Independent Evaluation of the Stop TB Partnership

Final Report

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Executive summary

This document reviews the impact, effectiveness, and efficiency of the Stop TB Partnership over the period 2001 - 06 and makes recommendations aimed at maximizing the impact of the Partnership over the next 5 - 7 years.

Background

Tuberculosis is one of the leading causes of death from infectious disease worldwide. After a decade of increasing international efforts and initiatives on tuberculosis, the Stop TB Partnership was formally established in 2001. The Partnership is a loose global health partnership, a coalition of organizations dedicated to the elimination of tuberculosis as a public health problem.

Evaluation approach

As we are evaluating the impact of the Partnership over and above what would have happened if it did not exist, we focus our efforts on the set of defined bodies that are specific to the Partnership, and different from the individual Partners – the Coordinating Board, Executive Committee, Secretariat, Partners' Forum, GDF, GLC, and Working Groups. Our evaluation is based on data and publication reviews, an internet-based survey, visits to eight countries, and over 200 interviews.

Partnership impact

The period under review for this evaluation, 2001 - 06, has seen significant progress, with improvements in global tuberculosis epidemiology and in tuberculosis control. Funding for tuberculosis control has increased, as has research and development funding and activity.

The Partnership has contributed significantly to the effort to stop tuberculosis. Because of the Partnership's contributions, the progress in global tuberculosis control and research over 2001 - 06 has been greater than it would have been without the Partnership. The Partnership has had impact in 5 ways:

1 Expanding and strengthening the coalition of organizations involved in tuberculosis control and research, e.g., increasing community and private sector involvement

2 Broadening the agenda for tuberculosis control and research, increasing consensus on the agenda, e.g., via the Global Plans, and strengthening guidance, e.g., via the activities of the Working Groups

3 Expanding the reach, and increasing the impact of global advocacy, e.g., through conducting high-level missions to countries

4 Coordinating and supporting Partner activities in key areas including technical assistance to countries, some of which have also benefited other functions and disease programs in countries' health systems

5 Improving tuberculosis control in countries, both directly, e.g., via GDF/GLC, and indirectly through its other activities such as advocacy

Effectiveness and efficiency of Partnership bodies

We have reviewed the effectiveness of Partnership bodies (i.e., how well they have achieved what they set out to do) and their efficiency (i.e., the level of resource they have used relative to their activities and impact).

The Partnership bodies reviewed have all been effective in carrying out their core activities, which include a range of technical work, managerial work, advocacy and innovative business and operating models. There are some areas where these bodies have been less effective, including reviewing progress against Global Plans, reviewing the performance of Partnership bodies themselves, and making full use of the GDF to catalyze improvements in countries' commitment to TB control. There are also areas of activity whose effectiveness is difficult to assess because they lack clearly defined objectives, targets, or monitoring and review of progress –particularly in the Partnership's advocacy work, and in Working Group activities.

The Partnership operates efficiently in the context of a loose Partnership with a Secretariat housed in WHO. It has adopted measures to further improve its operational and financial efficiency, such as systematizing preparation materials for Board meetings, and establishing a Trust Fund. Its resource efficiency has sometimes come at the cost of effectiveness. For example, the GDF's lean staffing model has led to a necessary prioritization of operational activities over performance review and thorough strategic planning. For a number of activities, resource efficiency is difficult to assess as resourcing is not fully monitored.

Why has the Partnership had impact? And why not?

Overall, the Partnership has been very successful over the past 5 years, and our Evaluation has led to some hypotheses about the underlying drivers of its

performance. We identify 4 factors driving the Partnership's impact and effectiveness:

1. Starting with technical consensus, originally based on WHO's DOTS strategy, and subsequently broadened
2. Fostering an inclusive, collaborative approach that encourages all constituencies to join, provides effective forums and support for collaboration, such as the Working Groups, and respects Partners' own accountability and governance mechanisms
3. Focusing the efforts of Partnership bodies on where they can add most value, e.g., in global advocacy, and avoiding duplication of roles and activities of Partners
4. Adopting innovative approaches and business models, e.g., the GDF, and bringing in the skills and experience needed to make these efforts succeed

We have also identified some areas where the Partnership has been less effective in its activities. Some of this is to be expected – not all activities succeed, and this is true for all organizations. Some of this is because the Partnership's mechanisms for setting objectives, coordinating activities, and reviewing performance have not been as strong in these areas as in others. For example, the specific objectives of a number of the Partnership's advocacy activities have not been defined (e.g., Call to Stop TB); other activities are not associated with clear metrics and targets; and there has not been sufficient review and discussion on how to use GDF to catalyze broader improvements or ensure effective transition plans in grantee countries. The Partnership has internal examples of good practice in this area (for example GDF's suite of performance metrics), and should be able to address these issues across the Partnership bodies.

Changes to the TB landscape 2001 - 06 and potential implications

We have developed a view on the different ways that the TB landscape may evolve over the next 5 - 7 years, described 3 specific scenarios, and drawn out the implications for the Partnership. The main insight from this work is that the TB landscape is becoming increasingly complex (in terms of countries' performance, number of in-country and international organizations involved, and number of diagnostic and therapeutic tools becoming available) and with more uncertainty than before (including uncertainty on the future performance of major HBCs, and on the evolution of drug-resistant TB).

This has three major implications for the Partnership:

1. The Partnership should define its value proposition and roles very clearly to distinguish itself from the increasing number of organizations and partnerships involved in TB control and research
2. The Partnership will need to monitor the evolving landscape more rigorously than in the past both to react quickly to opportunities and challenges that arise and to prepare countries, other Partners, and itself for more medium-term events (e.g., the potential launch of a new drug)
3. The Partnership and its bodies must be able to demonstrate comprehensively the impact and efficiency of all their activities to donors and other stakeholders in order to secure needed resources in a more crowded landscape, and therefore must plan these activities based on expected impact and then measure and report impact and efficiency

Recommendations

The Partnership has had a significant impact on TB control and research. It has also built a strong platform for further impact, including a broader agenda for TB control and research, an expanded partnership, and a track record of innovation and delivery.

We believe that the Partnership should set itself very high aspirations for its impact over the next 5 - 10 years: there is clear need for its work, it has earned the right to raise its ambitions, and it will operate in a more complex and crowded global public health landscape with more pressure on each organization to demonstrate impact.

We have developed our recommendations with this high level of aspiration in mind. We recommend few changes to *what* the Partnership does, and significant changes to *how* it does them. The major thrust of these recommendations is as follows:

1. Invest more effort in data and analysis to *identify and agree on the biggest opportunities to drive progress in TB control and research* (e.g., *specific* countries' commitment, *specific* technical and managerial issues), and to drive consensus and commitment on the actions that countries, other Partners, and the Partnership and its bodies must undertake to realize these opportunities
2. *Integrate the strategies of individual Partnership bodies into a unifying Partnership strategy* that clearly lays out what the Partnership aims to deliver and how it will do so. This is distinct from the Global Plan, which lays out

what needs to be done, and from the individual strategies of Partnership bodies

3. *Concentrate Partnership effort and resource* on delivering the big opportunities identified above, rather than spreading across too many issues
4. *Maximize the use of Partnership levers to influence countries, Partners, and other actors* and to hold them to account for delivering on commitments: performance transparency, strong advocacy, and leverage of GDF grants-in-kind
5. *Increase performance transparency* for the impact and efficiency of the Partnership and its bodies to ensure optimal use of Partnership resources

We then make detailed recommendations on the role of the Partnership, on the activities of Partnership bodies, and on structure, management, and governance. We also lay out at a high level the estimated resource implications (in terms of orders of magnitude, rather than detailed costing), which are up to ~10 more FTEs, and ~$300-600K more annual funding, and ~$1-2M investment[1].

[1] Detailed recommendations and cost assumptions in the Recommendations section

Background: Origins of the Partnership

Tuberculosis is one of the leading causes of death from infectious disease worldwide. Despite effective diagnostic and therapeutic tools and a proven and affordable control strategy (DOTS), tuberculosis kills around 1.5 million people every year, many of whom are young adults who should be in their most productive years. Some parts of the world are now facing multi-drug resistant tuberculosis. Tuberculosis is also a leading cause of death among people living with HIV/AIDS.

In 1991 the World Health Assembly set targets for tuberculosis control by 2000. WHO launched its 5-point policy package in 1994, and the DOTS "brand" was adopted in 1995. However, it was clear by 1997 that most countries with a high burden of tuberculosis would not reach the targets. The following year an influential report by an Ad Hoc Committee on the Tuberculosis Epidemic concluded that weak political commitment was one major constraint, and called for a Global Charter on tuberculosis. The Charter was to be an agreement between international agencies such as WHO, the World Bank and donors on the one hand and the governments of endemic countries on the other, about specific steps to be taken to control the tuberculosis epidemic in a given timeframe. As an adjunct to the Charter, it also recommended the establishment of a Global Drug Facility for the procurement and distribution of anti-tuberculosis drugs.

The Stop TB Initiative was formed in 1998. In 2000, a milestone conference on Tuberculosis and Sustainable Development brought together ministers from 20 of the 22 countries that account for 80% of the world's tuberculosis burden and high-level representatives of UN agencies, technical agencies, and donor countries. The resulting Amsterdam Declaration set time-bound targets to stop tuberculosis. The first official Global Stop Tuberculosis Partners' Forum and the first meeting of the Global Stop Tuberculosis Partnership Coordinating Board were held in 2001.

There is no consensus which of the above milestones constitutes the precise start of the Global Stop Tuberculosis Partnership; it seems a matter of continuous creation, with seminal moments in 1998, 2000, and 2001. This evaluation focuses on events since the establishment of the Partnership's formal structures in 2001, while recognizing the important foundation laid by earlier events.

At its simplest, the Global Partnership to Stop Tuberculosis is a global movement to accelerate social and political action to stop the unnecessary spread of tuberculosis around the world. It is open to all those who demonstrably share that aim.

The Partnership has a broad mission and specific targets. A Global Plan to Stop tuberculosis, developed in 2001, mapped the projected work program from 2001 - 05 for the Partnership Working Groups and the Secretariat. There is now a second Global Plan, running from 2006 - 15 (*Exhibit 1*).

Evaluation approach

The Stop TB Partnership is a coalition of organizations dedicated to the elimination of tuberculosis as a public health problem. Given the nature of the Partnership and the large number of Partners involved, we need to be specific about how we define and describe the Partnership for the purpose of this Evaluation. We see at least 3 useful ways of thinking about the Partnership, laid out in *Exhibit 2*.

For this Evaluation, we find it most useful to think of the Partnership as the "set of defined bodies specific to the Partnership" (i.e., the Coordinating Board, Secretariat, GDF, etc., which are distinct from individual Partners): these are the most appropriate bodies to evaluate the performance of, and to direct recommendations to. When we refer to "the Partnership" in the rest of this document, it is to this specific definition of it.

Exhibit 3 lays out the framework for this evaluation. We answer 6 distinct questions with regard to the Partnership: the first three in the relevant chapters, and questions 4 - 6 collectively in the chapter on recommendations.

Over the course of the evaluation, we have carried out extensive data and publication reviews, conducted a survey of those touched by the Partnership, visited 8 countries, and carried out over 200 interviews. A summary of these activities can be found in *Exhibit 4*, with the details in the appendices.

The non-exhaustive nature of this Evaluation clearly places some limits on the robustness of some of our findings and recommendations, and we have indicated where we believe this to be significant and warranting further work.

Progress in tuberculosis control and research in 2001 - 06

The period being reviewed for this Evaluation, 2001 - 06, has seen progress in the global effort to Stop TB, with improvements in global tuberculosis epidemiology metrics (falling mortality rates, falling estimated prevalence rates, and stable estimated incidence rates). Tuberculosis control metrics have improved, though narrowly missing the 2005 goals of 70% smear-positive case detection rate and 85% treatment success rate. While there is some concern about the accuracy of these metrics, there is general consensus that control of drug-sensitive smear-positive tuberculosis has greatly improved. Contributing to these improvements has been an increase in funding for tuberculosis control, which has more than doubled in high burden countries. Research and development for tuberculosis has also seen substantial improvement, with an almost fivefold increase in funding and a record number of new drugs, diagnostics, and vaccines in clinical trials. *Exhibit 5* shows these changes in more detail.

What impact has the Partnership had in 2001 – 06 over and above what would have happened without the Partnership?

SUMMARY OF FINDINGS

The Partnership has contributed significantly to the effort to stop TB in 2001 - 06. Because of the Partnership's contribution, the progress in global tuberculosis control and research over this period has been greater than it would have been without the Partnership. The Partnership has had impact in 5 ways. It has:

- Expanded and strengthened the Partnership of organizations involved in tuberculosis control and research – e.g., increasing private sector involvement and increasing collaboration with the Global Fund
- Broadened the agenda for tuberculosis control and research, increased consensus on this agenda, and strengthened guidance – e.g., raising awareness of TB-HIV, MDR-TB, and the need for new tools, articulating a unified framework for action in the Global Plan, and creating forums to provide broad input to agencies developing technical guidance
- Expanded the reach and increased the impact of global advocacy for tuberculosis – e.g., using the Global Plan for advocacy efforts, raising the profile of tuberculosis in high-level political summits, and conducting high-level missions to countries
- Coordinated and supporting Partners' activities in key areas including technical assistance to countries, monitoring and evaluation, and research and development
- Improved tuberculosis control in countries, both directly, e.g., via the GDF and high-level missions, and indirectly through other activities

DETAILED FINDINGS

1. Expanding and strengthening the Partnership

The Partnership has broadened its membership and strengthening relationships with selected partners.

- The Partnership was launched with 7 Partners, and has since increased the number of Partners listed on the directory from 40 in 2001 to over 517 in 2006 and to 589 by mid-2007. In doing so it has engaged a broader range of organizations in TB control and research, including:
    - Private sector: 12% of Partners are corporations, mostly in the healthcare sector (e.g., pharmaceutical companies)
    - NGOs: 62% of Partners are NGOs, including 150 national NGOs, many small NGOs, and activist groups, such as community groups, patient advocates and members of the HIV community
- The Partnership has strengthened relationships with several Partners (e.g., UNAIDS, the Global Fund, and the World Economic Forum) and negotiated 4 major collaborations:
    - Memorandum of Understanding (MoU) with the Global Fund, (May 2005): This MoU has solidified the position of the GLC as the gatekeeper to access to second-line drugs, and hence supports the effort against the spread of drug resistance. Examples would include projects in Uzbekistan, Peru and the Democratic Republic of Congo
    - MoU with the World Economic Forum (October 2006): This MoU lays out the ways in which the WEF and the Partnership should collaborate with each other, and has formalized the WEF as the corporate constituency on the Coordinating Board. This has allowed the Partnership to facilitate meetings of the corporate sector to engage them in tuberculosis control
    - Beyond the timeframe of this evaluation, there is also an MOU with the World Care Council (June 2007) and support to and discussions with UNITAID, that have contributed to UNITAID's pledge to fund efforts in second-line drugs and pediatric tuberculosis

2. Broadening the agenda, increasing consensus, and strengthening guidance

The foundation of any effective global public health effort is a common agenda within a unified framework of action. In tuberculosis, DOTS, formulated by WHO before the launch of the Partnership, is at the core of this common agenda. The Partnership has not encroached upon the role of organizations providing

normative, technical, or other guidance (e.g., WHO, the Union, American Thoracic Society). Its distinctive contribution has been in broadening the agenda for tuberculosis control and research, increasing consensus on this agenda, and strengthening guidance for TB control.

- The Partnership has broadened the tuberculosis control and research agenda, for example by raising the profile of TB-HIV and MDR-TB, and by incorporating the development of new tools, and articulated a unified framework for action in the first Global Plan. It renewed this in the second Global Plan, which describes what Partners need to achieve by 2015 against this broader agenda. The Global Plans have increased consensus amongst those who contributed to their development, in particular the Working Groups whose abbreviated strategic plans appear as part of the Plan. This framework is now broadly accepted and guides tuberculosis control and research efforts worldwide, with 74% of survey respondents saying they are strongly familiar with it and 55% strongly agreeing with it, and a further 22% familiar and 36% agreeing. (*Exhibit 6*). Moreover, the Global Plan has created a standard framework for national tuberculosis control plans and a *de facto* framework for applications to the Global Fund
- The Partnership and its Working Groups have strengthened guidance for TB in 4 ways: (1) providing input to the technical guidance developed by WHO; (2) identifying and prioritizing issues on which technical guidance is needed; (3) endorsing and supporting the dissemination and adoption of WHO guidance; and (4) supporting the development, dissemination, and adoption of other guidance. *Exhibits 7 and 8* show examples of Partnership contributions in these areas

3. Expanding the reach and increasing the strength of global advocacy

The Partnership has conducted extensive advocacy activity over 2001 - 06. While an exhaustive evaluation of the impact of all these activities is difficult (for reasons discussed below), the balance of evidence is that Partnership has made major contributions to increased media prominence, political visibility and commitment, and financing for tuberculosis, and this is also recognized by stakeholders.

News articles on tuberculosis in major media have increased by 37% over the evaluation period (from 258 to 353). This compares to a 46% increase for malaria (331 to 483) and a 15% increase for HIV (4,326 to 4,974). The political visibility of tuberculosis has increased substantially, including presence at major international summits such as the G8. This has led both to statements of

commitment and to actions. For example, interviewees report that the President of Mexico returned from the 2005 Gleneagles G8 Summit and asked his government to ensure that he could go to the next Summit with evidence of progress against tuberculosis in Mexico. Funding for tuberculosis, as measured by NTP budget in high burden countries, has more than doubled between 2002 and 2007, from $420M to $999M, with funding increases from Russia, China, South Africa, and the Global Fund as the main contributors to this increase (*Exhibit 9*).

The Partnership has undertaken 7 major advocacy activities: (1) The use of the Global Plans as an advocacy tool, (2) inclusion of tuberculosis on the agenda of major international summits, (3) the institution of Working Groups; (4) High Level Missions; (5) Tuberculosis Ambassadors; (6) the Call to Stop TB, and (7) World TB Day. 87% of survey respondents strongly agree or agree that the Partnership's advocacy efforts have been effective, and interviewees are also virtually unanimous in their praise for the Partnership's efforts in raising the profile of tuberculosis (*Exhibit 10*). However, the contribution of some activities is difficult to assess. This is partly because there are often many influencers of media prominence, political commitment, and financing. But it is also partly because the Partnership has not, in many cases, clearly defined the metrics and targets for measuring the impact of its activities. The evaluation below shows some activities with clear and demonstrable impact, some activities which are likely to have impact, and other activities for which impact does not appear to have been clearly defined or measured. Overall, however, the balance of evidence is that Partnership's contribution to tuberculosis control and research through its advocacy efforts has been a major one.

- **The use of Global Plans as advocacy tools**. In addition to setting the common agenda and framework, the Partnership's two Global Plans supported the efforts of activists, and provided opportunities to engage with world leaders. For example, activists in Brazil used the Global Plan as part of their strategy for convincing the federal government to commit to DOTS. The 2006 - 15 Global Plan's launch events have provided opportunities to engage leaders in many countries. *Exhibit 11* shows the participants at other launch events
- The Partnership has succeeded in getting tuberculosis included on the agenda of **major international summits**, such as the G8, with the 2005 Gleneagles Summit committing to help meet the needs identified by the Partnership and the 2006 St. Petersburg Summit affirming G8 support for the Global Plan, in the context of reaffirming G8 support for the GFATM (*Exhibit 12*)

  Interviewees describe the impact of tuberculosis' presence at these meetings

in terms of both increasing national political commitment (as in the Mexico example above) and increasing financing commitment. For example, interviewees identify Partnership efforts through these summits, TB-HIV Working Group advocacy, and visits by Dr. Sampaio, alongside advocacy by the Treatment Action Group, as drivers of PEPFAR's $18.8 M commitment to TB-HIV in 2005 —a contribution which has since increased. The Netherlands government's pledge of €30M is cited as another such example

- The Partnership's **Working Groups** have played a major advocacy role, by signalling the importance of different areas of tuberculosis control and research, and by serving as a forum for building consensus and commitment. For example, interviewees report that in MDR-TB, Partners who had not hitherto prioritized MDR-TB have now accepted that it is an area that requires addressing
- **High Level Missions** (HLM) have used high-level individuals in a mission to a country to promote tuberculosis control and research. Many occur alongside Coordinating Board meetings. There have been at least 8 HLMs since 2004 (and possibly more, as records for these are not comprehensive). HLMs to endemic countries have helped raise the profile of tuberculosis by attracting high-level politicians. Ministers of Health have opened Coordinating Board meetings in Ethiopia (May 2005), Nigeria (April 2006), and Indonesia (November 2006). Interviewees credit the Nigeria HLM with increasing NTP funding from $2M to $4M, and with some impact, though less sustained, in Indonesia. The Partnership's HLM to the African regional meeting of health ministers in 2005 resulted in the 'Maputo Declaration' of tuberculosis as a regional health emergency. This was followed by another HLM to the African Union Summit in Gaborone later in 2005, and by TB Ambassador Dr. Sampaio's visit to the Afro-Committee meeting in Addis Ababa in 2006, but as yet these efforts do not appear to have led to concrete impact

  Similar to a High Level Mission, Partnership activities at the 2004 Partner's Forum in Delhi are cited as instrumental in securing China's political commitment and financial commitment (China NTP funding is $68M higher in 2007 than it was in 2002). Interviewees report that the Partnership's impact in China was mainly through making HBCs' performance visible at the 2004 Partner's Forum, and through the Global Plan, which helped China and other countries with increasing resources decide on where to focus and invest. Other drivers for China include WHO's work in that country, improving economic conditions, and a greater focus on public health since the 2003 SARS outbreak

  Sustained Partnership involvement is also credited with maintaining

tuberculosis on the political agenda in Peru during frequent transitions of government and encouraging the creation of a national partnership with membership beyond the traditional public health sphere (e.g., Peruvian Armed Forces)

- The Partnership has supported the recruitment of **TB ambassadors** and helped them advocate for tuberculosis at the highest political levels. For example, the UN Secretary General appointed Dr. Jorge Sampaio, former president of Portugal, as the UN's Ambassador on tuberculosis in May 2006. Dr Sampaio's activities are provided in *Exhibit 13*. It is too early to see the impact of Dr Sampaio's efforts in terms of increased political commitment or financing
- The Partnership launched **The Call to Stop TB** on World Tuberculosis Day in 2006 to rally people to fight tuberculosis by endorsing a Call for full financing and implementation of the Global Plan 2006-15. It has been attracted almost 700 signatures from leading figures including former Secretary-General Kofi Annan, President Gloria Arroyo, former Prime Minister Tony Blair, Prime Minister Gordon Brown and Bishop Desmond Tutu. There are as yet no clear examples of increased political commitment or financing from the Call, and the Partnership is now working with an external agency to define appropriate impact metrics and targets and track these
- **World TB Day** was instituted in 1982 on the hundredth anniversary of Koch's discovery of the tuberculosis bacillus. It provides a yearly opportunity to raise the profile of tuberculosis at global and country levels, and serves as a focal point for expressions of support from prominent figures. World TB Day has been organized by the Partnership since 2000, but the impact of the Partnership's activities is difficult to assess as it has not defined any metrics or targets for measuring impact

4. Coordinating and supporting Partner activities

The Partnership has contributed directly and indirectly to the core activities of its Partners and as a result improved the impact of these activities, including technical assistance to countries, monitoring and evaluation of tuberculosis metrics, and research and development of new tools.

Coordinating technical assistance: The Partnership has coordinated technical assistance to countries in a number of ways. The Indonesia NTP reports that "one of the advantages of the Partnership is having a broader range of partners from whom to seek advice. For example, GDF and Management Sciences for Health supported the establishment of a domestic supply of fixed-dose combination, blister-packed tuberculosis drugs, while PATH supported ACSM efforts". The

Partnership's TB-Team identified countries in need of assistance with GFATM grant applications and provided necessary technical assistance. The proportion of GFATM funds allocated to tuberculosis has risen from 15% in round 1 to 21% in round 6, with tuberculosis application success rate rising from 49% in round 2 to 62% in round 6 (*Exhibit 14*).

