically accelerate the development and use of new diagnostics, drugs, and vaccines for PPM DOTS, as well as overall TB control.

Annex 2. Agenda

Second meeting of the Public–Private Mix Subgroup for DOTS Expansion 3–5 February 2004, New Delhi, India

Day 1 – Tuesday, 3 February 2004

Chair: P. Hopewell

Session 1. Introduction

Co-chair: J. Narain

09:00–09:15	Welcome address and introductions	J. Narain
09:15–09:30	Report from the Chair of the PPM DOTS Subgroup	P. Hopewell
09:30–09:45	The ISAC initiative and PPM DOTS	L. Blanc
09:45–10:00	Global progress on PPM DOTS	M. Uplekar
10:00–10:30	<i>Coffee break</i>	

Session 2. PPM DOTS progress in the WHO Regions

Co-chair: L. Blanc

10:30–10:50	Report from the Regional Office for Africa	D. Kibuga
10:50–11:10	Report from the Regional Office for the Eastern Mediterranean	H. Sawert
11:10–11:30	Report from the Regional Office for South-East Asia	N. Nair
11:30–11:50	Report from the Regional office for the Western Pacific	D. Ahn

Session 3. PPM DOTS progress in countries

Co-chair: D. Ahn

11:50–12:10	Bangladesh	A. Jalal Uddin
12:10–12:30	Kenya	J.M. Chakaya
12:30–13:30	<i>Lunch</i>	
13:30–13:55	Indonesia	R. Day/J. Voskens/M. Firdosi
13:55–14:15	China	D. Chin/L. Wan/Y. Jiao
14:15–14:30	Discussion on country presentations	

Session 4. Scaling-up PPM DOTS

Co-chair: K. J. R. Murthy

14:30–14:50	India	L. S. Chauhan
14:50–15:20	Philippines	C. Yu/J. Lagahid/M. Voniatis
15:20–15:40	Discussion on scaling-up	
15:40–16:00	<i>Coffee break</i>	

Session 5. New approaches to involve private providers

Co-chair: R. Skolnik

16:00–16:20	Accrediting private providers for ARV delivery in South Africa	F. Randera
16:20–16:40	Franchising TB/HIV services in Africa	D. Montagu
16:40–17:00	Franchising DOTS in Myanmar	G. Stallworthy
17:00–17:30	Discussion on new approaches to involve private providers	

Session 6. Group work

17:30–17:40	Introduction to group work	K. Lönnroth
17:40–18:00	Group work	
18:00–19:00	<i>Cocktails, hosted by the Regional Office for South-East Asia</i>	

Day 2 – Wednesday, 4 February 2004

09:00–13:30 Field visit to a PPM DOTS site

Coordinators:
V. K. Arora and S. Lal

13:30–14:30 *Lunch*

Session 7. PPM DOTS implementation and evaluation tools

Chair: P. Hopewell

14:30–15:00 Economic evaluation of PPM DOTS

K. Floyd

15:30–15:15 Discussion on presentation

15:30–18:00 Group work, continued

Day 3 – Thursday, 5 February 2004

Chair: P. Hopewell

Group work presentations

Co-chair: N. Nair

09:00–09:20 Group 1

09:20–09:40 Group 2

09:40–10:00 Group 3

10:00–10:30 *Coffee Break*

10:30–10:50 Group 4

10:50–11:10 Group 5

11:10–11:30 Group 6

11:30–12:00 Summary discussion on group work

12:00–13:00 *Lunch*

Closing session

Chair: P. Hopewell

13:00–13.30 Resources mobilization

- The Fund for Innovative DOTS Expansion through Local Initiatives to Stop TB (FIDELIS)
- The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM)

G. R. Khatri

R. Skolnik

13:30–14:00 Recommendations of the Subgroup and next steps

K. Lönnroth/M. Uplekar

14:00–14.15 Closing

P. Hopewell

15:00–17:00 Meeting of the Core Group of the PPM DOTS Subgroup

Annex 3. List of participants

Second meeting of the Public-Private Mix Subgroup for DOTS Expansion 3–5 February 2004, New Delhi, India

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