Supporting monitoring and evaluation: The Partnership must ultimately judge its impact by its effect on the measures of tuberculosis control – case detection rate and treatment success rate, and of tuberculosis epidemiology – mortality, incidence, and prevalence. Many interviewees at both global and country levels have raised concerns about the reliability of the data, especially for incidence and prevalence estimates at country level, while recognizing that data for tuberculosis is more comprehensive than for many other diseases and applauding WHO's efforts in this area. *Exhibit 15* outlines these views.

Monitoring and evaluation of these metrics is part of WHO's mandate, not the Partnership's. The Partnership's contribution in this area has been to raise awareness of the importance of having reliable data and to monitor additional metrics:

- The Partnership has raised the importance of tuberculosis control metrics by publicizing and sharing them at Partner's Forums and other meetings, and through publication in annual reports. In countries where the GDF and GLC have been active their involvement has sometimes contributed directly to raising monitoring and evaluation standards (e.g., work of GLC in Peru)
- In addition to the tuberculosis control metrics reported on by WHO in the Global Tuberculosis Control Report the Partnership has started to monitor additional metrics related to new tools (e.g., number of candidates and funding levels) and ACSM activities

Supporting R&D: Research and development of new tools (drugs, diagnostics, and vaccines) has increased over the evaluation period: there are now 10 drugs, 7 vaccines, and at least 13 new diagnostics in clinical trials, and funding for new tools has increased from ~$125M in 2000 to over $750M in 2006. Product Development Partnerships (PDPs) – TB Alliance, FIND, and Aeras – have played the leading role, with the Gates Foundation providing major funding support.

The Partnership's contribution in this area has been threefold:

- The Partnership has increased raised awareness of the need for R&D by describing the need in the Global Plan, and by establishing dedicated Working Groups for drugs, diagnostics, and vaccines

- The new tools Working Groups have facilitated coordination between researchers, with Working Group members reporting examples of better collaboration (e.g., to develop lab assays for vaccines), sharing key information (e.g., drug targets being screened), and acceleration of development (e.g., introduction of more vaccines into clinical trials). The Working Groups are broader communities than the PDPs (and TDR, which also contributes to diagnostics), and interviewees report that this "additional" contribution of the Partnership to PDPs is valuable
- The Partnership has also contributed to increasing funds for new tool R&D: the Gates Foundation reports that the process of developing the first Global Plan helped it better understand where it could contribute, and thereby helped secure the Foundation's financial support

More recently, the Partnership has established the retooling task force to support country's adoption of new tools in 2006 and the tuberculosis research movement in early 2007 to mobilize more resources and coordinate activities.

5. Improving tuberculosis control in countries

Our evaluation of the Partnership's contribution to improving tuberculosis control in countries is primarily based on visits to 8 countries. Through interviews, data reviews, and site visits, we mapped out progress in each country against eight drivers of tuberculosis control, and then assessed the Partnership's contribution to this progress – while this is explicitly not an evaluation of the country's performance, it is necessary to understand in-country changes over the evaluation period in order to assess the Partnership's contribution. *Appendices B and C* contain the details of this component of the Evaluation, with detailed findings by country, examples of good practice, and country feedback to the Partnership.

Overall, the countries visited have improved drivers of TB control over the evaluation period, as shown in *Exhibit 16*. On average, there has been major progress against resource mobilization and ensuring sustainable funding, improving access to tuberculosis centers, and availability of high-quality drugs and diagnostics for drug-sensitive tuberculosis. There has also been progress in involving non-NTP organizations and in ACSM. There has been relatively less progress in MDR-TB, which is now the area where drivers of tuberculosis control appear least advanced.

The Partnership has contributed significantly and substantially to this improved country picture, both directly and indirectly. It has contributed most strongly to drivers that it has elected to focus on, and – not surprisingly – less strongly to drivers that it has had less focus on. We have found no evidence of Partnership activities having a negative impact on country TB control efforts. *Exhibit 17* is a

schematic summary of the Partnership's country-level impact. Examples – not exhaustive – of Partnership contribution are described below.

The Partnership has had **direct impact** in a number of areas, for example:

- Advocacy efforts have contributed to greater political commitment and funding in China and India, as outlined in the section above
- GDF has supplied over 10 million patient treatments and supported DOTS expansion in many countries. In Kenya, it has ensured a reliable high-quality drug supply through 2 rounds of grants including emergency and paediatric grants; in Uzbekistan it has complemented support from Kreditanstalt für Wiederaufbau (KfW) and now supplies drugs funded by the Global Fund; in India it supplied grant-in-kind drugs to the NTP from 2002 to 2005, and now supplies drugs funded by DFID
- The GLC has approved over 12,000 patient treatments for drug-resistant tuberculosis. In Peru, it is providing access to second-line drugs in a pilot that is now being scaled up nationally; in Burkina Faso, GLC has shown flexibility by approving a pilot without requiring bacterial drug susceptibility testing; in Uzbekistan, where the GLC and MDR-TB Working Group have facilitated the support of Gauteng laboratory from Germany and CDC in improving both the national reference laboratory and quality assurance of provincial laboratories. (Further details of the impact of the GDF and GLC on drug supply can be found in their respective sections)
- The Partnership's publication of TB control results and targets in the Global Plan has improved performance management in Peru and China by giving both explicit targets to aim for
- Working Group discussions and publications on Public Private Mix have increased private sector involvement in India through pilots in states (e.g., New Delhi, Mumbai, Thane) which are now being scaled up nationally
- ACSM group has directly supported ACSM activities in Kenya and Peru

The Partnership has also contributed **indirectly** in a number of areas, for example:

- TB-HIV Working Group has raised NTP and other stakeholder awareness of TB-HIV, resulting in progress in India, Burkina Faso, and Peru
- The Partnership has indirectly contributed to strengthening the wider health system: in Morocco, the Practical Approach to Lung Health (PAL) has been implemented; in Indonesia, healthcare workers trained in estimating resource needs for tuberculosis are now applying their training for similar efforts for other diseases
- The Partnership has inspired the formation of Peru's national Partnership

The Partnership has **contributed less** to some in-country drivers of tuberculosis control, e.g., coordination of in-country actors, the holistic approach to the patient (although there are limited examples of how the Partnership has contributed here, through patient packs in Uzbekistan or Indonesia, or the inclusion of patient rights leaflets in GDF drug supplies in Kenya), or access to antiretrovirals for patients with tuberculosis-HIV. These were not areas of focus for the Partnership over the evaluation period. While the Partnership has been active in strengthening laboratories, there is still a significant unmet need in this area.

How effectively and efficiently has the Partnership delivered this impact?

In this section, we evaluate the effectiveness of the Partnership bodies (Coordinating Board, Executive Committee, Secretariat, Partners' Forum, GDF, GLC, and Working Groups). We also comment on the efficiency of these bodies' operations, and on the appropriateness of their structure and composition. We base our assessment on a combination of data-based analysis, interviews, survey results, and comparison with internationally recognized good management practices.

SUMMARY OF FINDINGS

The Partnership bodies have all been effective in carrying out their core activities, driving Partnership impact including, for example, increasing awareness-building, increasing consensus on an expanded framework for action, advocacy, access to first-line drugs, and DOTS expansion. Partnership bodies have been effective across the spectrum of technical activities, a broad range of advocacy measures, and innovative business models.

There are areas of activity where Partnership bodies have been less effective, including reviewing progress against the Global Plans, reviewing the performance of Partnership bodies themselves, and using the GDF to catalyze improvements in government commitment, financing, and drug procurement capability in countries.

There are also areas of activity whose effectiveness is difficult to assess because objectives and targets have not been sufficiently defined, and/or progress has not been monitored or reviewed.

The Partnership operates efficiently in the context of loose Partnership with a Secretariat housed in WHO, and has adopted a number of measures (devised by the Secretariat) to improve operational and financial efficiency. Resource efficiency has in some cases contributed to decreased effectiveness (e.g., with the GDF), and resource efficiency of most Working Groups cannot be assessed as their resourcing is not monitored.

COORDINATING BOARD

Effectiveness of the Coordinating Board

We evaluate the Partnership's Coordinating Board against the broad objectives set out in the basic framework for the Partnership and its updates, recognizing that there will be some element of subjectivity in this, particularly as the Board has not articulated specific objectives or measures of success for its own activities: (1) coordinating and supporting Partner activities, (2) providing leadership and direction to the Partnership, and (3) reviewing Partnership activities.

The Coordinating Board has been highly effective in coordinating and supporting Partner activities, through providing an effective forum for Partner interaction and ensuring good constituency representation.

- Interviewees are unanimous in their appreciation of the opportunity to interact regularly with different constituencies (e.g., donors, high burden countries, technical agencies), and many note that they would have no similar opportunity if the Partnership did not exist. Discussion of countries' progress at Coordinating Board meetings has put constructive pressure on NTP managers and national governments to address tuberculosis in their countries, while Coordinating Board meetings coordinated with High Level Missions have provided them with support
- Constituency representation on the 34-member Board appears to have been appropriate given the focus of the Partnership's work over the past 5 years, and evolving nature of this work has been represented by appropriate changes to the Board, for example with the addition of UNAIDS, the Global Fund, and representation from patient, private sector, and community constituencies during 2004/05. Board members appear to have an appropriate mix of technical and managerial backgrounds and expertise. The process for nominating new constituencies to the Board involves extensive debate and discussion, appears appropriate, and is positively viewed by interviewees. The process for selection and rotation of constituency representatives also appears clear, with the exception of donor, private sector, and community constituencies, and this has raised some concerns among interviewees. Constituency representatives have also been varied in the degree to which they involve their constituencies, and there does not appear to be a standard Partnership process for this *("I don't know the process for giving my input to my representative on the Board on the issues that concern me"*).

The Coordinating Board has been broadly effective in leading and directing the work of the Partnership and of Partners, with some clear successes, some areas

showing less impact, and some areas where different constituencies have different views on the extent of the Board's effectiveness.

- The Board has been effective in leading the development of and creating alignment on the 2006 - 15 Global Plan, in raising awareness and focus on MDR-TB, TB-HIV, and the need for new tools, and also in broadening the tuberculosis control agenda beyond technical issues and better including patients, communities, and the private sector
- The Board appears to have had less success in its efforts to raise the profile of and increase Partner activity in laboratory strengthening, childhood tuberculosis, tuberculosis and poverty. This view is based on concerns raised in interviews, our observation of the relatively fewer number of publications, and smaller amount of information on tuberculosis websites, relative to other areas such as MDR, and our observation that in countries visited, lab provision and quality remain concerns, and there is limited activity on childhood tuberculosis or tuberculosis and poverty
- In a number of areas, constituencies (and some Board members) have different views on the Board's achievements. While many view the Global Plans as a great success, some donor interviewees would also have preferred the Coordinating Board to drive for a more detailed costing for the components of the Plan, as this would better help them secure funding. Some partners would have liked faster progress on broadening the tuberculosis control agenda, pointing to ISTC as a promising example

The Coordinating Board reviews the activities of Partnership bodies including the Secretariat and Working Groups. It does not have a systematic approach to reviewing progress against MDGs or Global Plan objectives. Coordinating Board members themselves have different views on the Board's role in monitoring and reviewing progress.

- The Board reviews the activities of the Secretariat once or twice a year, spending on average ~40 minutes on this, which some Board members find insufficient given the scope of issues to discuss. It also regularly receives and debates reports from the Working Groups, although these are often focused on particular topics rather than on the overall progress of the Working Group (which is covered in the Annual Reports)
- The Board does not have a systematic approach, including detailed metrics, for reviewing progress against MDGs and Global Plan objectives. This was recognized by the Board at its meeting in November 2006 (Exhibit 18), and there are plans in place to address this

- Board members themselves differ in their views on the Board's role in the area of performance management, with views ranging from 'not Coordinating Board's role' to 'Coordinating Board should do more systematic reviews' and through to 'Coordinating Board should hold Partners to account'. Over 50% of Coordinating Board survey respondents reported that the Board only identified major milestones and risks, and was not comprehensive in its processes to monitor implementation and manage risks effectively

Efficiency of the Coordinating Board

We evaluate the efficiency of the Coordinating Board in meeting preparation and organization, discussion and debate, and decision-making.

Board members almost unanimously praise the efficiency of Coordinating Board meetings, managed by the Secretariat: "*I have never sat on such a professional Board*". 40% of Coordinating Board survey respondents report that the Board is the most productive one they sit on, and 60% report that it is at least as productive as any other Board meeting they attend.

Our assessment, based on interviews, survey results, and observations, is that meetings are extremely well prepared and conducted in an open, positive environment with a high level of engagement and good discussion. However, the meeting format allows for relatively little structured debate on the issues, and the extent to which the Board as a whole feels ownership of some issues appears low. Board decisions are identified up front and made, with some questions raised as to how actionable some of these are.

- Meeting preparation and organization are efficient, with logistical information and content available on the Coordinating Board website, and useful pre-read materials with summaries sent sufficiently in advance – preparations that Board members find useful *("I have encouraged my own board to adopt the summary sheet for pre-read* materials"). We did note in Berlin that some Board members had not read the briefing materials.
- Board members are highly engaged in the discussions (86% of Board survey respondents are satisfied. "Relatively few members read their e-mails or seem distracted during debates"). At the Berlin meeting, we observed sharing of views, disagreements, challenge, and criticism, in an open and generally constructive environment. Interviewees also report that the closed door session at the previous Coordinating Board meeting was also useful for sharing concerns. We also noted 2 issues that in our view compromised the quality of the discussions:

- There was relatively little structured *debate* on issues between Board members. The standard process was a presentation followed by a question and answer session between Board members and the presenter, with little debate between Board members and little facilitation to lead the discussion towards a particular conclusion or decision
- There was also little collective ownership by Board members for many of the issues and challenges being discussed, and limited volunteering to take on specific issues. Many Board member suggestions and recommendations began with "*you must…"*. There were few instances of "*we must…"* or *"we the Partnership must…"* and even fewer of *"my organization/constituency will…"*
- The decisions required from the Board are clearly specified, and Board members interviewed find the discussions well focused, with clear decision points. However, 25 % of survey respondents (and 35% of Secretariat survey respondents) raised concern about how actionable these decisions are

EXECUTIVE COMMITTEE

Effectiveness of the Executive Committee

We evaluate the effectiveness of the Executive Committee in evaluating and reporting on the activities of the Partnership, making decisions not requiring or able to get full Board input, and preparing topics for Coordinating Board discussion.

Broadly, the Executive Committee performs these roles effectively. The Executive Committee does discuss Secretariat work plans, but it appears that the Secretariat reports directly to the Coordinating Board, and that this is viewed as appropriate and effective (though see our comments in the Coordinating Board section). In February 2007 it was proposed that an additional oversight body for GDF would be beneficial, and since then, the Executive Committee has taken a more active role on this, with regular reports and discussions. The Executive Committee is seen to be effective at making decision in absence of Coordinating Board input when appropriate: *"I completely Trust the Executive Committee to take decisions"* (Coordinating Board member). Coordinating Board and Secretariat members both report that the Executive Committee effectively supports the Secretariat with advice and decisions, e.g., helping GDF decide how to allocate and prioritize limited funds, and making arrangements for the establishment of the Stop Tuberculosis Trust Fund and Civil Society Fund. While the exact split of roles between Executive Committee and Secretariat is unclear for preparing topics for Coordinating Board discussions, Coordinating Board members express satisfaction with the agendas and materials for these meetings.

Efficiency of the Executive Committee

Executive Committee members feel that the meetings are constructive and efficient, in part due to consistency of Executive Committee membership, and are satisfied with Executive Committee structure and processes. Interviewees are broadly satisfied with Executive Committee composition. Some have expressed concern about the lack of rotation of positions on Executive Committee, but point to no specific cases where this has caused a problem.

THE SECRETARIAT

Effectiveness of the Secretariat

We evaluate the effectiveness of the Secretariat in (1) preparing and launching Global Plans, (2) reporting on progress against Global Plans, (3) preparing Coordinating Board meetings, (4) building the Partnership, (5) mobilizing and managing Partnership resources, and (6) conducting ACSM activities.

(1) Preparing and launching Global Plans. The Secretariat has been very effective in coordinating, preparing and launching two Global Plans, as described in the section on Partnership Impact: the Global Plans have been effective as an agreed framework for action and as a document to support advocacy.

The Secretariat has been less effective in ensuring that various Partnership bodies (e.g., the Working Groups) describe their plans with sufficient managerial rigor and with sufficiently clear links to Global Plan objectives. This includes ensuring that

- The objectives of the various Partnership bodies are *all* clear, specific to the Partnership bodies themselves, and clearly linked to the broader goals of tuberculosis control and research
- All such objectives have clear metrics, targets, and appropriate interim milestones for the 2006 - 15 period
- The activities that Partnership bodies plan to take on to achieve these objectives are all specified

Recognizing the loose, noncorporate nature of the Partnership, this is less of a criticism than it would be for many other types of organization.

(2) Reporting on progress against Global Plans. The Partnership has not yet developed a comprehensive system of monitoring progress against the Global Plan (as discussed in the Coordinating Board section), nor does it yet have a comprehensive system of monitoring progress against the objectives set by the Working Groups and other Partnership bodies. The Secretariat itself monitors and reports on its activities through the WHO performance management system. This is then published at the more aggregated level of the WHO Stop TB Department, making it less easy to follow the Secretariat's performance vis-à-vis the Partnership.

(3) Preparing Coordinating Board meetings. The Secretariat is highly effective at preparing and managing Board meetings, and receives high praise from Board members for this: *"The Secretariat always ensures that everything runs smoothly"*. 95% of survey respondents agree or strongly

agree the Secretariat is effective at presenting the work plan to the Coordinating Board.

(4) Building the Partnership. As described in the section on Partnership Impact, the Secretariat has been quite effective in this activity, particularly in broadening the range of constituencies in the Partnership and in strengthening relationships with specific Partners. The Secretariat also supports communication with Partners through the Stop TB website, newsletters, e-mail alerts, an e-forum, and a range of more informal and ad-hoc networks and contacts. Interviewees find many of these communications useful, but also note some shortcomings: incomplete or missing information on the website (e.g., key meetings not shown in calendar), and insufficient transparency on the activities of different Working Groups (also highlighted in the 2006 review of Working Groups).

(5) Mobilizing and managing Partnership resources. As described in the section on Partnership Impact, the Secretariat has been very effective in mobilizing resources for tuberculosis control and research. The Secretariat has also been effective in mobilizing resources for its own activities, with income growing from $5.2M in 2003 (excluding GDF) to $11.3M in 2006 (excluding GDF and technical assistance to India – see *Exhibit 19*). It has also broadened funding sources: while CIDA has ceased to fund Secretariat activities, new funding has been secured from other Partners including DFID, The Netherlands, USAID, and the Gates foundation.

The Secretariat has also been effective at managing and allocating resources to ensure that Secretariat-supported activities are not adversely affected by timing of funding flows. The establishment of the Trust Fund has allowed the Partnership greater financial independence to distribute finances between activities and also to take out loans between different segments of the Trust Fund to bridge gaps in funding, which has been particularly helpful to GDF.

(6) Conducting Advocacy, Communication and Social Mobilization activities. As described in the section on Partnership Impact, the Secretariat has been very effective in leading global advocacy and communication efforts, though the impact of some of these activities is unclear because the Partnership has not described the specific objectives, metrics, and targets for some activities, and does not monitor their effects. Country-level efforts to support ACSM have also been successful, though some interviewees question the split between Secretariat and ACSM Working Group functions in this area.

Efficiency of the Secretariat

The Secretariat carries out the activities described above efficiently. While Secretariat management and administration costs have been quite variable over the years, they have been decreasing as a percentage of total expenditure since 2004 (*Exhibit 20*). This is particularly notable as the Partnership has grown significantly over the past few years and its activities have increased, increasing the total workload of Secretariat staff (particularly in communication, coordination, administration, and providing support to Working Groups).

The Secretariat's housing arrangements within WHO appear on the whole to be successful, and the Secretariat and Partnership have worked with WHO over the years to address some of the specific needs of the Partnership, for example by establishing the Trust Fund for managing Partnership finances. WHO staffing and recruitment processes remain challenging for the Partnership, with hiring cycles that can extend to 12 - 15 months (*Exhibit 21*) – for example the GDF was formally without a manager for over a year, although an interim manager covered the role.

Another consequence of the Secretariat's housing within WHO is that the Executive Secretary for the Partnership is also an employee of WHO and has a reporting relationship to WHO – in this case to the Director of WHO's Tuberculosis Department. While some interviewees have expressed about potential conflicts of interest in this situation, the overall feedback is that this arrangement is in practice working well, due in large part to the strong working relationship between the two. More formally, the Executive Secretary's terms of reference state that his role is to manage the Secretariat for the purpose of furthering the goals of the Stop TB Partnership, and include no mention of ensuring that the Partnership's work is in line with WHO policy or direction. By agreement with the Coordinating Board, the Executive Secretary's performance is assessed by his WHO supervisor and reported to the Board for discussion.

THE PARTNERS' FORUMS

Two Partners Forums have been held during the review period, Washington in 2001 and Delhi in 2004. The first Partners' Forum was used to launch the first Global Plan and endorse the structure of the Partnership. The first independent evaluation of the Partnership concluded *"There seem no grounds for the evaluation to propose amending the principles of the Forum after only one meeting"*. The second Forum was used to report on the progress made against Global Plan, to discuss how to accelerate progress, to increase engagement of non-governmental constituencies, and to highlight the human face of tuberculosis through involvement of people affected by tuberculosis and HIV. Contributors to the Forum included the Indian Prime Minister, ministerial delegations from high burden countries, Bill Clinton, Kofi Annan, Mikhail Gorbachev and the Director-General of WHO.

The Forum benefited the Indian National Control Program by increasing public awareness, gaining commitment from senior government officials, raising the morale and ambition of the program officers and facilitating donor commitment. It was also one of the triggers for China to heighten its commitment to tuberculosis control (*Exhibit 22*).

Partners' views on the value of the Forum are mixed. A majority of survey respondents see it as important, and ~31% see it as fundamental. Some interviews report that the absence of a Forum since 2004 *"has not been missed"*.

THE GLOBAL DRUG FACILITY

The Partnership launched the Global TB Drug Facility in 2001, in response to an identified need in countries for a reliable supply of affordable, high-quality first-line anti-tuberculosis drugs. The GDF has an innovative business model combining grants-in-kind of high-quality first-line drugs, pooled procurement, and targeted technical assistance from Partners. The Partnership's goals for this effort were to *directly* improve countries' access to high-quality first-line drugs, and to *indirectly* use the GDF business model to catalyze improvements in the global drug supply landscape and to catalyze improvements in countries' commitment to tuberculosis control, including greater funding and procurement capability for drugs. If fully successful, the need for GDF's grant-in-kind service would decrease over time.

Effectiveness of the Global Drug Facility

We have evaluated the effectiveness of the GDF and of the Partnership against the direct and indirect goals described above. The GDF has had tremendous impact, well above what would likely have happened without GDF, in improving access to high-quality first-line drugs. The Partnership has had some positive impact on global drug supply. It has also had some, but limited, impact in helping countries drive significant improvements in their funding and procurement capabilities.

Improving access to high-quality first-line drugs: GDF has provided 10 million high-quality patient treatments to 79 countries – 7.4 million through its grant service (61 countries), and 2.6 million through its direct procurement service (35 countries)[2] – many of these countries would not have been able to afford quality drugs otherwise. Access to first-line drugs catalyzed the initiation of DOTS in some countries (e.g., Moldova) and ensuring a reliable drug supply has supported DOTS expansion in many other countries (e.g., India, Kenya)

In 2005, GDF drugs were used to treat 23% of estimated incidence and 40% of notifications in high-burden countries (*Exhibit 23*). GDF rapid response (e.g., $8M worth of drugs to India in 2005) and emergency grant assistance (e.g., Afghanistan) have helped countries avoid interruptions in treatment programs. In doing so, GDF has contributed greatly to reducing 'access to affordable quality drugs' as a barrier to good tuberculosis care. 80% of survey respondents from countries receiving GDF support reported that access to affordable quality drugs

[2] Source: *10 million treatments in 6 years: GDF Achievements Report.* Geneva: WHO; 2007 (WHO/HTM/Stuberculosis/2007.40)

was the major or largest barrier to good tuberculosis care in 2001. Only 30% reported that this was still the case in 2006 (see *Exhibit 24*).

Moreover, GDF has steadily increased the proportion of its drugs that are supplied as fixed-dose combinations, blister-packs, and patient packs, in line with WHO recommendations. The presence of GDF has also contributed more broadly to improving drug quality and packaging in many countries. For example, Kenya and Uganda now require that tuberculosis drugs bought via national tender match those supplied by GDF; local drug manufacturers in Indonesia have adopted packaging materials and designs recommended by GDF.

Improving the global tuberculosis drug supply landscape: The Partnership has had some positive impact on global supply and price. Over the period from 2003 (institution of WHO pre-qualified list) to 2006, the number of pre-qualified products increased from 5 to 7, while the number of pre-qualified suppliers remained at 4. (In 2007 these increased to 12 and 5 respectively). While this is an improvement, in our country visits, India, Indonesia, and Peru reported that the limited number of pre-qualified suppliers restricted their ability to purchase quality drugs. Interviews with manufacturers and procurement agents also suggest that there has been limited increase in total manufacturing capacity for quality first-line drugs – possibly because first-line tuberculosis drugs are felt to be a less attractive market than others available to manufacturers.

On price, the GDF was 28 - 40% cheaper than other global suppliers at inception. Over time, GDF's price advantage has eroded to 10 - 25% as the prices have increased by 0 to ~50% depending on the drug (*Exhibit 25*). There are a number of possible explanations for this situation, and the information needed for a definitive answer is not readily available. Our view based on available information is that the GDF's pooled procurement mechanism continues to be effective, but less so than in 2001 because the supply of quality first-line drugs has not grown in pace with the growth in demand. GDF's price transparency may also have contributed to limiting price increases by manufacturers.

For second-line drugs, GDF did not contribute to improving supply over the Evaluation period, as it only started working with the GLC in 2006. The Partnership has recognized the shortage of second-line drugs and its consequences for implementing MDR tuberculosis control programs (e.g., at the October 2007 Coordinating Board meeting).

Improving countries' ability to finance, procure, and manage their drug supply: The Partnership's impact in this area has been relatively limited, and this is likely to limit countries' ability to become independent of GDF or other external support

in the near term. For example, Kenya is the first country to complete 2 terms of GDF grant-in-kind support, and will still need support in the future.

- GDF and Partners have worked with countries to improve drug management (demand forecasting, drug storage, drug distribution capabilities) and drug quality standards. They have run workshops for NTPs and NGOs, developed tools and guidance in conjunction with Management Sciences for Health (MSH), and worked with countries during technical missions. The impact of these activities is unclear, as GDF and the Partnership monitor national capabilities, but not the direct impact of their interventions on these capabilities. In our country visits, Kenya reported significant improvement in drug management thanks to GDF support, while India and Indonesia reported much less progress. Kenya also reported significant quality improvements in non-GDF drug supply through the influence of GDF
- The Partnership has had little impact on ensuring alternative sustainable funding (e.g., government commitment or Global Fund grant) for drug supply. Of 21 countries receiving GDF grant support over 2003 - 20063, total government funding for tuberculosis increased in 12 but decreased in 9. Annual tuberculosis drug budgets remain low or variable in both India and Kenya (Exhibit 26), and Kenya has required emergency funding from UNITAID as transitional grant for its first post-GDF year. In our survey, less than 10% of respondents from 21 GDF countries reported that their countries would be able to purchase and procure drugs completely independently of GDF by 2010 (*Exhibit 27*). While grants-in-kind have increased from $15M per year (2003) to $44M per year in (2006), direct procurement has remained fairly constant, rising from $5.8M to $6.2M in the same period (while recognizing that 38 countries, including 26 Global Fund grantees, have used the service).
- The Partnership has also had little impact on improving national procurement systems in countries – one of the initial aspirations for this effort, though not an objective owned by (or deliverable by) GDF. GDF itself bypasses national procurement systems by design, and weak national procurement systems remain a challenge for TB drug supply. In Kenya, for example, there is ongoing concern about the national procurement system's ability to import drugs of comparable quality and price to GDF's. Similarly, interviewees report that part of the reason for India's continuing use of the GDF grant service is the perceived weakness of its national procurement system

[3] Source: GDF database; 21 countries with data for government funding available in both 2003 and 2006

Efficiency of the Global Drug Facility

We evaluated the GDF's efficiency in service delivery to countries, and in operational efficiency, including procurement of second-line drugs.

Country feedback on the GDF has been generally very positive in terms of service standards, processes, and information and materials supplied, with some concern about the time taken from application to receipt of drugs (*Exhibit 28*). Many interviewees have also expressed appreciation for GDF's responsiveness to feedback and for its staff's support. While there have been a few lapses in service delivery, these are not seen as major problems and most have already been rectified.

GDF has operated with a lean resource model, even as the number of countries it serves has grown. Its operating costs[4] have remained around 8% of revenues over 2003 - 2006 (see *Exhibit 29*) and it has never had more than 15 staff members – mostly on short-term or secondment contracts with consequent high turnover. While this has helped its 'operational' efficiency in the narrow sense, country interviewees also report that high turnover has resulted in problems with retention of knowledge and continuity of client relationships, e.g., understanding of country contexts, familiarity with procurement rules, and sustained relationships with country contacts and monitoring missions. The direct procurement service line does not have dedicated resources, and some have raised questions about its viability in the absence of the larger grant-in-kind service line.

The GDF has been less efficient in its support for 2nd line drug procurement. Interviewees report that the process for GDF-GLC convergence in procurement still remains unclear – this was agreed in principle in 2003 and the official directive was issued in 2006. There are still separate procurement agents for first- and second-line drugs, and no success yet in securing the permanent appointment of a knowledgeable procurement officer for second-line drugs within GDF, which has reportedly hampered the MDR-TB Working Group's efforts to address difficulties in the second-line drug supply chain. (In 2007, GDF has increased the number of staff with second-line drug expertise.)

GDF and the Partnership have not used GDF's performance review system as effectively as they could have. GDF has developed a comprehensive suite of performance metrics looking at operational performance (e.g., % monitoring missions occurring on time), impact (e.g., number of patient treatments delivered),

[4] Operating costs *include* technical missions and quality control work, and *include* WHO charges for funds passed through the GDF Trust Fund, but *exclude* some support costs borne by the Secretariat, e.g., financial management, GDF's revenue and payment cycle, legal clearances, computerized order placement and tracking systems with appropriate internal control and monitoring of credit limits

and country performance (e.g., % of countries complying with GDF terms and conditions for support). However while it measures all these metrics, the GDF and the Partnership only monitor a review a subset (e.g. number of patient treatments delivery, delivery lead times of suppliers). In particular, the Partnership does not appear to manage itself and the GDF against the broader goals of helping countries become self-sufficient in funding, procuring, and managing their drug supply. Interviewees suggest a number of reasons for this, including the very lean staffing of GDF (high operational workloads leaving little time for comprehensive performance management) and the focus early in GDF's existence on ensuring sufficient funding for its grant-in-line service line and on ensuring success against its goal of improving access to first-line drugs.

THE GREEN LIGHT COMMITTEE

The Green Light Committee was founded in 2000, before the founding of the Partnership, with a mechanism that provided access to second-line drugs at greatly reduced prices to country programs that could demonstrate MDR-TB projects in line with DOTS-Plus guidelines, thereby safeguarding the efficacy of second-line drugs. The Partnership has supported it by providing operational funding where needed, and helping it secure funding through the Global Fund's country grants and through UNITAID.

The first Global Plan to Stop TB defined the role of the Green Light Committee as:

> *"First, to evaluate proposals from potential DOTS-Plus pilot projects to determine if those projects have adequately addressed all issues highlighted in the Guidelines for Establishing DOTS-Plus Pilot Projects for the Management of MDR-TB. Qualifying projects may benefit from concessionally priced second-line anti-tuberculosis drugs obtained as a result of the work of the Subgroup on Drug Procurement Systems.*
>
> *Second, to promote technical assistance (through the partners participating in the Working Group) for the submission of proposals to the GLC and for implementation of the project protocols.*
>
> *Last, to periodically reassess pilot projects whose applications meet the requirements highlighted in the Guidelines for Establishing DOTS-Plus Pilot Projects for the Management of MDR-TB."*

This safeguarding mandate still forms the core of the role of the GLC. In addition, the GLC provides policy advice to WHO on the management of drug resistant tuberculosis. It now appears supplemented by a wider stakeholder expectation that the GLC will also work to increase access to second-line drugs for the treatment of drug-resistant tuberculosis, while ensuring that increased access will not lead to increased drug resistance, particularly in light of the MDR-XDR tuberculosis response plan.

The GLC itself comprises 9 institutional members who provide technical experts to review applications, and a small Secretariat that coordinates applications, technical assistance, and reassessment. The GLC mechanism's more direct role in drug procurement is taken under the GDF.

Effectiveness of the Green Light Committee

The GLC has now approved projects in 40 countries, which suggests that appropriate usage is now in place in those countries. It has not to date been the GLC's central role to offer technical assistance to countries to promote this usage, although it has carried out monitoring missions both before and after approving some programs.

We evaluated the impact of the GLC against the 3 objectives described above. We have also noted its broader impact on tuberculosis control and on the Partnership where we have observed this during the Evaluation.

Overall, the GLC has been very effective in its primary "safeguarding" role, providing countries that can demonstrate good MDR-tuberculosis management with access to concessional priced second-line drugs – the GLC "brand" appears well known and respected in countries visited. More recently, it has also begun to influence some of the underlying barriers to good MDR-tuberculosis control, in line with stakeholder expectations that it play a role in broadening access. It has also made broader contributions to tuberculosis control and to the Partnership.

The GLC has been very effective in its "safeguarding" role, and its memorandum of understanding with the Global Fund has ensured that GFATM-funded MDR-tuberculosis projects are also subject to the technical approval of the GLC. In terms of the 3 objectives defined in the Global Plan,

- The GLC has approved 70 of 90 applications received in 2000 - 2006 – 58 new projects and 12 extensions for existing projects5. As the GLC has moved out of its pilot phase, it has increased its approvals from 3 countries covering 1,180 patients in 2001 to 24 covering 12,604 patients in 2006. No concerns have been raised that inappropriate projects have been approved
- It has carried out at least pre-approval visits to 14 countries to better understand their applications and challenges. Reform of the GLC in 2006 included revised Instructions for Applications which have streamlined and strengthened GLC processes and function. In particular, pre-application technical assistance by various partners has resulted in improved quality of GLC applications from countries, limiting the number and extent of iterative interactions required prior to approval
- The GLC has carried out monitoring visits in 54 out of 58 approved projects – roughly one visit to each project every other year – and provided feedback to

[5] Three applications have been withdrawn, and the status of the remaining 17 is unclear – at least 6 were pending further clarification from the applicant at the end of 2006. 3 projects were cancelled by local authorities after approval

these projects. Interviewees, such as the Republican DOTS centre in Uzbekistan and the NTP in Burkina Faso, have reported the monitoring visits to be useful

- In terms of broadening access to second-line drugs (which is what many interviewees have said they expect of GLC), there has been less progress. As the GLC has moved out of its pilot phase, approvals have increased, from 3 countries covering 1,180 patients in 2001 to 24 countries covering 12,604 patients in 2006 (Exhibit 30). But GLC-approved projects still cover less than 5% of estimated global need, as noted in the last Stop TB Annual Report. Interviewees attribute this to insufficient infrastructure (e.g., labs and diagnostics) and insufficient human resources to identify MDR cases in most countries, who then do not apply to GLC. These issues are outside GLC's direct remit or control. Moreover, there is concern about the high attrition rate between treatment numbers approved by GLC and those actually provided. The size of the problem is unknown, and is currently being evaluated by GLC

The GLC has also made broader contributions to TB control and to the Partnership, through its guidelines for programmatic management of MDR-TB which we reissued in 2006 (helping to build a common agenda), coordinating technical assistance to countries as part of its application and monitoring process, and strengthening the Partnership's relationship with the Global Fund and UNITAID.

Efficiency of the Green Light Committee

The GLC itself comprises 9 technical experts. It has over the evaluation period expanded from 6 to 9 members, bringing in patient and community representatives (e.g., the World Care Council). The structure and composition of the GLC has not been raised as a concern, and appears appropriate.

The GLC has been efficient in its approval process. Following the agreement of the GLC Operating Procedures in 2006, the vast majority of applications are now effectively dealt within 4 months. It has on occasion been slower to communicate its decisions to applicants, particularly where further questions on the application have been raised. The GLC revised its application procedures in 2006 to ensure that approvals were handled in a timely manner. The GLC reports difficulties with the budget required to carry out its functions, a point that we will pick up in the broader context of budgets for Working Groups and other Partnership bodies.

WORKING GROUPS

The Stop Tuberculosis Partnership's Working Groups have been the major mechanism for bringing Partners together on issues that the Partnership has deemed critical. Depending on the issue in question and on Working Group members' own choices, the Working Groups have taken on different activities and roles. All serve forums for engaging Partners, discussing issues, and coordinating activities. Many also perform other activities. For example, the GLC now sits as a subgroup of the MDR-TB Working Group; the ACSM Working Group has task forces charged with specific projects, including supporting national TB partnerships.

The number, structure, and composition of Working Groups appear to have been in line with the priorities of the Partnership over the last 5 years. The loose structure has encouraged partners to engage and to commit funds and resources. The current structure has however raised 3 specific concerns for many interviewees:

- That the structure and hierarchy of Working Groups are the main reflection of the priorities of the Partnership. If this is the case, how should this be modified to reflect current priorities – e.g., some feel that if Laboratory Strengthening is a priority, then it should be a Working Group
- That the "status" of being a Working Group influences attention from the Coordinating Board, members' commitment, and fundraising ability
- That there is overlap of activities in certain areas (e.g., TB-HIV has an ACSM component, MDR-tuberculosis has a new drugs and diagnostics component) and not enough collaboration in others

Effectiveness of the Working Groups

It has proven challenging to assess *comprehensively* the effectiveness of the Working Groups, for a number of reasons related to how they define, adapt, and measure progress against their objectives. In many cases, a Working Group's objectives are clearly defined and deliverable by the Working Group, and progress against this objective is tracked. However, this is not always the case.

- In some cases, objectives set by the Working Group are goals for overall tuberculosis control and research, which must be delivered by countries or by individual Partners, not by the Working Group itself. For example the Working Group for New TB Drugs has objectives including "identify and validate drug targets for persistent bacilli and latent disease", and "develop a sustainable portfolio of new drug candidates that meet drug profile criteria".

The specific objective of the Working Group itself, rather than the TB Alliance, pharmaceutical companies or academic centers, is not clearly articulated. The 2008 - 09 Biennial Work Plan submitted to the Coordinating Board in October 2007 lays out Working Group activities (e.g., "organize and co-sponsor annual open fora on key regulatory issues") but does not describe the expected results of such activities, or how these help achieve the goals set out in the Global Plan

- In other cases, Working Groups have not succeeded in aligning stakeholders against their specific objectives. For example, some interviewees would have preferred the MDR-TB Working Group to also address the problem of inadequate supply of second-line drugs
- In other cases, Working Groups have not defined what they will achieve through certain activities and how these will further broader Partnership goals. For example, the ACSM Working Group has promoted a theme for World TB Day, developed a messaging platform, compiled an international calendar of events, developed guidance and tools for countries, and run ACSM workshops in countries, but has not stated what specifically it will achieve by doing so
- And in yet other cases, Working Group objectives have changed over time, and previously stated objectives have not in fact been pursued

It is nonetheless clear that all Working Groups have made significant contributions and driven much of the Partnership's impact over 2001 - 06. Many examples have been described in the Partnership Impact section. Below, we lay out further examples by Working Group:

ACSM Working Group: The Working Group has contributed to *advocacy to national governments and donors* leading to additional funding for ACSM and tuberculosis. It has also contributed to *supporting monitoring and evaluation* of ACSM activities in countries. Examples include:

- Approached PEPFAR for funding for consultants to visit countries and support GFATM applications of ACSM. The success of this initiative supported PEPFAR's more broad funding of TB-Team as well as making more money available in country for ACSM activities
- Provided questions for WHO country questionnaire on ACSM activities, which should improve monitoring of progress by countries

DOTS Expansion Working Group: The Working Group has contributed to *improving tuberculosis care in countries* and to *supporting monitoring and evaluation* through the expansion of DOTS globally by aligning and supporting country activities. By bringing together NTP managers from high burden

countries and international partners, it has facilitated the adoption and implementation of the DOTS strategy by all 22 high burden countries, and fostered a sense of commitment and accountability in countries. Many interviewees have described DEWG as a key driver of DOTS expansion, because of the sense of commitment and accountability that it has engendered in NTP and other Working Group members. Examples include:

- Created Global DOTS Expansion Plan endorsed and followed by all HBCs
- Held annual meetings for the NTP managers, providing an opportunity to monitor progress, share experiences and stimulate action where necessary

MDR TB Working Group: The Working Group has contributed to *improving tuberculosis care in countries*, supporting the progress made globally in MDR control primarily through the work of the GLC. Additionally, the Working Group has raised the importance of infection control in tuberculosis. Examples include:

- Members of the Working Group serve voluntarily on the GLC committee
- Participated in the writing committee of WHO on MDR guidance
- Encouraged its members to exert pressure on the Global Fund to commit to the GLC mechanism, with success

TB-HIV Working Group: The Working Group contributed to *setting and building consensus on a common agenda* around TB-HIV collaboration. It has gone beyond its original objectives of conceptualizing, testing, and monitoring tools and policies for TB-HIV prevention and care and contributed to *improving tuberculosis care in countries* by supporting the rollout of TB-HIV programs. Examples include:

- Contributed to the development of WHO documents 'Strategic framework to decrease the burden of tuberculosis/HIV' and 'Interim Policy on collaborative tuberculosis/HIV activities', through reviews, contribution of evidence, discussion, and debate
- Held annual meetings that brought NTP managers together to share their experiences and provide support for implementation
- Actively recruited community activists into the Working Group and ran training on tuberculosis HIV advocacy to develop country champions

Working Group on **New Diagnostics**: Individual members of the Working Group have made significant progress on the development of new diagnostics over the period of the evaluation, many of which are being piloted or rolled out. Collectively the Working Group has also started to contribute to *supporting R&D for new tools* by mapping out the current development state of different

diagnostics and identifying and describing problems preventing the development of new diagnostics

Working Group on **New Drugs**: The Working Group has contributed to *supporting R&D for new tools* by ensuring stakeholders in drug development are working together to speed the development of new drugs, and by involving public stakeholders through the work of the retooling task force. Examples include:

- Provided a forum for sharing information. Working Group members report that in some cases this has resulted in closer collaboration
- Created a document that includes all current activities in drug development allowing researchers to have visibility on the total landscape

Working Group on **New Vaccines**: The Working Group has contributed *supporting R&D for new tools* by increasing collaboration between researchers and accelerating the introduction of vaccines into clinical trials. Examples include:

- Held a series of meetings that have resulted in players collaborating more on specific topics, e.g., development of lab assays
- Supported alignment of the work and objectives of WHO vaccine development with the Global Plan
- Encouraged vaccine candidate owners to enter their candidates into clinical trials by 2005 – without which pressure 4 of 7 vaccines currently in trials would not have entered as early as 2005

Understandably, Working Groups have not always been able to deliver against objectives they have set themselves. For example, the Working Group on New Vaccines had an objective to "prioritize actions needed and areas of new resources, that will advance the sustained access of improved tuberculosis vaccines to endemic countries" in its terms of reference. Working Group members report that they have not delivered against this objective due to insufficient resources. Similarly, DEWG members would like to have delivered more impact against coordinating technical assistance to countries, involving the private sector, and ensuring tuberculosis control efforts contribute to broader health sector and poverty reduction strategies.

Efficiency of the Working Groups

We have evaluated the efficiency of the Working Groups along 6 dimensions, based on interviews, observations of Working Group meetings[6], and the previous

[6] Working Groups observed: ACSM, tuberculosis-HIV, New Drugs, New Diagnostics, DOTS expansion

evaluation of the Working Groups. The dimensions are: (1) performance management, (2) communications, coordination, and collaboration, (3) resources, (4) partner engagement, (5) leadership, and (6) meeting management. By design the first three of these overlap directly with the categories of the previous Working Group: action and accountability, communications, coordination and collaboration, and resources. In particular, we should note that the Secretariats for most of the Working Groups are provided by WHO, rather than by the Partnership itself.

Performance management: Performance management in this context includes setting clear objectives which can be delivered by the Working Groups (as opposed to by individual Partners, or by governments or other entities), establishing appropriate metrics and targets to track progress against these objectives, reviewing performance regularly, and taking corrective action where necessary. While there is clearly variation between Working Groups, and perhaps even within a Working Group over time, we have identified 3 issues are sufficiently widespread to merit discussion:

- As described above, there are many cases where objectives set by the Working Groups cannot be delivered by the Group itself (e.g., "ensure that MDR-TB patients worldwide have access to adequate diagnosis and treatment"), and cases where the link between Working Group deliverable objectives and the broader goals of the Partnership is not sufficiently clear
- Some metrics used by Working Groups are at too high a level (e.g., total global number of treatments), not closely linked to specific activities, or set with targets for the distant future (e.g., 2015), making it difficult to track progress on a sufficiently detailed basis to guide actions (e.g., country-by-country, annually)
- Many Working Groups do not have a regular formal process for reviewing their performance against agreed objectives and targets, and agreeing on what needs to be done to address any problems or gaps

Communication, coordination, and collaboration: The level of communication, coordination, and collaboration varies across Working Groups but most interviewees recognize that there is a need to do more to keep partners informed and coordinate with other Working Groups. Good practice examples identified include regularly updating the website (e.g., TB-HIV) and sending out newsletters (e.g., TB-HIV). The previous external evaluation of the Working Groups has covered this topic in significantly more detail.

Resources: Different Working Groups have different levels of Secretariat support and different levels of funding. Resourcing generally depends on the

commitments of individual Working Group members (e.g., WHO provides the Secretariat for the TB-HIV Working Group, the TB Alliance has been the main funder of the Working Group on New Diagnostics, and the Partnership is supporting the ACSM Working Group).

Most Working Groups do not keep comprehensive records of their budgets, funding sources, activities conducted, and objectives met. It is therefore not possible from an external perspective to comment on resource need vs. resource use, or on the efficiency or resource use. Core members of the Working Group generally feel resources to be inadequate and to limit activities (e.g., New Drugs Working Group would like to have reached out proactively to partners, DOTS expansion Working Group would like to have been able to support more activity in countries). Some Working Groups are looking to the Partnership Secretariat for more resourcing – and some interviewees have raised questions about whether the Secretariat should be the right funding source for these Groups.

Partner engagement: The Working Groups have been successful in actively engaging appropriate partners in their work via participation in meetings and input into discussions or guidance. Membership of Working Groups and attendance at meetings is reported to have significantly increased over the evaluation period. Many Working Groups recognize that there is room to do more with certain key partners (e.g., the TB-HIV Working Group would like to engage the HIV community to a greater extent, and the Working Group on New Drugs would like to further engage national laboratories).

Meeting management: The meetings attended in Cape Town[7] demonstrated the commitment of individual members to the groups both in terms of the high level of attendance and the high level of engagement in discussion and debate. The sessions that were devoted to work planning for the group were significantly less well attended. The main focus of the meeting agendas appeared to be to inform members of progress in the field and to share experiences. In general there appeared to be little emphasis on taking decisions or committing to action as a result of the meetings – although the objective of many sessions may have been information sharing rather than decision-making.

[7] ACSM Working Group, DOTS Expansion Working Group, Working Group on New Drugs, Working Group on New Diagnostics, tuberculosis-HIV Working Group

Why has the Partnership had impact?

Based on the evaluation, our view is that the Partnership's success has been driven by four factors:

- Early technical consensus: the Partnership started with a high degree of consensus on WHO's DOTS strategy, which it has supported and built on
- Inclusive, collaborative approach: the Partnership has actively encouraged constituencies involved in tuberculosis care and research to join the collective effort; it has provided a range of forums for collaboration, and it has fostered an atmosphere that encourages collaboration and cooperation, without attempting to hold to account or govern its Partners – who retain their own accountability governance mechanisms
- Focus on making a difference: the Partnership has avoided taking over the roles of its Partners – for example, it provides input and endorsement to the normative guidance of WHO and others, but does not issue its own. It has focused its efforts on where it has seen gaps that it can fill, e.g., in global advocacy and in improving access to high-quality drugs
- Innovation: the Partnership has demonstrated innovative approaches in many of its activities, including advocacy and especially the GDF. It has brought in the skills and experience needed to help these efforts succeed

Our view is also that the Partnership's 'failures' (as described in this report) are for the most part due to insufficiently effective performance management of the various Partnership bodies. This includes:

- Insufficient clarity on the objectives of some Partnership bodies (particularly Working Groups) and activities (particularly advocacy)
- Lack of appropriate metrics and targets for some objectives
- Insufficient performance reviews and discussions to identify and address problems areas (e.g., on using GDF to catalyze broader country improvements in drug funding and procurement)

Changes to the TB landscape in 2001 - 06 and their potential implications

Recommendations for maximizing the impact of the Partnership over the next 5 - 7 years must be grounded both in the evaluation of its past performance and in an understanding of the landscape in which it will operate in the future. We have therefore developed 3 scenarios for how the TB landscape may look over the period to 2015 and drawn out some implications for the Partnership.

The approach to developing these scenarios, and the scenarios themselves, are laid out in detail in Appendix D. The approach broadly is as follows:

1. We reviewed and identified 17 potential drivers of change relevant to TB control and research across 5 areas: (i) changes in disease patterns (e.g., evolution of MDR-TB) and treatment (e.g., launch of new diagnostics or drugs), (ii) changes in funding for TB control, (iii) evolution of the drug supply, (iv) changes in TB research (e.g., funding levels), and (v) broader changes in health systems (e.g., countries' ability to absorb and use development funding)
2. We segmented these drivers based on their level of uncertainty (high uncertainty means that there are different possible end states for a driver and it is not possible to predict accurately which end state will develop) and on their relevance to the Partnership (high relevance means that changes in a driver would require a major response from the Partnership). We identified 8 drivers with high uncertainty and high relevance, useful for constructing scenarios
3. We constructed 3 scenarios using these drivers to illustrate 3 plausible (and possibly extreme) ways that the TB landscape may evolve in the future. There are of course many intermediate possible scenarios as well, but extreme ones are often more helpful for testing strategies
4. We reviewed the implications of each scenario for the Partnership and drew out implications for the Partnership's future role, strategy, and activities

The main insight from this scenario-building exercise is that whichever scenario plays out over the next 5 - 7 years, the TB landscape is going to be more complex and have more uncertainty in the key drivers of TB control than in the recent past

–in part because of the progress in TB control and research and the contributions of the Partnership[8]:

- The TB landscape is becoming more complex because (i) there is a greater variation across countries in the level of TB control (as many countries have progressed significantly while others have remained stable), (ii) there is a greater range of in-country actors engaged (e.g., patient groups), (iii) there are more global organizations and partnerships involved in TB control and research, and (iv) there are more diagnostic and therapeutic tools available or on the horizon
- There is more uncertainty in the evolution of key drivers of TB control and research, for example (i) continued progress vs. standstill vs. regress of TB control in the largest HBCs such as India, China, or Russia, (ii) the evolution of XDR-TB, (iii) the availability, usefulness and impact of new drugs, and (iv) the evolution of national partnerships

This has 3 major implications for the Partnership:

1. The Partnership should define its value proposition and roles very clearly to distinguish itself from the increasing number of organizations and partnerships involved in TB control and research
2. The Partnership will need to monitor the evolving landscape more rigorously than in the past both to react quickly to opportunities and challenges that arise and to prepare countries, other Partners, and itself for more medium-term events (e.g., the potential launch of a new drug)
3. The Partnership and its bodies must be able to demonstrate comprehensively the impact and efficiency of their activities to donors and other stakeholders in order to secure needed resources in a more crowded landscape, and must therefore plan these activities based on expected impact and then measure and report impact and efficiency

[8] Greater uncertainty in this context refers to the evolution of key drivers of TB control and research. The Evaluation recognizes that the Partnership has contributed to reducing uncertainty and increasing consensus on the approach to the fight against TB

Recommendations

The Partnership has had a significant impact on TB control and research. It has also built a strong platform for further impact, including a broader agenda for TB control and research, an expanded partnership and a track record of innovation and delivery.

We believe that the Partnership should set itself very high aspirations for its impact over the next 5 - 10 years: there is clear need for its work, it has earned the right to raise its ambitions, and it will operate in a more complex and crowded global public health landscape with more pressure on each organization to demonstrate impact.

We have developed our recommendations with this high level of aspiration in mind. We recommend few changes to *what* the Partnership does, and significant changes to *how* it does them. The major thrust of these recommendations is as follows:

1. Invest more effort in data and analysis to *identify and agree on the biggest opportunities to drive progress in TB control and research* (e.g., *specific* countries' commitment, *specific* technical and managerial issues), and to drive consensus and commitment on the actions that countries, other Partners, and the Partnership and its bodies must undertake to realize these opportunities
2. *Integrate the strategies of individual Partnership bodies into a unifying Partnership strategy* that clearly lays out what the Partnership aims to deliver and how it will do so. This is distinct from the Global Plan, which lays out what needs to be done, and from the individual strategies of Partnership bodies
3. *Concentrate Partnership effort and resource* on delivering the big opportunities identified above, rather than spreading too thin across too many issues
4. *Maximize the use of Partnership levers to influence countries, Partners, and other actors* and to hold them to account for delivering on commitments: performance transparency, strong advocacy, and leverage of GDF grants-in-kind
5. *Increase performance transparency* for the impact and efficiency of the Partnership and its bodies to ensure optimal use of Partnership resources

We then make detailed recommendations on the role of the Partnership, on the activities of Partnership bodies, and on structure, management, and governance. We also lay out high-level estimated resource implications: ~10 more FTEs,

~$300-600K more annual funding, and ~$1 - 2M investment (*Exhibit 40*).

Recommendation 1: The Partnership should make progress against the Global Plan more visible, analyze it, and use it to influence Partner activities

Context: The Partnership has achieved strong credibility internationally. Its Global Plan is widely recognized and supported. The Partnership has shown that it can influence countries and other Partners to improve TB control and research efforts. It can build on this and develop a systematic approach to using information on countries' performance against the Global Plan to identify major opportunities and barriers and to influence the activities of countries and other Partners vis-à-vis these.

Detailed recommendations:

1.1 Fully update and republish the Global Plan every 3 years, and index interim updates and amendments for ease of use

1.2 Ask countries and other Partners to formally endorse the Plan

1.3 Publish a full Global Plan Progress Report every 3 years covering all areas of TB control and research and their status versus Global Plan targets (and review and publish interim progress on *selected critical issues* every 12 - 18 months): make maximum use of data already being collected by Partners, and collect selected other data as needed. Data (and sources) could include:

- TB epidemiology and control metrics (WHO TB Control report): overall, TB-HIV, MDR-TB, and for other issues as needed (e.g., pediatric TB)
- Funding for TB control (WHO TB Control report)
- ACSM (structured survey results, e.g., as used in the Evaluation)
- Holistic patient approach (survey results, e.g., as used in the Evaluation)
- Average prices for one course of treatment for drug-sensitive and MDR-TB (GDF, distributors, manufacturers) and number of manufacturers on WHO approved suppliers list (WHO)
- Diagnostic, Drug, and Vaccine pipelines (PDPs)
- Funding for TB R&D (Product Development Partnerships)

1.4 Analyze performance against Plan at a level of detail that identifies reasons for success and failure and helps the Partnership identify specific countries and issues (technical, managerial, or other) where there are major opportunities for or major barriers to improving TB control and research

1.5 Focus the Partners' Forum on sharing and discussing these Progress Reports, celebrate successes, make 'underperformance' visible, and hold discussions on how to accelerate progress, especially where falling behind Plan

Potential implications for Partnership organization and resources – *covers recommendations 1, 2, and 8*:

- 2 - 3 additional full-time equivalent (FTE) staff in Global Plan and Performance Transparency Unit of Secretariat, with experience in strategic planning across private sector (e.g., international corporate or management consulting) and public/international sector
- Estimated $150 - 300K per year additional funding to support
  - Data gathering, coordination, and analytic work required for recommendations 1.1, 1.3, and 1.4
  - Updating and refreshing Partnership strategy (recommendation 2.2)
  - Supporting performance transparency (recommendations 8.1 and 8.2)

One-time investment (e.g., $300 - 600K) in qualified external support with expertise in strategy, global public health, and international development issues, to work with the Coordinating Board, leaders of the different Partnership bodies and the Executive Secretary,to develop and articulate overall Partnership strategy building on the individual strategies of the different Partnership bodies (recommendation 2.2). This should be subsequently updated and refreshed as above, with limited external support if needed.

Recommendation 2: The Partnership should focus on 4 roles where it adds value over and above Partners and other organizations, and articulate a Partnership-level strategy for delivering impact through these roles

Context: The Partnership has had impact on TB control and research over and above what would have happened without the Partnership. There is still significant need for many of the roles and activities of the Partnership, as well as opportunities for new roles and activities. Looking ahead, there is likely to be increasing scrutiny of the value-add of global health partnerships relative to existing organizations and less support for areas where a global health partnership cannot demonstrate a decisive advantage over others. While the Global Plan lays out what needs to achieved and broadly what is required to do so, and while many Partnership bodies have developed their own strategies for delivering their objectives, the Partnership as a whole has not yet brought those together into a coherent, unified articulation of what it (i.e., all the Partnership bodies together) will achieve and how it will measure its own success.

Detailed recommendations:

2.1 The Partnership should focus on performing roles where it can add significant value to global TB control and research, over and above the contributions of existing organizations involved in TB control and research. Specifically, the Partnership should focus on the following 4 roles:

- Setting the global vision for tuberculosis control and research, building consensus, and building and maintaining an effective partnership of organizations to deliver the vision
- Communicating performance against the vision and conducting advocacy to achieve specific objectives
- Coordinating technical assistance to countries and sharing best practice
- Conducting a limited number of special initiatives, including the GDF and GLC, where it is the organization best placed to do so

Subsequent recommendations lay out in more detail the specific activities, capabilities, organization, governance, and resourcing that Partnership bodies will need to perform these roles effectively and efficiently.

2.2 The Partnership should develop a document that articulates the overall strategy of the Partnership, building on the individual strategies of Partnership bodies such as Working Groups, Secretariat, and GDF. This document should lay out the Partnership's "internal objectives" for driving TB control and research, the Partnership's stance on a broad range of strategic issues in TB control and research – a selection of which, raised in

our Evaluation work, is included in *Exhibit 31*– and the ways in which the Partnership and its bodies can most effectively work with and influence senior decision makers and resource committers in countries.

Potential implications for Partnership organization and resources: *outlined in Recommendation 1*

Recommendation 3: The Partnership should expand, strengthen, and systematize its advocacy efforts

Context: The Partnership has focused on advocacy and used a broad and often innovative set of approaches. It has had a number of successes at both global and national levels. In some cases, it has not been explicit about the objectives of its advocacy efforts and/or not been able to measure and document the impact of these efforts, raising questions about the impact and value of some of its advocacy work. Going forward, the Partnership has a clear and powerful advocacy role.

Detailed recommendations:

3.1 Develop a balanced annual advocacy strategy and delivery plan for the Secretariat's Advocacy Unit, deriving from and consistent with the broader Partnership strategy, describing:

- "External" advocacy goals that the Partnership wishes to attain (e.g., increasing government commitment in a particular country)
- "Internal" Partnership objectives related to those goals
- Specific advocacy activities for each internal objective, including target, tailored message and materials, specific 'channel' (e.g., TB Ambassador, High Level Mission, local civil society efforts), and expected outcome

This strategy should be balanced in both having planned activities (e.g., for planned events like G8 Summits) and leaving flexibility to act rapidly and tactically where needed.

3.2 Annually review the Partnership's performance against this plan

3.3 Review the portfolio of current and planned advocacy activities to ensure that each has clear, measureable external goals and internal objectives that are in line with Partnership priorities. Stop or modify activities which do not have these attributes

3.4 Absorb any relevant activities of the ACSM Working Group into Advocacy Unit (*see* recommendation 7.1) – in particular Working Group activities that are direct advocacy work and do not fit the WG establishment criteria

3.5 Broaden the "external" goals of advocacy. In particular, increase focus on building awareness of the economic costs of TB, the economic incentives and disincentives to good TB care, and the contributions of good TB control mechanisms to health systems

3.6 Broaden the range of senior decision makers targeted. In particular, target country-level resource committers (e.g., ministers of finance, economic

planning and development) and, where appropriate, those responsible for the social determinants of TB care (e.g., housing)

3.7 Conduct regular scans of the TB landscape, with particular focus on evolving donor priorities, advocacy strategy of other disease partnerships and global health organizations, and media reports. Use these scans to inform the Stop TB advocacy strategy and identify opportunities for collaboration (e.g., joint advocacy missions on TB/HIV)

Potential implications for Partnership organization and resources:

- Likely to require some incremental resource, with experience in advocacy and marketing, in Secretariat (as part of Advocacy Unit). Level of resourcing TBD based on:
  - Degree to which resource can be freed based on the portfolio review recommended in 3.3
  - Degree to which activity (and resource) are imported into the Advocacy Unit from the ACSM Working Group (recommendation 3.4)

Recommendation 4: The Partnership should become a global resource for coordinating technical assistance to countries and for sharing best practices

Context: The Evaluation shows a need to coordinate and expand available technical assistance (TA) to countries, to increase the utility of this scarce resource, and to reduce the logistical burden of securing TA: feedback from many NTP managers is that they receive (too) many offers of technical assistance and often find it challenging to select TA that is most appropriate to their needs. The Partnership is well placed to address this need. Moreover, a central mechanism for expansion and coordination of TA would also be a natural home for sharing best practices.

Recommendation: Make TB-Team the main Partnership body for coordinating TA to countries, with the following main activities:

- Develop a standard framework for TA. This framework should include traditional TA (help on specific tasks supplied by outside agencies) and managerial capability building (e.g., project management, grant writing, donor reporting, and financial accounting)
- Set up and manage an 'online marketplace' to allow NTPs and other country organizations to post requests for TA (and see the supply of TA available) and technical partners to post capabilities and capacity (and see demand) using the standard framework – see *Exhibit 32* for examples from other sectors. TB-Team's role would be to set the rules for coordination and to maintain the site. It could do so in conjunction with TBCTA, complementing that organization's work
- Identify opportunities for improving the efficiency or coordination of technical assistance (e.g., alert countries and technical agencies to similar requests from countries in the same region that could be coordinated)
- Set up and maintain a database of best practice across all areas of TB control, using the framework for TA. Country organizations (e.g., NTPs and NGOs) and technical agencies could submit examples of work that they consider best practice for TB-Team to publish and maintain on the database. Submissions could also be reviewed by relevant experts

The Partnership should secure expert assistance to (i) rapidly design the concept and prototype for the online services, (ii) conduct a market survey of "demand-side" country organizations and "supply-side" technical partners to confirm willingness to participate and gather feedback on the prototype, (iii) establish countries' need for and donors' willingness to provide a grant fund alongside the matching function, and (iv) ascertain the level of resourcing required to operate these services.

Potential implications for Partnership organization and resources:

- Funding support for evaluation and setup (estimated $1.0M)
- 2 - 3 FTE to operate on ongoing basis – degree to which this is incremental depending on existing resourcing and activities of TB Team
- Incremental annual budget (e.g., for marketing service and for website management) of estimated $150 - 300K per year

Recommendation 5: The Partnership should continue to operate GDF in its current form, and use it to accelerate sustainable transformation of TB control in priority countries over the next 3 - 4 years

Context: GDF has been very successful in providing countries with a reliable supply of high-quality, affordable first-line drugs, and somewhat successful in influencing the global supply landscape. The Partnership has had limited success in using the leverage of GDF's grant-in-kind service line to catalyze broader, sustained commitment to TB control in countries, and therefore runs the risk that GDF's impact from grant-in-kind work will be temporary and unsustained. While new financing mechanisms have emerged since GDF's launch, many countries still report a need for GDF's services.

Detailed recommendations:

5.1 The Partnership should continue to operate GDF – GDF's services are still needed by many countries, and the Partnership is the best 'owner' of GDF

5.2 The Partnership should review its aspiration of using GDF grants-in-kind to catalyze sustainable improvements in countries' commitment to and funding of TB control, in light of the emergence of the Global Fund and UNITAID:

- If the Partnership chooses to maintain this aspiration (which we would recommend), then it should seek to demonstrate over the next 3 - 4 years that it can use the GDF grant-in-kind mechanism to catalyze sustainable advances in grantee countries. To do so, it should focus on a few grantee countries where GDF plays a major role and therefore has leverage, and where greater commitment to TB control would have a major impact on global epidemiology, and then use the leverage of GDF's grants-in-kind to both hold to account and help these countries drive the changes needed to transform TB. To use of GDF's leverage, it should:
  - Systematically review whether countries and other Partners are meeting commitments made in GDF grant applications at CB meetings
  - Consider public reporting of countries' performance vs. commitment
  - Target advocacy efforts to countries not honoring their commitments, mobilize Partners best positioned to influence, engage the support of patient groups and civil society, and consider grant withdrawal
- If the Partnership chooses to relax that aspiration, it should then develop an alternative long-term vision for GDF (for example, as a pure direct procurement service for drugs and commodities) based on country needs and on commercial and organizational feasibility

5.3 Given the importance of 5.2 and the GDF's lean resourcing, it should focus on service lines where it is likely to have the greatest impact: it should continue grant-in-kind, direct procurement, and emergency grant services for first-line drugs, as well as its current commitments to drug and diagnostic partnerships. It should review carefully the benefits of further expansion into diagnostics and other areas versus the managerial and operational costs, and ensure that it can devote sufficient managerial attention to grant-in-line work

5.4 For similar reasons, GDF management should review carefully the number of countries it commits to serving and the minimum on the volume of drugs that it will supply (both number of treatments and percentage of annual treatments)

5.5 The Partnership should continue to work with the Global Fund and UNITAID to ensure alignment and objectives and policies, and to ensure that countries can use funding from these organizations to procure GDF drugs efficiently

Potential implications for Partnership organization and resources: none beyond resourcing laid out in existing GDF plans

Recommendation 6: The Partnership should maintain GLC in its current form for as long as it believes that the risks of misuse of second-line drugs require it

Context: The GLC has performed an effective job in safeguarding access to second-line drugs and in providing TA to countries wishing to establish programs to manage drug-resistant tuberculosis. It has been effective in adapting its processes to address the increasing number of programs requesting GLC approval.

Detailed recommendations

6.1 Maintain the Green Light Committee in its current form: the current membership and mechanism functions well and should be maintained

6.2 Do not expand the mandate and objectives of the Green Light Committee beyond safeguarding access to second-line drugs and providing TA to countries to help them establish appropriate programs. Use other Partnership bodies (including GDF, working with Global Fund and UNITAID) and Partners to address the broader issues in control of MDR-TB, e.g., global supply, pricing, distribution of second-line drugs, and country-level commitment to tackling the MDR challenge. (This recommendation recognizes that the membership of these bodies often overlaps with that of the GLC. Nonetheless, addressing these broader issues should be part of the objectives of these other bodies, not of the GLC)

Potential implications for Partnership organization and resources: none beyond resourcing laid out in existing GLC plans

Recommendation 7: The Partnership should continue to use Working Groups as a major vehicle contributing to TB control and research, systematize the processes for their establishment and performance review, and provide them support from the Secretariat

Context: Working Groups (WGs) have been the Partnership's main mechanism to bring Partners together on critical issues in TB control and research. While WGs have played different roles and conducted different activities depending on the issue in question, they have contributed significantly to the overall impact of the Partnership over the Evaluation period. However, measuring the full effectiveness and efficiency of Working Groups over the Evaluation period has proven difficult: in some cases, WGs have not clearly articulated the specific objectives, in others they have not adequately defined metrics, targets, or performance review mechanisms for their work, and in most cases, they have not tracked resource commitment and use for their work. Some WGs report that they are currently addressing these issues. Many stakeholders also report that the Partnership should revisit the number of WGs, the issues they address, their organization structure, and their Board representation.

Detailed recommendations:

7.1 Establishment: The Coordinating Board should establish Working Groups on selected strategic topics for a fixed duration of 3 years, and review these every 3 years, starting with the May 2008 Coordinating Board. *Exhibit 33* lays out proposed selection criteria for Working Groups and alternative mechanisms for addressing strategic issues

Given the complexity of the issues requiring a Working Group approach, our view is that the total number of Working Groups should ideally not be more than 7 - 8, to ensure that the Partnership as a whole and the Coordinating Board in particular can devote sufficient time and energy to each. If there are more than eight issues that meet the criteria for WG status, the Coordinating Board should debate and prioritize the 7 - 8 that are most critical over the 3-year period, and review after 3 years

The Partnership should in this context review the status and objectives of the ACSM WG: The Partnership Secretariat carries out advocacy and communication for TB, particularly at a global level, and the other Working Groups, product development partnerships, and individual Partners do so for their own areas of focus. The Secretariat and ACSM WG should work together to ensure that there is no duplication of activities, either by developing a remit for the WG that is consistent with the establishment criteria above and clearly non-duplicative, or by absorbing the WG activities

into the Secretariat Advocacy Unit and the Coordinating Board subcommittee on Advocacy (*see* Recommendation 9)

7.2 Review: The Coordinating Board should review the impact, effectiveness, and efficiency of all WGs every 3 years, and address the following:

- Existence: Dissolve WGs that no longer meet establishment criteria (e.g., because they have successfully addressed the issues they were created for)
- Performance: Assess how well and how efficiently each Working Group has delivered against its internal objectives, and make necessary recommendations on how to improve performance
- Membership and leadership: Review the appropriateness of Working Group broad membership and core membership. Rotate the Chair, unless there is a very compelling reason to maintain the Chair for a second 3-year term

7.3 Activities: All Working Groups should serve as topic-specific forums for discussion and debate, which Partners can use to inform their own activities. Each Working Group should also prepare:

- A 3-year strategic plan laying out the external goals it is targeting, the specific internal goals, deliverables (e.g., reports, draft guidance, endorsement statements), and milestones it is *voluntarily* setting itself, the main activities involved, and the resources and funding required
- A more detailed annual operational plan
- An annual performance report vs. the operating plan

The Partnership Secretariat, in consultation with WG Chairs, should prepare templates for the strategic plan and operational plan and for the annual report.

Each WG should publish its strategic plan to increase transparency, encourage cooperation, and incentivize accountability.

7.4 Funding: Working Groups should be established with a funding plan. This would call for use of existing Partnership funds, or funds or donations-in-kind directly contributed by Partners. Working Groups should also identify where they need Partnership Secretariat or broader Partnership support in raising necessary funds. They should report on use of funds in their annual performance report

7.5 Administrative support: Working Groups should have dedicated administrative support, detailed in their Operating Plans, with funding or resourcing ideally provided by WG Partners themselves. The Partnership

Secretariat should provide funding adequate for a baseline level of administrative support (e.g., 0.5FTE per Working Group) and could consider further funding support based on the WG Operating Plans

7.6 Performance transparency: Working Groups should review their performance against their Strategic and Operating Plans, and make these visible to the Coordinating Board. We recommend that Working Groups review their performance with the Working Group sub-committee of the CB every 6 months for informal feedback and joint problem-solving. These meetings should be attended by all Working Group Chairs and Secretaries and the Executive Secretary, and also serve to identify and manage potential synergies and duplications among Working Groups. The Working Group sub-committee should then report on Working Groups' performance to the Board every year.

7.7 Board Representation: Working Group representation on the Coordinating Board will be discussed in the CB section

Potential implications for Partnership organization and resources:

- Resourcing for 3-year reviews of Working Groups (recommendation 7.2) would ideally be provided by dedicated resource from individual Partners (e.g., equivalent to 3 - 4 months of 2 - 3 FTEs familiar with the Working Groups and the issues involved)
- Resourcing for administrative support (recommendation 7.5): 0.5 FTE per WG, provided by Secretariat, unless already provided by WG – 3 - 4 FTE in total

Recommendation 8: The Partnership should increase performance transparency for Partnership bodies, and also use performance transparency to encourage Partners to deliver on commitments

Context: The Stop TB Partnership is organized on the principles of a loose partnership, where Partnership bodies are accountable to the broader Partnership, and individual Partners remain accountable to their own governing bodies, with no formal accountability to the Partnership. The Partnership makes use of some elements of good performance management, e.g., the GDF has an appropriate set of performance metrics and targets, and has regular performance discussions. It has also shown that it can influence country and other Partner commitment and activities by making performance information transparent and visible. However, while all Partnership bodies have had some impact over the Evaluation period, some – Working Groups in particular – have not been able to clearly and comprehensively demonstrate their impact and efficiency.

Looking ahead, it will be important for the Partnership to increase performance transparency on impact and efficiency, for the following reasons:

- The work of Partnership bodies (e.g., Working Groups, GDF, and GLC) is designed to have impact in the fight against TB. Greater transparency on the objectives, targets, and impact of these efforts will a) at minimum ensure no duplication, b) make it easier for Partners to see how they can help deliver it, and c) enable Partnership bodies to get more input and feedback from the broader Partnership on how to maximize impact
- In the future landscape in which the Partnership will operate, there will be a greater need to show impact, results, and efficiency, driven in part by evolving donor demands and in part by a increasingly complex landscape with more organizations carving out specific roles for themselves

We explicitly do not recommend that the Partnership adopt private-sector-style performance management mechanisms. We do however recommend that the Partnership make greater use of performance transparency.

Detailed recommendations:

8.1 All Partnership bodies should be more transparent about their objectives, targets, impact, and efficiency, as laid out in *Exhibit 34*:

- They should then define metrics for these objectives as well as appropriate time-bound targets (e.g., 1-year, 3-year, and 5-year targets) that they have agreed to hold themselves accountable for – i.e., these targets are not imposed by anyone else in the Partnership

- The Partnership's "external" goals are informed by the Global Plan and by the WHO Mid-Term Strategic Plan. All Partnership bodies should define their own "internal" objectives that clearly relate to these external goals
- Partnership bodies should measure their performance against the objectives and targets they have agreed for themselves. The Secretariat should create a consolidated report that tracks this performance. The Coordinating Board should review and discuss this report at each CB meeting, and provide feedback and guidance aimed at helping Partnership bodies further improve their impact and efficiency

8.2 The Partnership should also make greater use of performance transparency to encourage individual Partners to deliver on voluntary commitments that they have made in the context of the Partnership's work, including for example voluntary commitments to deliver technical assistance, funding and resources, or specific activities. A proposed approach is laid out in *Exhibit 35*, based on logging the voluntary commitments of individual Partners and discussing the subsequent delivery and impact of these commitments. While there may be some concern that such an approach will inhibit Partners' willingness to commit to delivery, our view is that this risk is a) low, given Partner's commitment to TB control and research and to the delivering the Global Plan and b) outweighed by benefits of performance transparency as laid out in the Context section above.

Potential implications for Partnership organization and resources: *outlined in Recommendation 1*

Recommendation 9: The Partnership should adjust the structure and function of the Coordinating Board to enhance constituency representation, review global and Partnership progress in TB control and research, and increase focus on debating high-level strategic issues

Context: The Coordinating Board (CB) has been effective in coordinating and supporting Partner activities, and broadly effective in leading and directing work of Partnership. It has been less effective in monitoring and reviewing progress against Global Plan, and Board members have different views about whether this is part of its role. Coordinating Board meetings are efficient and well supported by the Secretariat. In addition, stakeholders have raised 2 specific issues to address: evolving the Board size, structure, and composition to ensure both appropriate constituency representation and support real discussion and debate, and ensuring that Board members appropriately represent their full constituencies.

Our recommendations in this section are grounded in both the Evaluation findings and subsequent stakeholder interview and discussions, and lessons learned from our work with high-performing Boards (*Exhibits 36 and 37*)

Detailed recommendations

9.1 Size and composition: The Coordinating Board should be large enough to represent constituencies in TB control and research and to be seen as legitimate by stakeholders and constituencies, without being so large as to make it impossible to have effective debates on the most important issues affecting TB control and research. The Board should use a sub-committee structure to allow smaller, topic-specific sub-groups have the appropriate debates and bring only the highest level issues up to CB for further debate.

In practice, this could mean a Coordinating Board of 28 - 30 members, representing 10 constituencies, and composed as in *Exhibit 38*.

9.2 Subcommittees: The Board should institute subcommittees of 4 - 6 Board members to focus on specific areas.

- Subcommittees to consider include: Partnership finance and administration (could be Executive Committee), Performance transparency, Advocacy, GDF, and Working Groups
- Subcommittees would meet prior to full Board meetings (e.g., in the first morning of a 2-day CB meeting, after the opening events) and bring their findings, recommendations, and issues for full Board debate to the Coordinating Board (e.g., in the first afternoon of a 2-day CB meeting)

- Subcommittees could also have 1 - 2 independent (non-Board) members who bring deep functional expertise not present on the Board, e.g., in marketing and branding (Advocacy) or procurement (GDF)

9.3 Board member appointment, rotation, orientation, and evaluation: The Partnership should ensure transparency for these functions; specifically:

- The Partnership should ensure that the process for Board member appointment and rotation is clear and transparent – the process does not have to be the same for all constituencies. It should consider staggered 3-year terms with 1 - 2 renewal options for Board members
- The Secretariat should prepare orientation materials and lead orientation sessions for new Board members. This should include a review of the Partnership's organization and activities, Partnership management and governance, and Board member roles and responsibilities
- Board members who are constituency representatives should be evaluated on their performance by their constituency (e.g., on the extent to which they canvas constituency opinions before Board meetings, represent them at meetings, and produce feedback on the discussions after meetings). This could be done through surveys for large constituencies, or interviews for smaller ones, with an interim (18 months – to provide feedback and allow for course correction) and final (3-year) evaluation in line with Board membership terms

9.4 Coordinating Board meetings: The Partnership should continue with 2-day, twice-yearly Coordinating Board meetings with preparation supported by the Secretariat. It should adapt the meeting agenda to allow more discussion on overall progress against the Global Plan and on the performance of the Partnership, for example:

- Day 1 morning: opening events and subcommittee meetings
- Day 1 afternoon: subcommittee reports to full Board and Board discussion on issues raised by subcommittees
- Day 2 morning: full Board discussion on global progress in TB control and research, progress against Global Plan, and a small number of relevant strategic issues
- Day 2 afternoon: full Board discussion on Partnership performance

Potential implications for Partnership organization and resources: none beyond that laid out in previous recommendations

Recommendation 10: The Partnership should align its organization structure with the activities recommended above, and the Secretariat should conduct a detailed evaluation of the resources required to deliver the recommendations

Context: The hosting arrangements for the Partnership Secretariat at WHO, augmented by some Partnership and Secretariat actions (e.g., setting up a Trust Fund) appear to have been effective over the Evaluation period. WHO is also currently reviewing its approach to hosting and working with global health partnerships. The Partnership's organization structure has also been broadly appropriate for its activities over this period. This Evaluation has not focused on a detailed evaluation of Secretariat activities and resourcing

Detailed recommendations:

10.1 The Partnership Secretariat should remain hosted at WHO, pending WHO's review of its relationship with Partnerships. The Partnership could also propose to review the hosting arrangement with WHO to discuss a) benefits to the Partnership and to WHO of this arrangement, b) opportunities for further increasing the efficiency of administrative activities, especially in light of ongoing WHO changes to administrative processes, IT, and support

10.2 Once the Coordinating Board has reviewed the above recommendations and decided on which to accept, modify, or reject, it should review its organization structure and make the necessary modifications to ensure that structure and activities are well aligned. *Exhibit 39* provides one example what this could look like, recognizing that there is usually more than one possible structural solution

10.3 The Secretariat should then carry out, for the accepted recommendations, an evaluation of the resources required to a) set up any new/modified activities (e.g., setting up an online TA marketplace) and b) perform new/modified activities on an ongoing basis (e.g., reviewing performance against the Global Plan). We have laid out our estimates for incremental resourcing required for these recommendations, based on our broader experience, and recognizing that we have not conducted a detailed resource and activity assessment as part of this work (which is in line with the terms of reference given). These will clearly need to be reviewed and refined

Potential implications for Partnership organization and resources: none beyond that laid out in previous recommendations. (Summary of these is in *Exhibit 40*)

Independent External Evaluation of the Stop TB Partnership – Exhibits

Final report exhibits
April 21 2008

Independent external evaluation of the Stop TB Partnership
conducted by McKinsey & Company

EXHIBIT 1: OBJECTIVES OF THE GLOBAL PLANS TO STOP TB

Global Plan to Stop TB, 2001–06

- Expand the currently available anti-TB strategy – DOTS – so that all people with TB have access to effective diagnosis and treatment
- Adapt this current strategy to meet emerging challenges of HIV and drug resistance
- Improve existing tools by developing new diagnostics, new drugs, and new vaccines
- Strengthen the Stop TB Partnership so that proven TB-control strategies are effectively applied

Global Plan to Stop TB, 2006–15

- Promote wider and wiser use of existing strategies to interrupt TB transmission by:
  - Increasing access to accurate diagnosis and effective treatments by accelerating DOTS implementation to achieve the global targets for TB control; and
  - Increasing the availability, affordability, quality of anti-TB drugs
- Derive strategies to address the challenges posed by emerging threats by adapting DOTS to prevent and manage multidrug-resistant TB, and to reduce the impact of HIV-related TB
- Accelerate the elimination of TB by
  - Promoting research and development for new TB diagnostic tests, drugs, and vaccines; and
  - Promoting adoption of new and improved tools by ensuring appropriate use, access, and affordability

Source: Global Plans

EXHIBIT 2: THREE DIFFERENT WAYS OF VIEWING THE PARTNERSHIP

A loose Global Health Partnership	A set of defined bodies specific to the Partnership	The full time staff of the Partnership
• Organizations formally signed on as a partner • Other organizations involved but not formally signed on, including – NTP programs in endemic countries – Donor governments and agencies – Those who have answered the 'Call to Stop TB'	• Coordinating Board • Executive Committee • Executive Secretary • Secretariat (incl. GDF) • Working Groups • GLC • Partners' Forum	• Executive Secretary • Secretariat (incl. GDF)

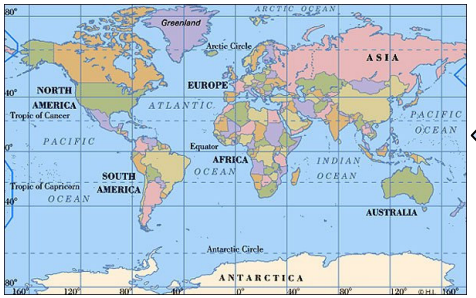

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EXHIBIT 3: OVERALL FRAMEWORK FOR THE EVALUATION APPROACH

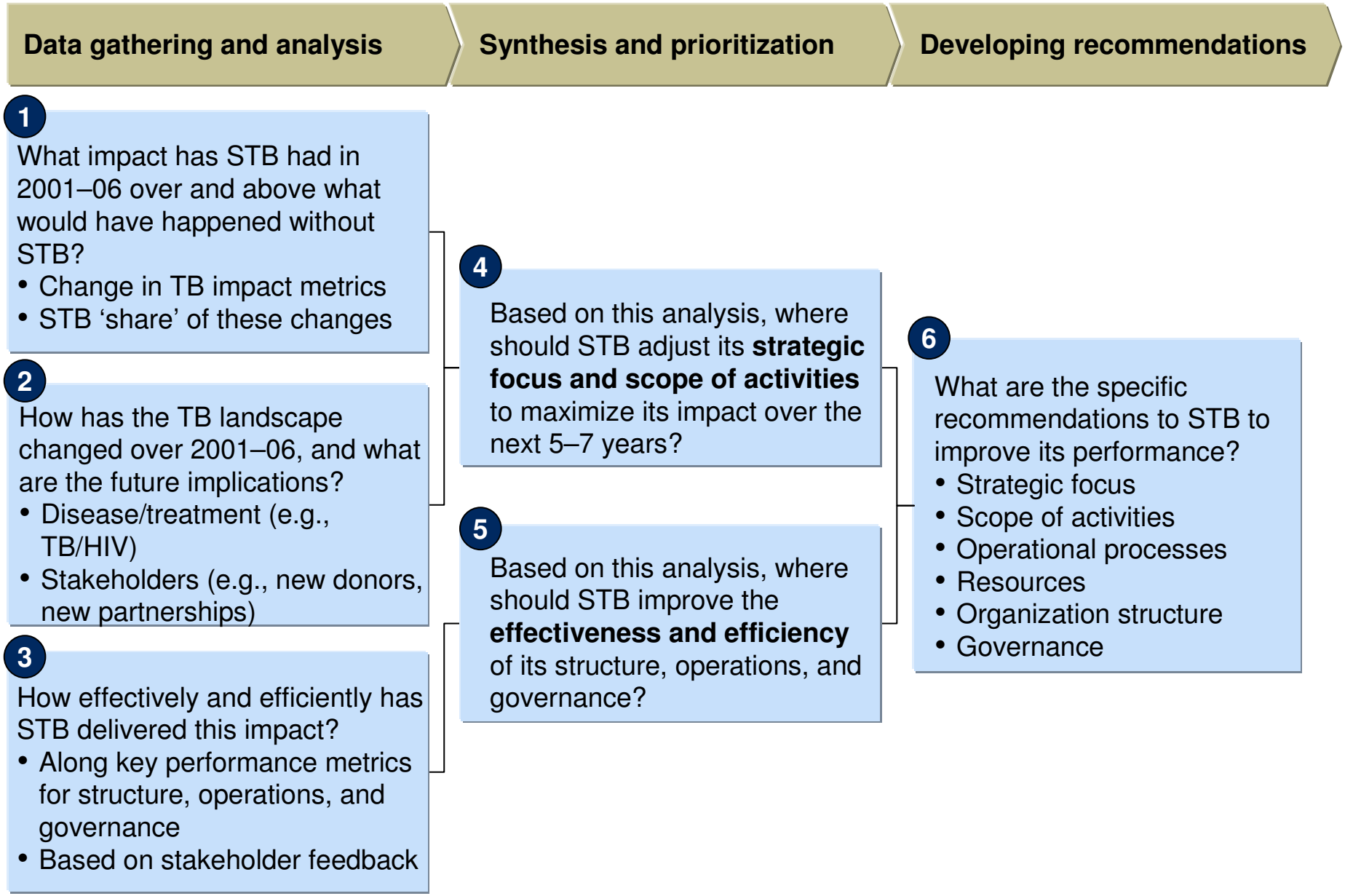

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EXHIBIT 4: EVALUATION ACTIVITIES

Interviews	• Conducted 94 interviews with people active at the global level in tuberculosis (see Appendix A for details)
Country visits	• Visited 8 countries – India, China, Indonesia, Burkina Faso, Uzbekistan, Peru, Kenya, Morocco (see Appendices B and C for details) • Conducted over 150 interviews in countries
Literature review & data analysis	• Reviewed publications of Stop TB Partnership, WHO Stop Tuberculosis Department, and selected other documents • Analyzed available data on tuberculosis epidemiology, control metrics, funding, advocacy, and research & development
Survey	• Conducted internet-based survey of 1,332 stakeholders with response rate as follows – Overall 17% – NTP managers 9% – Secretariat 61% – Coordinating Board 45%
Meeting attendance	• Attended October 2007 Coordinating Board in Berlin • Attended November 2007 Union Conference in Cape Town

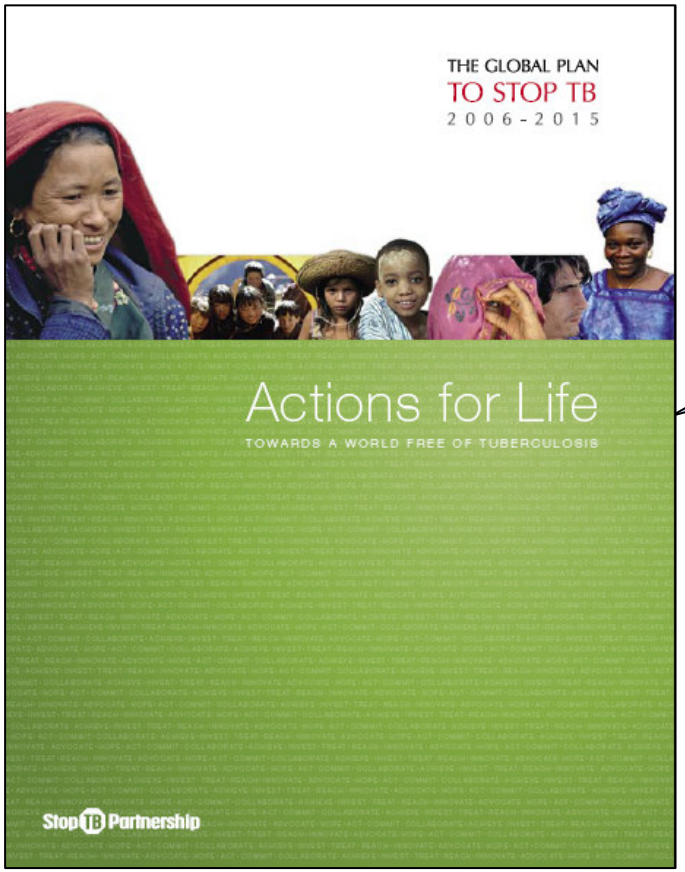
Source: <__>

EXHIBIT 5: OVERVIEW OF PROGRESS IN TUBERCULOSIS EFFORTS

	Indicator	From . . .*	To*
TB epide-miology	• Estimated prevalence**	262	209
	• Estimated incidence**	137	137
	• Mortality**	29	25
TB control	• CDR	33%	60%
	• TSR	<60%	84%
TB funding	• HBC NTP funding	$423m	$999m
R&D	• Funding	$125m	$768m
	• Pipeline***	n/a	10 drugs 13 Dx 8 vaccines

* Years are inconsistent due to data limitations; generally within evaluation time frame – see further slides for detail
** 2001–05; rate per 100,000
*** Excluding pre-clinical, as estimates differ in this area
Source: Global TB control reports; Treatment Action Group; Global Plans

EXHIBIT 6: REPRESENTATIVE INTERVIEWEE VIEWS ON GLOBAL PLANS



"The Partnership has been unbelievably successful - it has brought people globally together who are interested in TB to agree on a single advocacy agenda of 7 items"

"The Partnership has really raised the profile of TB with donors by developing a single mission, vision, and plan that everyone signs up to"

"The Partnership has had tremendous impact, particularly through innovative ideas such as having a Global Plan"

"The Global Plan is very much an advocacy document – has been useful in translating into regional and national plans"

Source: Stakeholder interviews

EXHIBIT 7: STRENGTHENING GUIDANCE (1/2)

	Examples of Partnership contribution to strengthening guidance
Providing input to technical guidance developed by WHO	• Working Groups (WG) supported WHO development of Stop TB strategy • DEWG, MDR/DOTS+ WG, and TB/HIV WG provided forums to discuss and re-evaluate technical guidance, e.g., MDR/DOTS+ WG provided input into WHO guidelines on MDR-TB surveillance and programmatic management of MDR-TB • DEWG sub-groups contributed to formulation of guidance and publications on TB and poverty, laboratory strengthening, PPM, and childhood TB, e.g., PPM sub-group contributed to the WHO's work on formulating strategies to engage private providers in TB control, including reviewing and endorsing the Guidance on Public Private Mix approaches in 2006
Identifying and prioritizing issues on which technical guidance is needed	• Working Groups successfully called for technical guidance in a number of areas, including designation of national reference laboratories and guidance on how to interact with HIV programs for the management of patients with TB-HIV • The DOTS+ WG called for updated guidance on drug susceptibility testing. Policy guidance was issued in July 2007 • The PPM sub-group called for more guidelines on Public Private Mix, which were issued in 2006

Source: team analysis

EXHIBIT 8: STRENGTHENING GUIDANCE (2/2)

Examples of Partnership contribution to strengthening guidance

Endorsing, supporting dissemination, and adoption of WHO guidance

- Partnership endorsed Stop TB strategy, which has been used to develop regional and country TB control strategies, e.g., in Morocco
- DEWG serves as a forum for NTP managers, helping them implement DOTS
- MDR/DOTS+ WG training programs on management of MDR-TB have had impact, evidenced by increasing numbers of patients under treatment in the former Soviet Union, reduction of MDR-TB incidence in the Baltics, and increase in the number of countries approved by GLC from 5 in 2002 to 40 today
  "GLC technical support has been instrumental in implementing DOTS+, particularly in the Baltics, where MDR incidence is now falling"
- Interviewees report relatively less dissemination of TB/HIV guidance to NTPs, because of the need to first establish DOTS program and coordinate with HIV/AIDS programs, but advances here as well, e.g., TB/HIV WG participation in the 2006 Toronto AIDS Conference

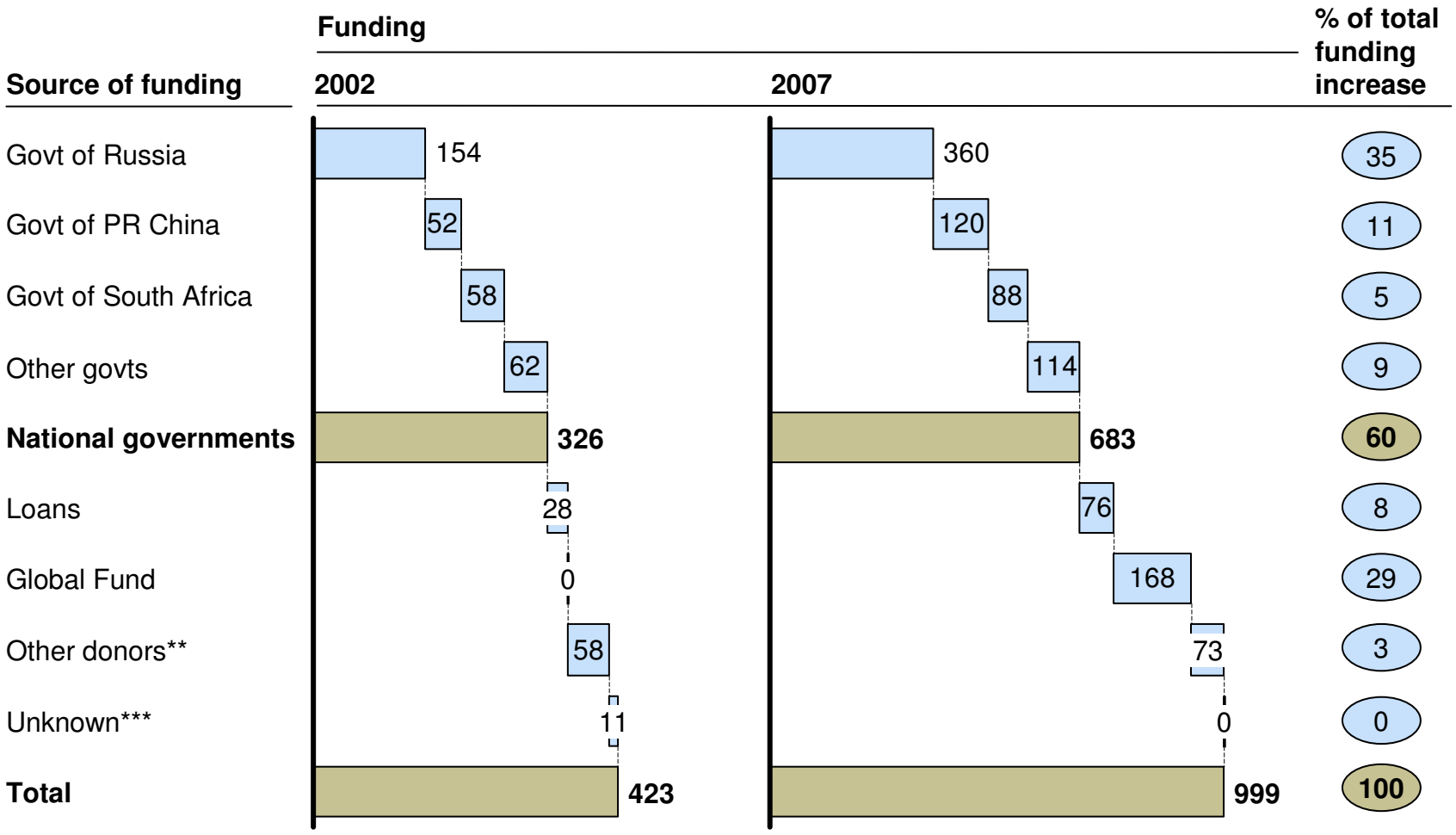
Supporting development, dissemination, and adoption of other guidance

- TBCTA engaged the support of medical associations in developed countries in the formulation of the *International Standards for Tuberculosis Care (ISTC),* to address the concern that DOTS is a strategy for the public sector and for the poor. ISTC has shown promise but it is still too early in implementation to see impact
- ACSM WG's country sub-group led the development of 10-year framework for action, accepted in Mexico City in September 2005 and published in 2006. $35m of Global Fund grants to ACSM activities in round 5 (2006) suggest that the potential for ACSM is being recognized, though it is too early to see implementation and impact

Source: team analysis

EXHIBIT 9: HIGH BURDEN COUNTRY NTP FUNDING

$m, funding by source for high burden countries*



* HBCs only, as data from other countries only collected from 2004
** E.g., bilateral donors
*** Applies to DR Congo 2002 and Nigeria 2002 as breakdown by funding source not available

Source: WHO Control Report 2007

EXHIBIT 10: REPRESENTATIVE INTERVIEWEE VIEWS ON PARTNERSHIP IMPACT ON GLOBAL ADVOCACY

"The advocacy function is very effective – very good value for money!"

"The main contribution of the Partnership has been in raising awareness and moving to secure political commitment"

"The Partnership's biggest impact has been in establishing a forum for the TB community and enabling the community to communicate in a common language"

Stop TB has been very successful at raising the profile of tuberculosis. Compared to other partnerships, Stop TB has always seemed like the flagship"

"The impact of the Partnership has been like day and night – when the Partnership says something, donors take it seriously"

Source: Stakeholder interviews

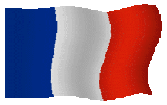
EXHIBIT 11: SELECTED PARTICIPANTS AT LAUNCHES OF THE SECOND GLOBAL PLAN TO STOP TB

Davos (*World Economic Forum)*

- William Gates Jr., Gates Foundation
- Rt Hon Gordon Brown MP, Chancellor of the Exchequer, UK
- Olusegun Obasanjo, President of Nigeria
- Marcos Espinal, Executive Secretary, Stop TB

Moscow

- Richard Zaleskis, WHO Regional Advisor, EURO
- Vladimir Shakhrin of Rock Group 'CHAIF' - New TB Ambassador
- Mary Collins, WHO Representative
- William Burns, US Ambassador
- Sarah England, Stop TB



Paris

- Léopold Blanc, Stop TB, WHO
- Nils E Billo, Exec. Dir., The Union
- Frederic Goyet, Ministère des Affaires Etrangères, France

London

- Chris Dye, Stop TB, WHO
- Paul Thorn, Activist
- Sheila Davey, Results UK
- Andrew George, Member of Parliament

Washington

- Richard Chaisson, Principal Investigator, CREATE
- Jerald C Sadoff, President & CEO, AERAS
- Maria Freire, President and CEO, The Global Alliance for TB
- Giorgio Roscigno, CEO, FIND
- Irene Koek, Chief, Infectious Diseases Division, USAID (moderator)

Ottawa

- Stephen Lewis, UN Special Envoy for HIV/AIDS in Africa
- Robert Greenhill, President, CIDA
- Mario Raviglione, Director, WHO Stop TB Department
- Melissa Phypers, Chair, Stop TB Canada

Nairobi

- Kenneth Kaunda, First President of Zambia
- Enock Kibunguchy, Kenyan Assistant Minister of Health
- Peter Eriki, WHO Representative
- Lucy Chesire, Community Representative on the Stop TB Coordinating Board

Source: Stop TB Partnership

EXHIBIT 12: G8 STATEMENTS OF SUPPORT

- *We reaffirmed our commitments to fight HIV/AIDS, tuberculosis and malaria, and agreed to work further with other donors to mobilize resources for the Global Fund to Fight AIDS, Tuberculosis and Malaria, and continuing to pursue as closely as possible for universal access to HIV/AIDS treatment for those who need it by 2010. We also resolved to support the Global Plan to Stop TB aimed to save up to 14 million lives by 2015 and to provide resources in cooperation with African countries to scale up action against malaria*

- *We will work to achieve these aims by:*
  H. Helping to meet the needs identified by the Stop TB Partnership. We also support the call for a high-level conference of Health Ministers for TB in 2006

- *We reiterate our commitment to fight against AIDS as well as tuberculosis and malaria as agreed in Okinawa, through further actions in such areas as institutional building, public-private partnerships, human resource development, research activities, and promotion of public health at the community level. We will strengthen our efforts in this fight, both bilaterally and multilaterally*
- *We reaffirm our support for the Global Fund to Fight AIDS, Tuberculosis, and Malaria*

Source: G8 documents

EXHIBIT 13: UN SPECIAL ENVOY TO STOP TB

Dr. Jorge Sampaio

Background

- Elected President of Portugal in 1996, re-elected in 2001, stood down in 2006
- President Sampaio was appointed special UN envoy to Stop TB on May 11 2006 by Kofi Annan

Mandate

- Work to build **heightened awareness of TB**
- Encourage world leaders to **strengthen their commitment to TB control**, and to work to **reach the Millennium Development Goal** of halting and beginning to reverse the incidence of the disease by 2015
- Lead the call for **countries to fully fund and implement the Global Plan to Stop TB,** 2006–15

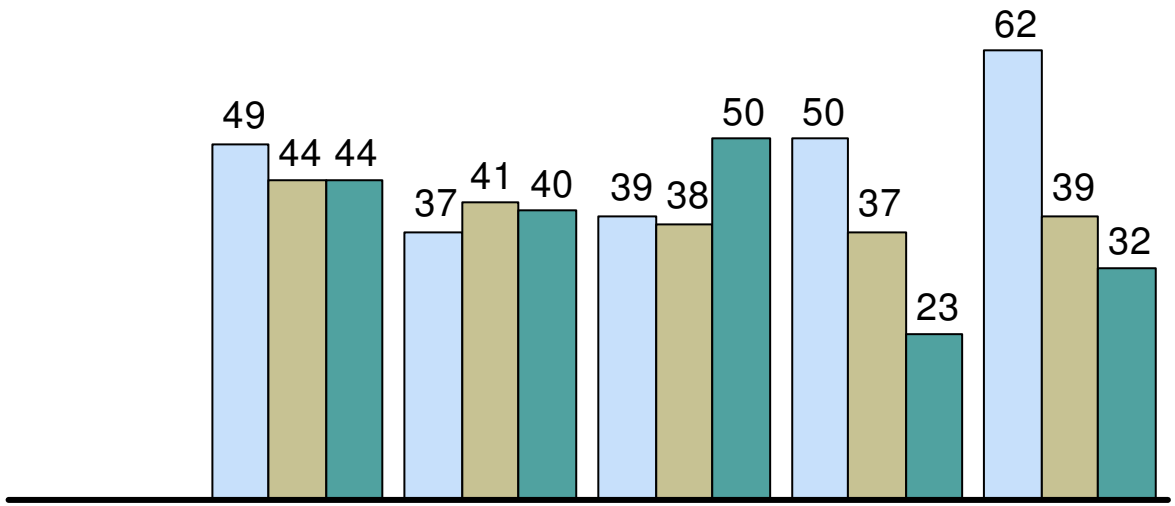
Activities

- Urged Health Ministers at the 56th Regional Committee for Africa in Addis Ababa, Ethiopia to develop national plans to combat the TB emergency (2006)
- Met with Mr. Barroso, President of the EC, to encourage EU leadership through support of the Global Plan (2006)
- Addressed the European CEO Summit on Business and AIDS, promoting improved collaboration between TB and HIV/AIDS program, and opportunities for private sector involvement in the TB fight (October 12, 2006)
- Declared the 2007 World TB Day theme at the opening of the 37th Union Conference, Paris (November 1, 2006)
- Statement during World AIDS Day for increased collaboration between HIV/AIDS and TB
- Participated in the Stop TB Partnership CB and met the Vice-President of Indonesia in Jakarta (November 30, 2006)
- Signed the “Call to Stop TB” with UN Secretary General Ban Ki-moon (March 21, 2007)
- Attended the UN General Assembly Special Session on HIV/AIDS (UNGASS) and met the UN Secretary General
- Wrote to all the G8 leaders encouraging them to prioritize TB for discussions at the St Petersburg Summit
- Prepared a message for the Summit of Portuguese-speaking countries held in Guinea Bissau in July 2006
- Met with world leaders at the Clinton Global Initiative Annual Meeting; and with Enrique Iglesias, Secretary General of the Ibero-American Community

Source: Stop TB Partnership website; annual report 2006

EXHIBIT 14: GLOBAL FUND TB APPLICATIONS, ROUNDS 1-6

Grant application success rates by disease by Global Fund (GF) application round
%



GF funding round	Round 1	Round 2	Round 3	Round 4	Round 5	Round 6
Number of TB applications	N/A	57	45	48	48	55
Number of TB applications granted	N/A	28	20	19	24	34
Percent TB $ grants approved of total $ grants approved	15	9	13	11	26	21

Source: WHO 2007 Control Report; Global Fund Technical Review panel reports rounds 2–6; team analysis

EXHIBIT 15: INTERVIEWEE VIEWS ON MONITORING & EVALUATION

Summary of views

- Monitoring & evaluation (M&E) is a WHO function, not a Partnership one. The WHO M&E team is highly regarded, and M&E for TB is more comprehensive than for many other diseases, e.g., covering time series and a broader range of indicators, including financial support

- However, TB M&E is still limited, with high margins for error (and occasional oddities such as case detection rates greater than 100%), due to a number of factors including:
  – Limited prevalence and incidence survey data, with no widespread surveys in some HBCs, especially in Africa
  – Limitations of disease modelling
  – Varying definitions for DOTS coverage

- Investment in M&E has remained low, and needs to be substantially increased, e.g., to fund more epidemiologic survey, in order for the Partnership to assess its impact and optimize its approach and strategy

Illustrative interview quotes

"Primary data hinders TB – the data is flawed but they do a great job of tracking it and using it to move a global response"

"The state of data collection in TB has improved hugely in the last ten years, but there's still a long way to go; the data still not robust enough to see what works in TB control"

"The underlying evidence for impact is still unknown – we need to be much more provocative in this area"

"We must be able to see if the strategy is working, using the epidemiological data. Data collection must be improved, in particular prevalence and incidence data – in too many places it's simply absent"

Source: Stakeholder interviews

EXHIBIT 16: SUMMARY OF CHANGES IN TB CONTROL DRIVERS ACROSS COUNTRIES

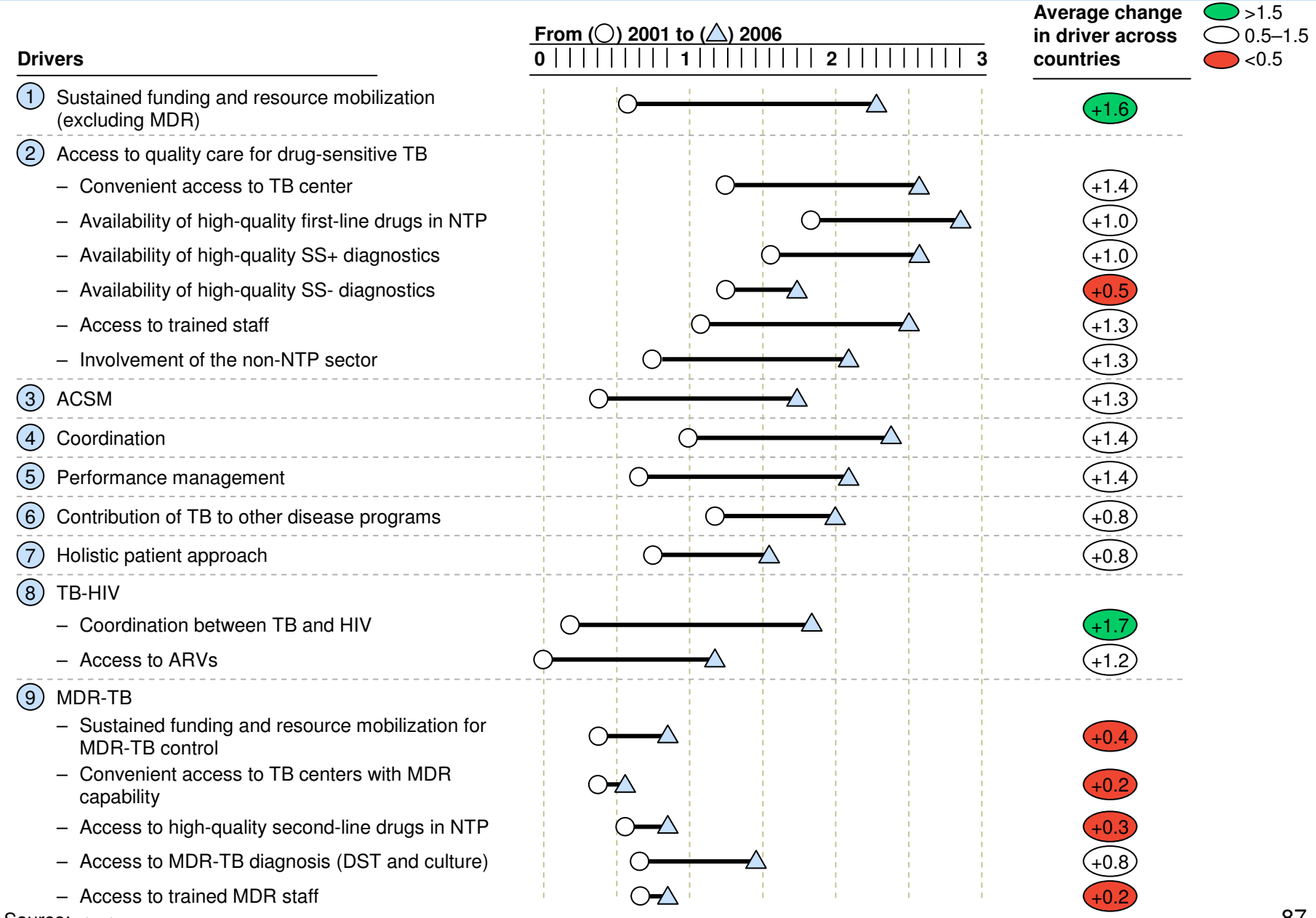


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EXHIBIT 17: SUMMARY OF PARTNERSHIP IMPACT IN COUNTRIES

Contribution

- ◆ Significant direct
- ◇ Moderate direct
- \- No/minimal contribution
- ● Significant indirect
- ○ Moderate indirect
- N/A No change in driver
- ? Contribution not assessed

Drivers	China	Kenya	Peru	Indonesia	Burkina Faso	Uzbekistan	India	Morocco
1 Sustained funding and resource mobilization (excluding MDR)	◆	◆	◆	○	◇●	○	◆	●
2 Access to quality care for drug-sensitive TB								
– Convenient access to TB center	●	○	○	-	-	○	○	N/A
– Availability of high-quality first-line drugs in NTP	●	◆	○	◇	◇	◆	◆	N/A
– Availability of high-quality SS+ diagnostics	-	-	N/A	?	○	○	-	N/A
– Availability of high-quality SS- diagnostics	●	-	N/A	◆	-	○	?	N/A
– Access to trained staff	●	○	-	○	-	○	-	N/A
– Involvement of the non-NTP sector	-	○	●	○	N/A	N/A	◇●	○
3 ACSM	-	◆	◆	●	-	○	◇	●
4 Coordination	-	N/A	◇	○	-	-	-	N/A
5 Performance management	◆	◇	◆	-	◇	○	?	N/A
6 Contribution of TB to other disease programs	N/A	N/A	-	○	-	N/A	N/A	●
7 Holistic patient approach	N/A	N/A	-	○	○	○	?	○
8 TB-HIV								
– Coordination between TB and HIV	○	○	○	-	○	○	○	N/A
– Access to ARVs	N/A	N/A	N/A	-	○	?	?	N/A
9 MDR-TB								
– Sustained funding and resource mobilization for MDR-TB control	N/A	◇	◆	N/A	N/A	○	-	N/A
– Convenient access to TB centers with MDR capability	N/A	N/A	-	N/A	N/A	○	N/A	N/A
– Access to high-quality second-line drugs in NTP	◇	◆	◆	N/A	N/A	◇●	◇	N/A
– Access to MDR-TB diagnosis (DST and culture)	○	-	◇	N/A	-	◇●	-	N/A
– Access to trained MDR staff	N/A	N/A	-	N/A	N/A	●	-	N/A

Source: <__>

EXHIBIT 18: EXTRACT FROM ANNUAL REPORT 2006

At its meeting in November 2006, the Stop TB Coordinating Board strongly endorsed the need to establish a monitoring system for the Global Plan

A monitoring and evaluation focal point has been identified by each Working Group, WHO region and by the Secretariat and from 2007 they will report annually against the targets and indications in their individual strategic plans

A simple standard template for the collection of monitoring and evaluation parameters and a streamlined process focusing on substantive impact indicators rather than process indicators are under development

There will be a review of reports, and presentation and dissemination of the results to relevant audiences. The overall report on progress in the implementation of the Global Plan will be published annually starting in 2008. Less formal biannually updates will be made to the Coordinating Board

Source: Stop TB Annual Report 2006

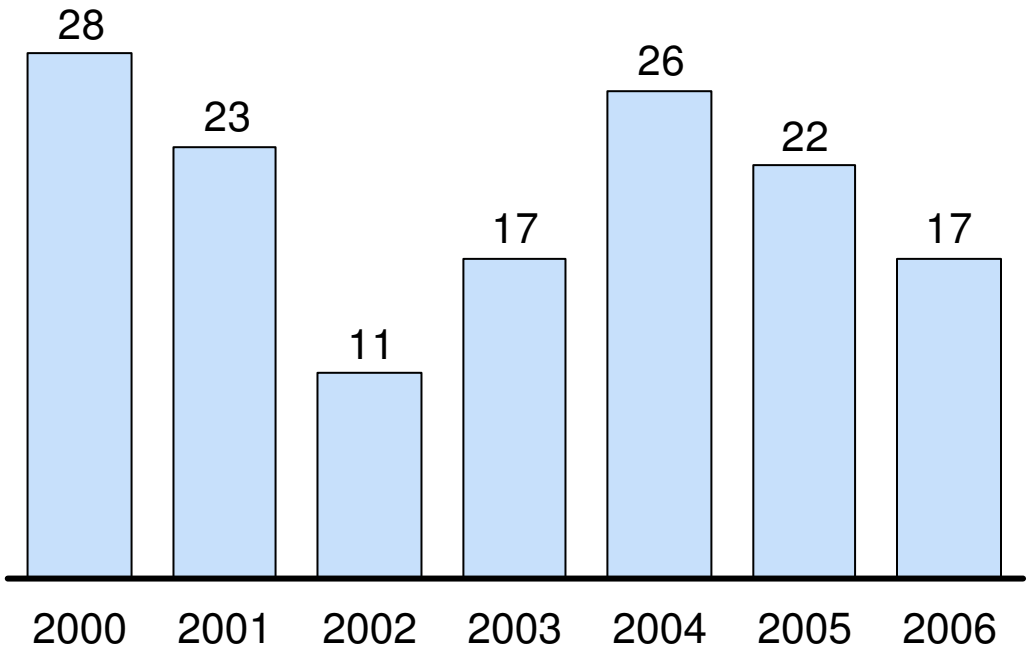
EXHIBIT 19: INCOME STATEMENT OF SECRETARIAT EXCLUDING GDF

	Income statement, $000				Income statement, % income			
	2003	2004	2005	2006	2003	2004	2005	2006
INCOME								
• Cash								
– Governments & their Agencies	4,360	6,885	3,774	9,545	83%	83%	69%	68%
• *CIDA*		*2,736*	*351*	*0*	0%	33%	6%	0%
• *DFID*		*1,815*	*176*	*5,870* *	0%	22%	3%	42%
• *USAID/US CDC*		*927*	*822*	*1,609*	0%	11%	15%	12%
• *The Netherlands*				*1,839*	0%	0%	0%	13%
• *Other*		*1,407*	*2,425*	*227*	0%	17%	44%	2%
– Multilateral organisations and Foundations	75	728	1,170	2,759**	1%	9%	21%	20%
– Interest Income	0	0	0	1280	0%	0%	0%	9%
Sub-total	**4,435**	**7,613**	**4,944**	**13,584**	**84%**	**92%**	**90%**	**97%**
• Voluntary contributions in kind								
– Governments	213	213	169	13	4%	3%	3%	0%
– Multilateral organisations, Foundations and others	595	443	359	379	11%	5%	7%	3%
Sub-total	**808**	**656**	**528**	**392**	**15%**	**8%**	**10%**	**3%**
Total Income	**5,243**	**8,269**	**5,472**	**13,976**	**100%**	**100%**	**100%**	**100%**
				$11.3m excluding India				
EXPENDITURE								
• Partnership	3,524	2,518	3,211	5,791	67%	30%	59%	41%
– National partnership coordination		*429*	*300*	*540*	0%	5%	5%	4%
– General partnership management		*1,501*	*606*	*1,061*	0%	18%	11%	8%
– ISAC		*0*	*1,312*	*442*	0%	0%	24%	3%
– Governance		*100*	*470*	*725*	0%	1%	9%	5%
– Working Groups		*488*	*523*	*774*	0%	6%	10%	6%
– Technical assistance India				*2,249**	0%	0%	0%	16%
• Advocacy and communication	855	1,096	929	1,093	16%	13%	17%	8%
• General Management and Administration	898	1,251	1,173	1,374	17%	15%	21%	10%
– Salaries		620	710	751	0%	7%	13%	5%
– Activities		124	87	48	0%	1%	2%	0%
– WHO professional service charge		481	376	575	0%	6%	7%	4%
– World Bank service charge		26	0	0	0%	0%	0%	0%
Total Expenditure	**5,277**	**4,865**	**5,313**	**8,258**	**101%**	**59%**	**97%**	**59%**
Surplus of income over Expenditure	**-34**	**3,404**	**159**	**5,718**				

* Includes $2,392k for technical assistance to India (ACSM and medical programs → WHO office in India)
** Bill and Melinda Gates Foundation gave $1,789k
Source: Stop TB Partnership Secretariat; team analysis

EXHIBIT 20: SECRETARIAT COSTS COMPARED TO PARTNERSHIP BUDGET

Secretariat General Management and Admin cost % of total partnership spend*



Comparisons

UNAIDS

- 34% of total expenditure was spent on secretariat activities and staff for the period Jan 2006 until April 2007

GAVI

- 14% of total expenditure was spent on management and general in 2004

TB Alliance

- 11% of total expenditure was spent on management in 2004 and 2005

* Excludes GDF

Source: Secretariat

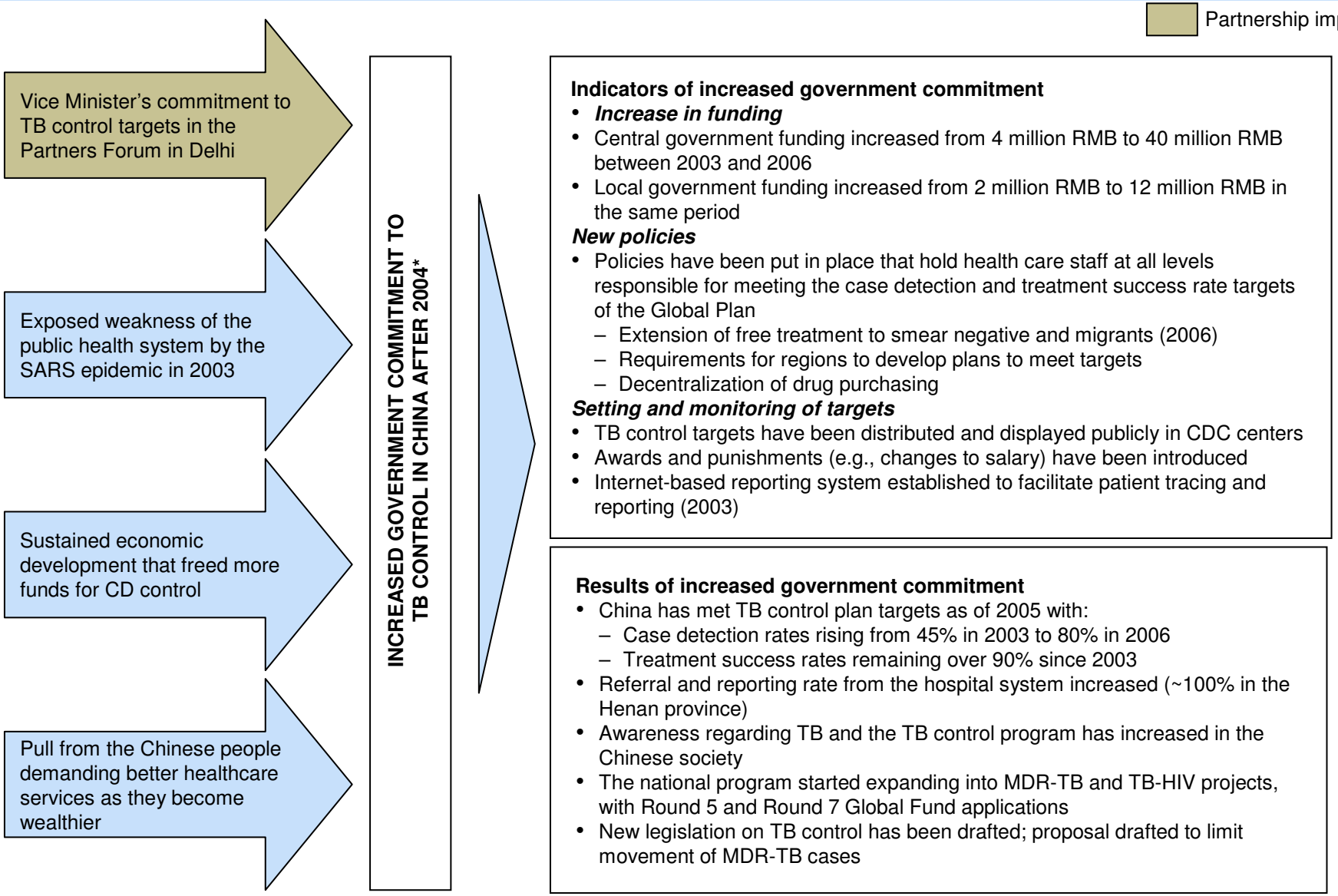
EXHIBIT 21: EXAMPLES OF HIRING CYCLE FOR SECRETARIAT

Example schedules for hiring of TBP staff

	Item	Title/grading of position	Type of position	Date initiated	Position advertising on	Incumbent in place on	Time taken to finalize
Fixed-term positions	1	GDF Manager, P04	Fixed term	03-Mar-04	30-Jun-04	01-Jun-05	15 months
	2	Resources and Control Manager, P05	Fixed term	09-Feb-05	27-Apr-05	01-Aug-06	16.5 months
	3	IT Officer, P03	Fixed term	30-Aug-05	01-May-06	15-Feb-07	17.5 months
	4	Partnership Officer, P04	Fixed term	27-Feb-06	10-Jul-06	23-Apr-07	14 months
	5	Governance Officer, P03	Fixed term	22-May-06	19-Sep-06	Chosen candi-date withdrew on 6-Jun 07	12.5 months still pending
			Fixed term	22-May-06	Re-advertised 18-Jun-07	Pending	Pending
	6	Procurement Officer, P04	Fixed term	17-Aug-06	12-Dec-06	Pending	Pending
Short-term positions	7	GDF Portfolio Officer, P03	Short term	10-Feb-05	30-Mar-05	06-Jun-05	4 months
	8	GDF Procurement Officer, P03	Short term	01-Sep-05	22-Sep-05	11-Mar-06	6.5 months
	9	GDF Procurement Officer, P04	Short term	02-May-07	16-May-07	01-Oct-07	5 months

Source: Stop TB Partnership Secretariat

EXHIBIT 22: IMPACT OF PARTNERSHIP FORUM IN DELHI ON CHINA



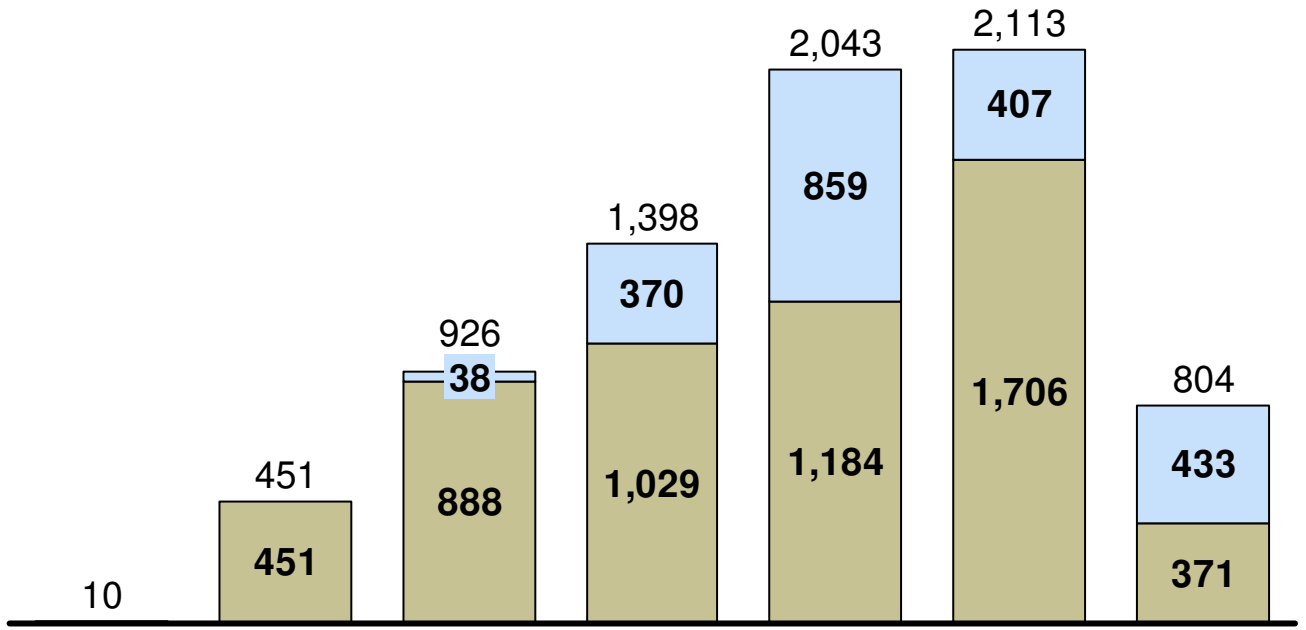
* TB is set as one of objectives of the national 5-year plan

Note: Intake of medication is observed by village doctors on a frequency ranging from 2 days to 2 weeks in the centers visited

Source: Country visit

EXHIBIT 23: EVOLUTION OF GDF

Patient treatments supplied to HBCs by year, 2001–07
HBC total,000



	2001	2002	2003	2004	2005	2006	2007 (Q1/2)
Percent of incidence*	0	5	11	16	23	N/A	N/A
Percent of notifications**	0	11	21	29	40	24	N/A

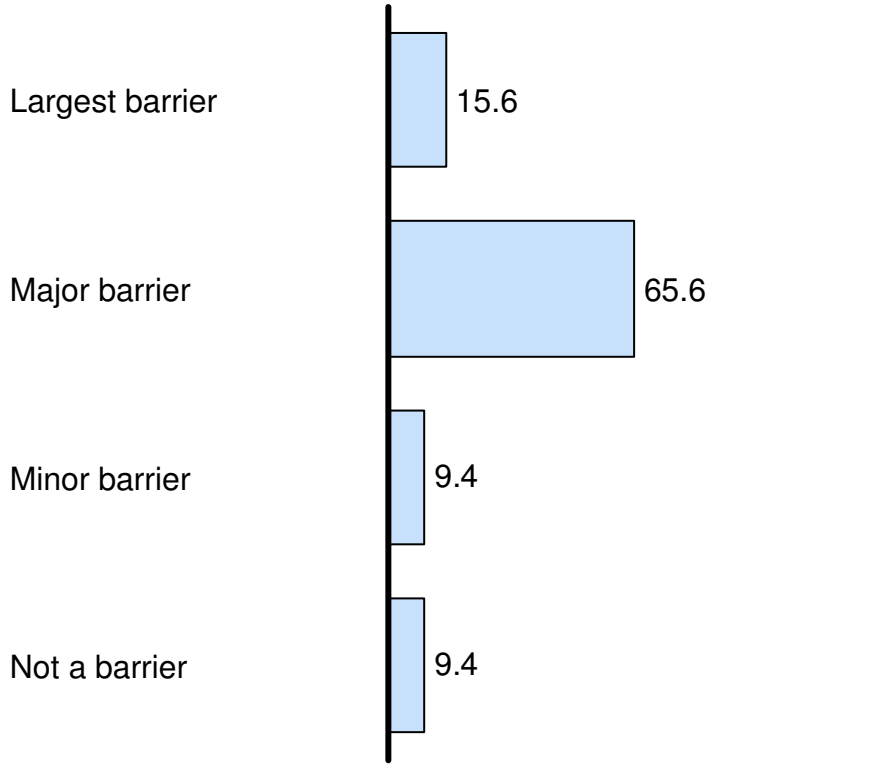
* Patient treatments/global TB incidence
** Patient treatments/global notifications

Source: GDF reports

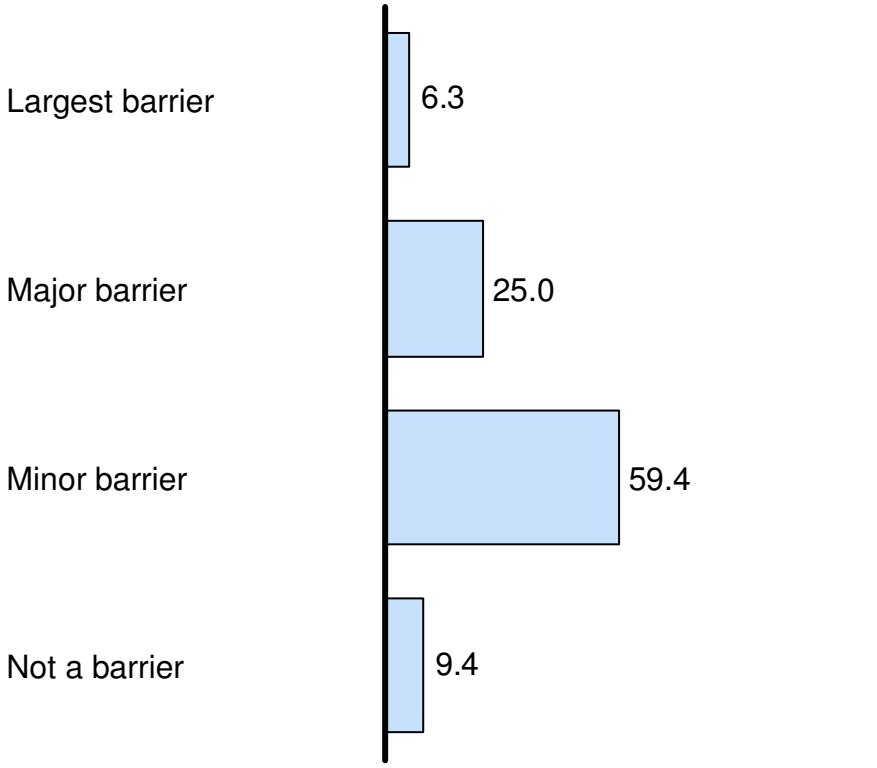
EXHIBIT 24: SURVEY RESPONSES ON "ACCESS TO AFFORDABLE QUALITY DRUGS" AS A BARRIER TO GOOD TB CARE

Percent of respondents
100% = 32*

How would you rate "access to affordable quality drugs" as a barrier to good TB care in your country in 2001?



How would you rate "access to affordable quality drugs" as a barrier to good TB care in your country in 2006?

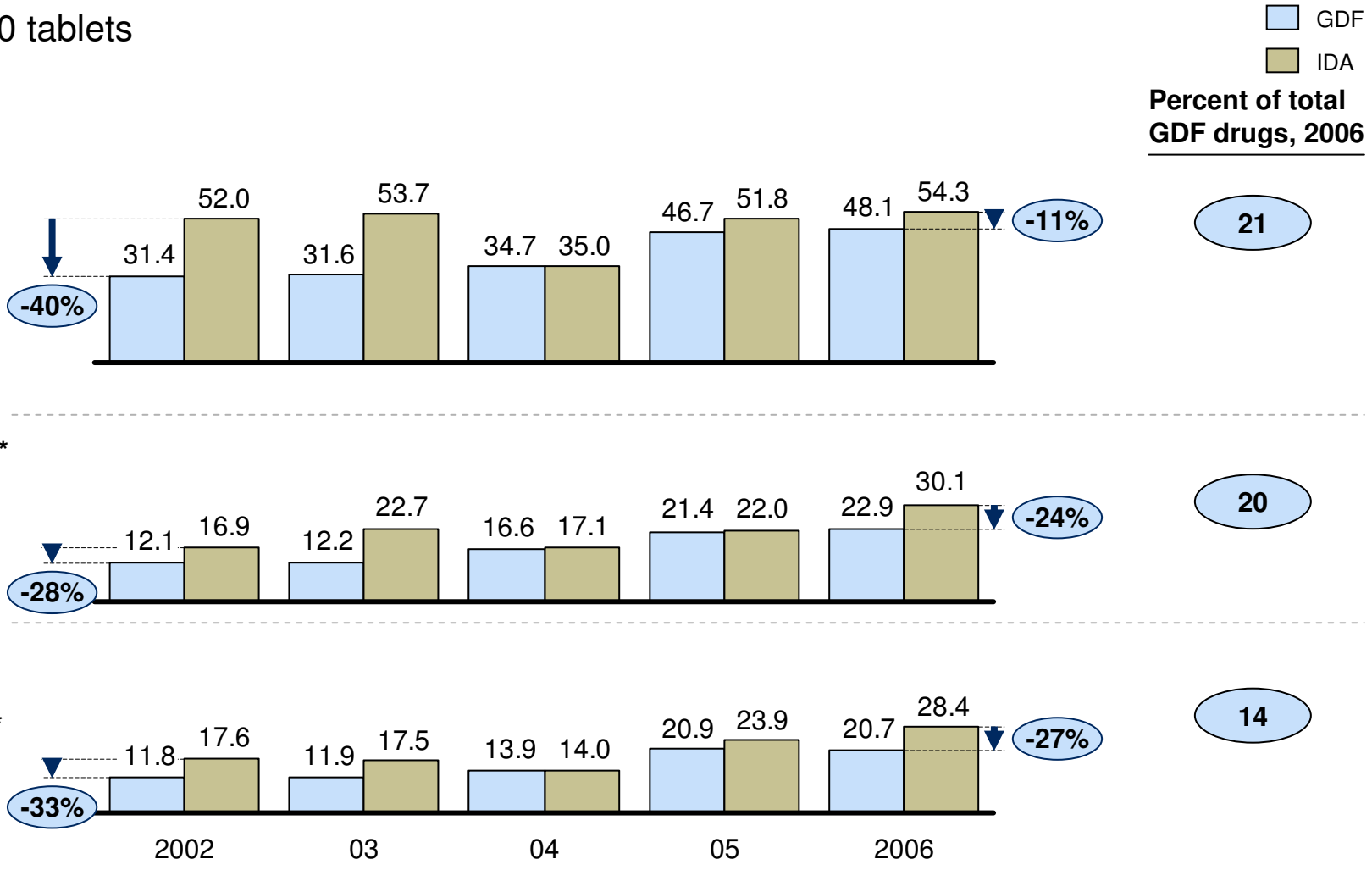


* All respondents from GDF countries. 21 different countries included. Includes 14 members of NTPs

Source: Partnership survey conducted Sep/Oct 2007

EXHIBIT 25: PRICES OF FIRST-LINE DRUGS

$ per 1,000 tablets



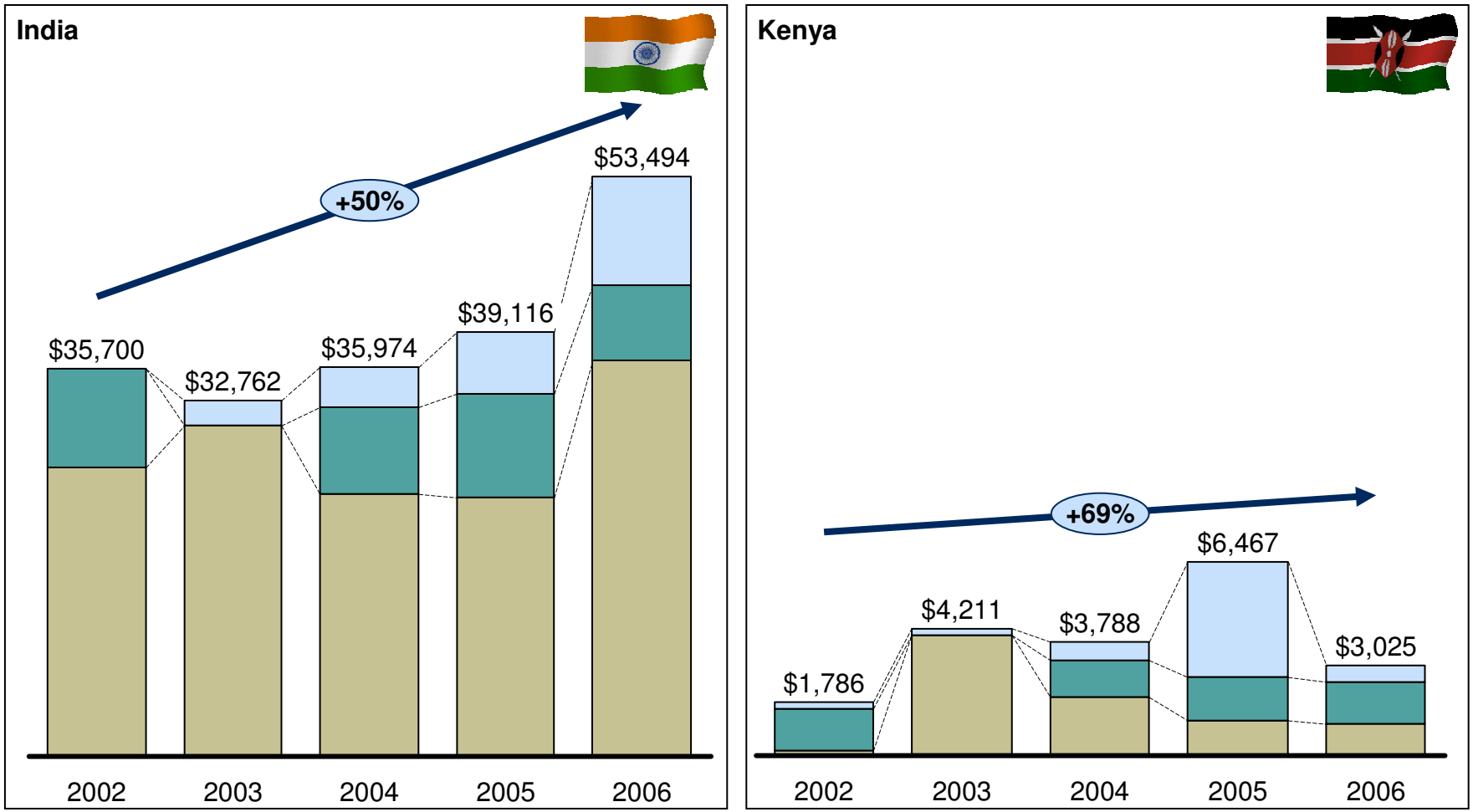
* All prices are non-blister

Note: EH400/150-B (ethambutol 400mg/isoniazid 150mg – blister pack), RH150/75-B (rifampicin 150mg/isoniazid 75mg – blister), RH150/75-B (rifampicin 150mg/isoniazid 75mg – non-blister), 4-FDC-B (rifampicin 150mg, isoniazid 75mg, pyrazinamide 400mg, ethambutol 275mg – blister)

Source: MSH; team analysis

EXHIBIT 26: EVOLUTION OF TUBERCULOSIS CONTROL BUDGETS

$ value of TB control budget by year
($000)

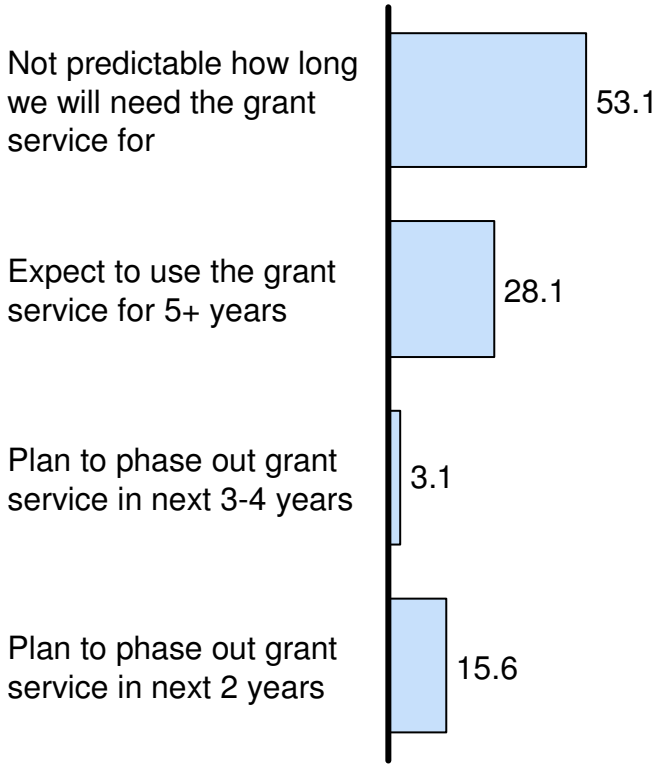


Source: GDF reports

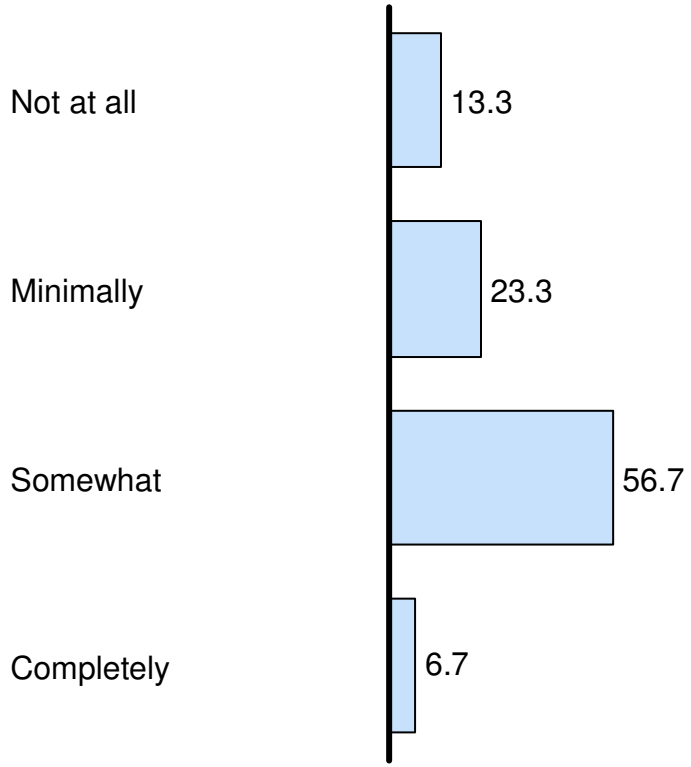
EXHIBIT 27: SURVEY RESPONSES ON COUNTRIES' ABILITY TO PURCHASE AND PROCURE DRUGS

Percent of respondents
100% = 32*

If you are currently using the GDF grant facility, what are your country's plan for TB drug financing over the next 5 years?



To what extent will your country be able to purchase and procure drugs independently of the GDF by 2010?



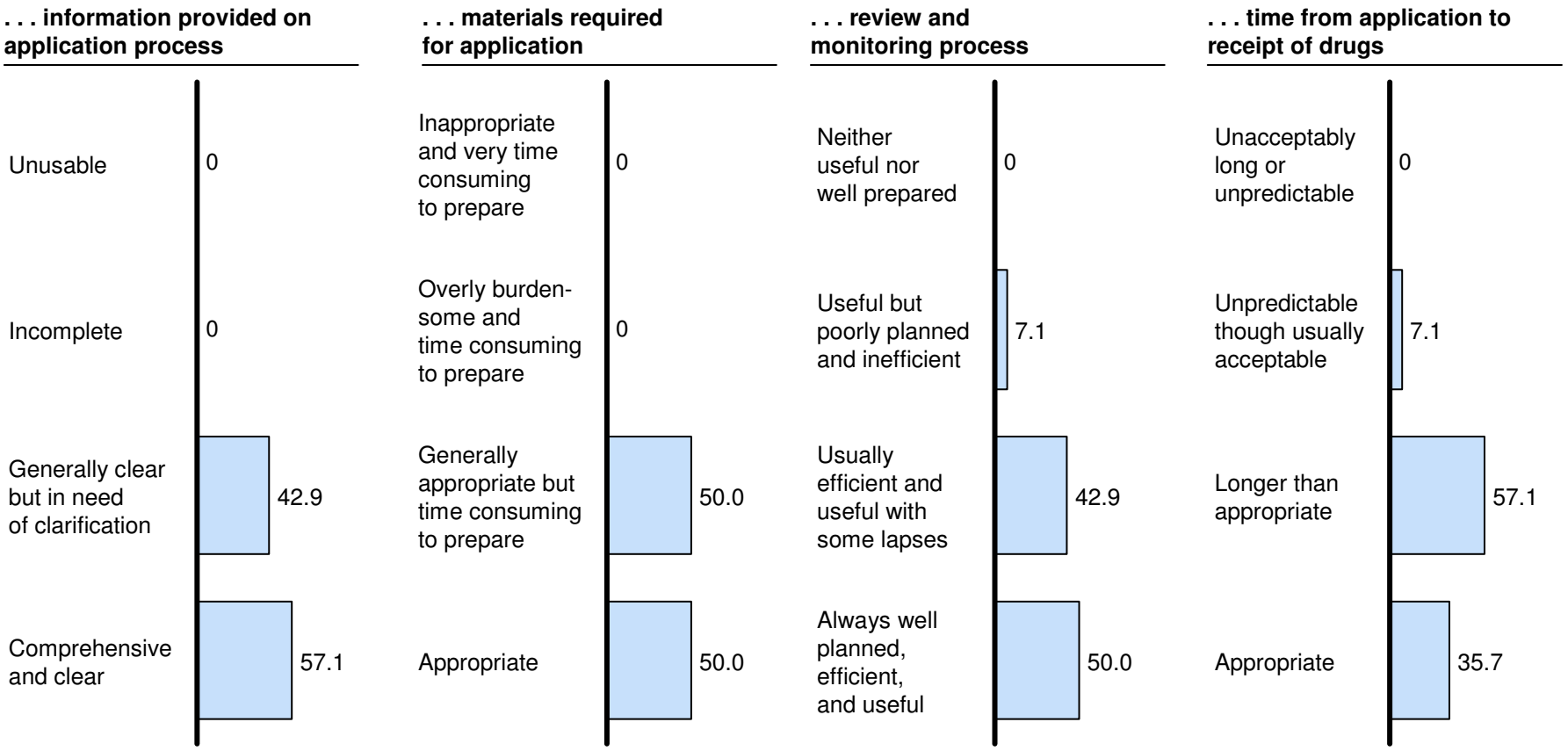
* All respondents from GDF countries. 21 different countries included. Includes 14 members of NTPs

Source: Partnership survey conducted Sep/Oct 2007

EXHIBIT 28: SURVEY RESPONSES ON EFFICIENCY OF GDF

Percent of respondents
100% = 14*

If your country is currently using GDF, how would you describe the process on the following dimensions . . .



* 14 survey respondents from 14 GDF countries classifying themselves as members of NTP

Source: Partnership survey conducted Sep/Oct 2007

EXHIBIT 29: INCOME STATEMENT OF GDF

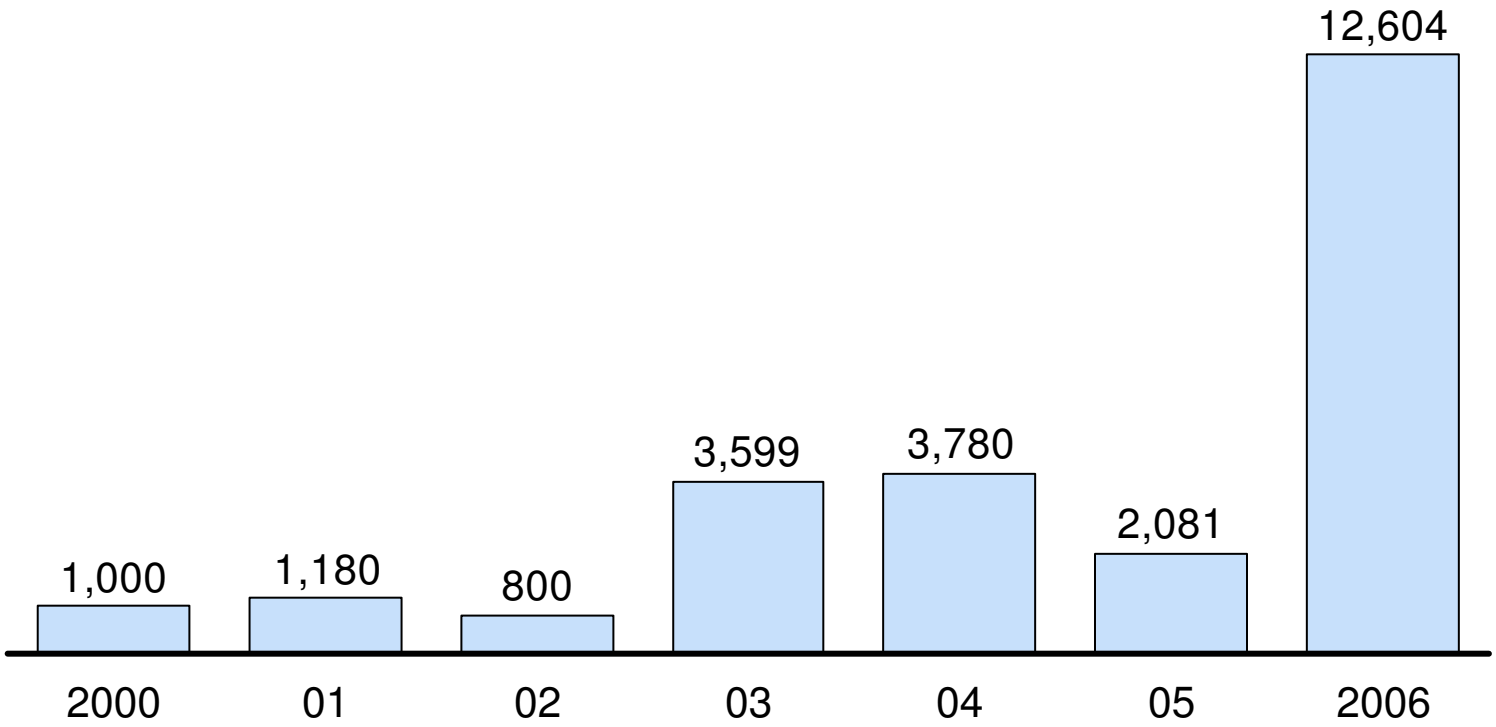
	Income statement, $000				**Income statement**, % Income			
	2003	**2004**	**2005**	**2006**	**2003**	**2004**	**2005**	**2006**
INCOME								
• Governments	14,911	15,157	26,085	40,723	67%	68%	62%	81%
– CIDA		11,347	20,642	22,862	0%	51%	49%	46%
– USAID		3,000	4,700	5,000	0%	14%	11%	10%
– Norway		810	743	899	0%	4%	2%	2%
– DFID				11,962	0%	0%	0%	24%
• Direct Procurment	5,786	6,613	13,433	6,165	26%	30%	32%	12%
• In-kind contribution of drugs (Novartis)		0	2,605	3,226	0%	0%	6%	6%
• In-kind contribution of staff	188	188	188	125	1%	1%	0%	0%
• Other	1249	258	0	0	6%	1%	0%	0%
Total	**22,134**	**22,216**	**42,311**	**50,240**	**100%**	**100%**	**100%**	**100%**
EXPENDITURE								
• Grant Procurment	13,626	8000	28,367	41,344	62%	36%	67%	82%
• Direct Procurement	5,786	6613	13,433	6,165	26%	30%	32%	12%
• Quality assurance and prequalification	144	114	123	84	0.7%	0.5%	0.3%	0.2%
• Technical assistance, monitoring and salaries	1,255	1,036	1,649	1,875	5.7%	4.7%	3.9%	3.7%
• Advocacy and communications	21	102	57	43	0.1%	0.5%	0.1%	0.1%
• Indirect cost	519	666	1,151	1,366	2.3%	3.0%	2.7%	2.7%
Total expenditure	**21,351**	**16,531**	**44,780**	**50,877**	**96%**	**74%**	**106%**	**101%**
Surplus of income over Expenditure	**783**	**5,685**	**-2,469**	**-638**				

Overhead costs have remained low

Source: Stop TB Partnership Secretariat; team analysis

EXHIBIT 30: GREEN LIGHT COMMITTEE APPROVALS

Patient treatments



	2000	01	02	03	04	05	2006
Applications approved	2	3	1	11	17	12	24
Share of MDR cases*, %	<1	<1	<1	<1	<1	<1	3

* Green Light Committee approvals/estimated MDR cases

Source: Green Light Committee

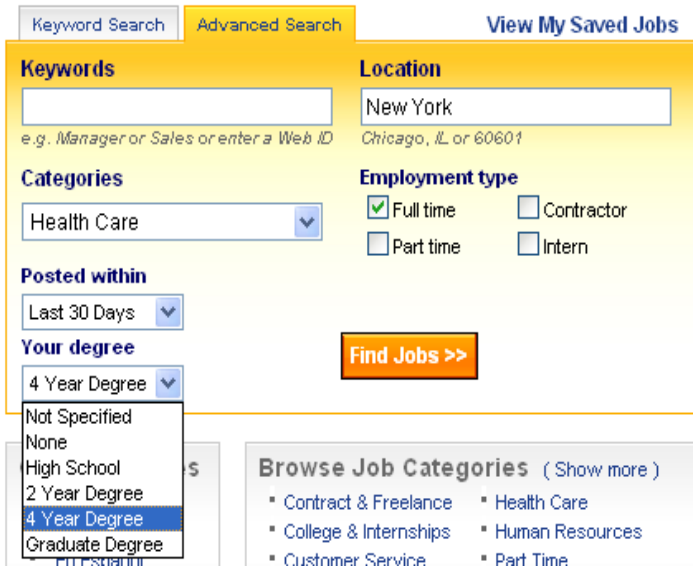
EXHIBIT 31: SELECTED STRATEGIC QUESTIONS IN TB CONTROL AND RESEARCH RAISED DURING EVALUATION

Engagement	• How much could the following groups contribute to better TB control in countries? How could the Partnership help them become more engaged and supported? – Patient groups – Civil society, non-technical in-country NGOs – Economic decision-makers and resource allocators at government level – Private sector healthcare payers and providers (e.g., in India, Sub-saharan Africa) • How effective are major advocacy events (e.g., World TB Day) in different countries?
Resource mobilization	• Building on its successful support to countries' Global Fund applications, how could the Partnership help countries increase the amount of support they request from the Fund to accelerate progress in TB control? – How can the Partnership cooperate more with the Fund to pursue this goal? – Are there specific countries the Partnership should focus on for this – countries where a step-change in TB control could be achieved with greater Fund support?
Technical challenges	• Given the latest MDR/XDR report, will existing scale-up efforts to address MDR be sufficient? • How impactful are the new first-line drugs in the pipeline expected to be? If they will be major drivers of progress in TB control, how prepared are countries to quickly adopt them? • How satisfactory is the evolution of drug supply? What more should the Partnership do for: – First-line drug supply (limited new supplier entry and doubling of prices) – Pipeline for drugs for MDR-TB
Non-technical challenges	• To what extent are the following barriers to good TB control? If they are significant, what should be Partnership do to help countries overcome them? – Economic disincentives to good TB care (e.g., financial incentives to hospitalize patients, financial incentives to prescribe inappropriate drugs) – Limited data availability on TB epidemiology and control metrics at sub-national level – Limited managerial skills and advocacy skills of NTP managers and staff

Source: Country visits; interviews; team analysis

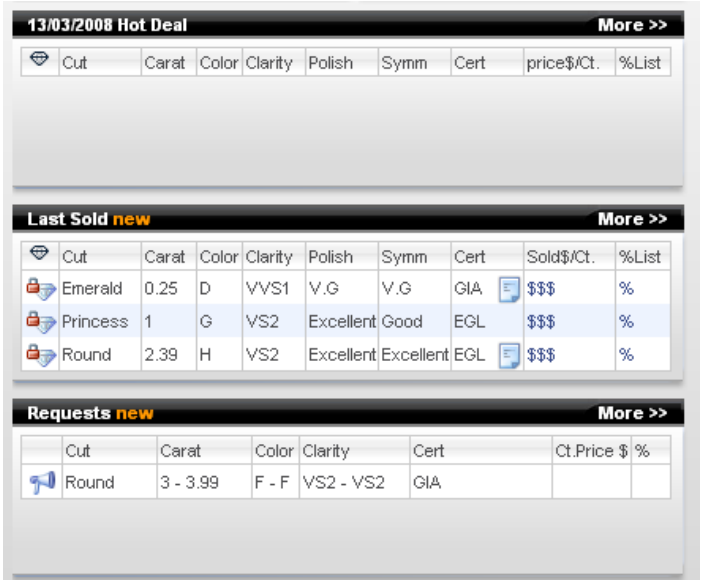
EXHIBIT 32: EXAMPLES OF ONLINE SUPPLY/DEMAND MATCHING MODELS

Careerbuilder.com



- Website connects employers and job seekers
- Suppliers (employers) post openings and users search for matches using a standard checklist
- Similarly employers can search a database of potential employees by standard attributes
- Careerbuilder does not recommend matches but acts only as an information service – interviews and offers take place offline

Diamondfloor.com



- Website connect buyers and sellers of certified diamonds
- Sellers post descriptions of diamonds and buyer search for matches using a standard checklist
- Buyers can also post requests by specifying a number of standard attributes
- Purchases are made and authenticated directly through the website

Source: Careerbuilder.com; Diamondfloor.com

EXHIBIT 33: PROPOSED SELECTION CRITERIA FOR ESTABLISHING WORKING GROUPS (WG)

Proposed criteria for establishing a WG to address a critical challenge in TB control and research

1. Important strategic issue in TB control and research, critical to delivering the Global Plan to Stop TB, where the Partnership can clearly show how the internal objectives and deliverables of the WG would have a positive impact on relevant TB control or research goals and associated Global Plan metrics

2. Complex issue whose solution is likely to require a sustained multi-year effort

3. Requires involvement or cooperation of multiple constituencies who do not have existing forum to focus on this issue

4. Has the commitment of a sufficient number of appropriate Partners who are willing to participate, and ideally fund

5. Would be likely to attract more funding or other resource to global TB control and research efforts

Alternative approaches to consider for issues that do not meet WG criteria

- *Interest groups or discussion groups*, e.g., for issues which are not considered 'strategic' but which have significant stakeholder interest and excitement

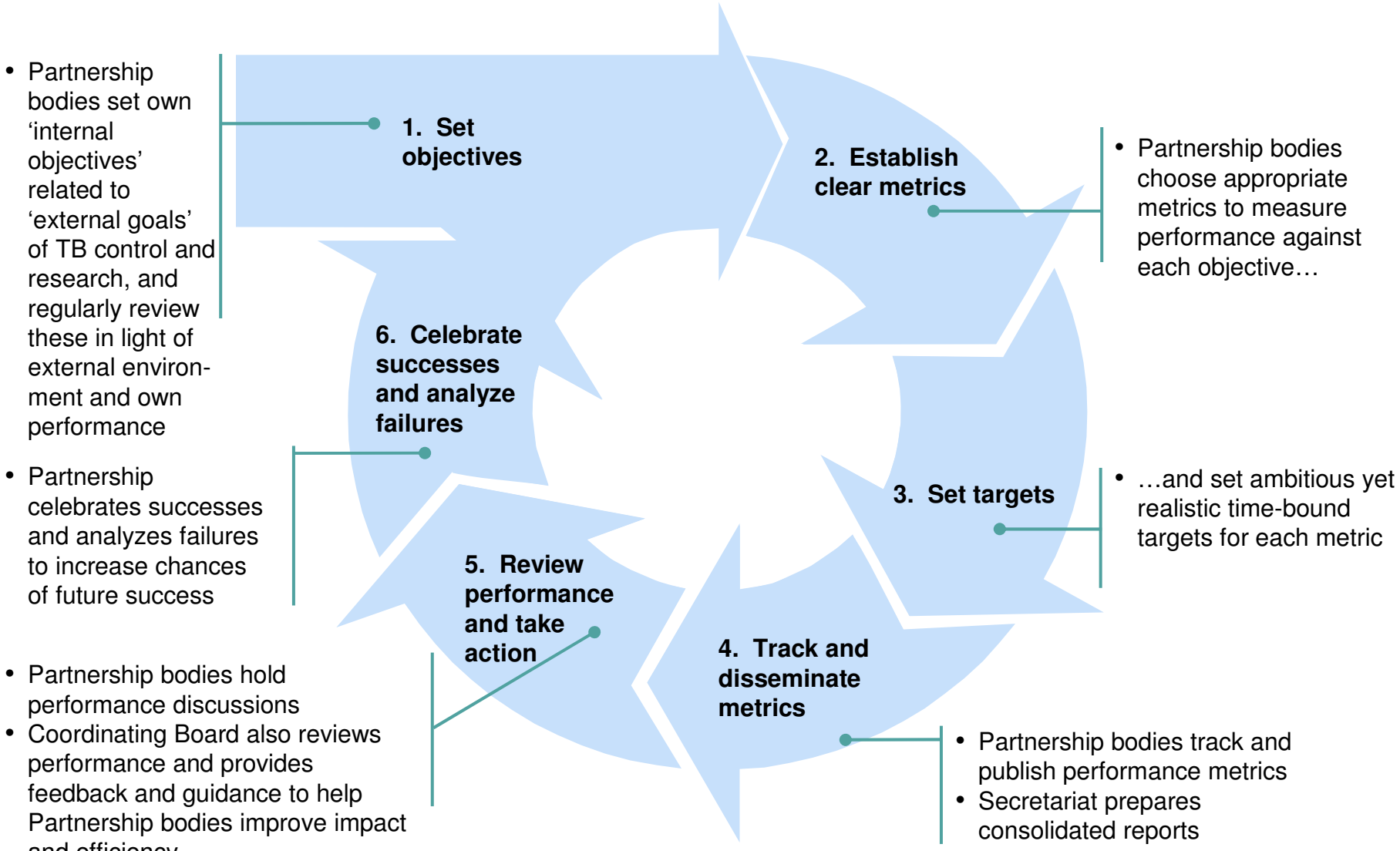
- *Task forces*, e.g., for issues that require focused attention by a small group for a limited duration

- *Partner-led projects,* for issues which a Partner has the most appropriate expertise and experience to lead on behalf of the Partnership

- *Consultant-led projects*, e.g., for 'one-off' issues, issues which an external consultant has the most appropriate expertise and experience to lead on, and issues which Partners are not able or willing to lead on

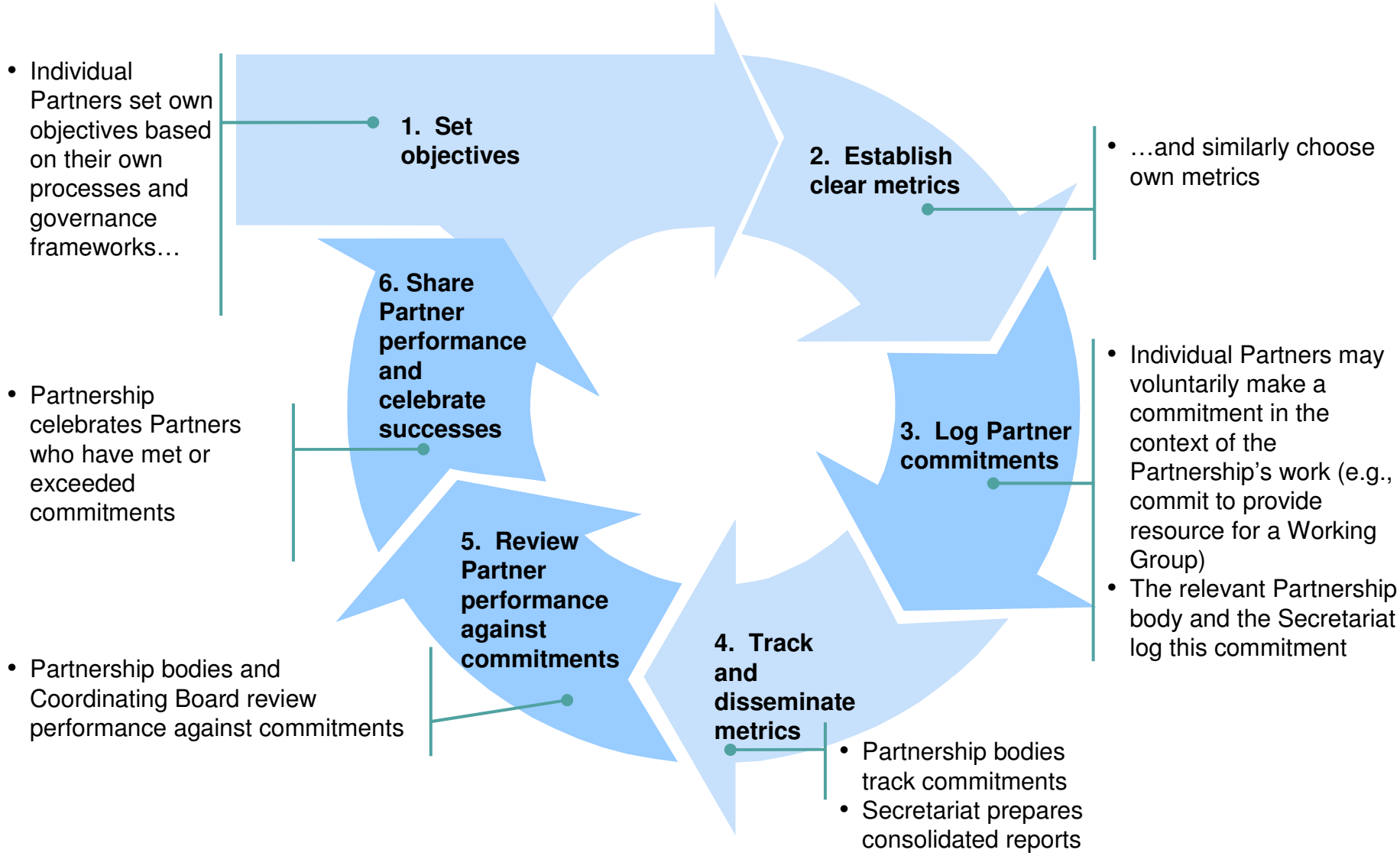
Source: Team analysis

EXHIBIT 34: PROPOSED PERFORMANCE TRANSPARENCY APPROACH FOR PARTNERSHIP BODIES



Source: <____>

EXHIBIT 35: PROPOSED PERFORMANCE TRANSPARENCY APPROACH FOR PARTNERS



Source: <____>

EXHIBIT 36: HIGH PERFORMING BOARDS PLAYS THREE DISTINCT ROLES

Source: "The Dynamic Board: Lessons from High-Performing Nonprofits"

EXHIBIT 37: ENABLERS OF HIGH PERFORMING BOARDS

Careful decisions on board size and structure	1. Size should be balanced between large enough to represent all constituencies adequately and small enough to ensure a cohesive team that can work efficiently 2. Use a few standing committees for recurring needs and ad hoc committees for many other needs 3. Organize committees around strategic priorities 4. Consider an advisory board separate from the governing board
Actively managed board composition	5. Composition should be managed against • How well members represent the organization's interests • The impact members can have against the board's goals • What levels of tenure and turnover will ensure ongoing board effectiveness 6. Designated seats increase governance legitimacy and reinforce linkages but can create issues if board members have conflicting loyalties • Effective new director orientation and processes for removing board members who cannot fulfill their duties mitigate this risk
Inspired board and committee leadership	7. Both aspirational and transactional leadership are necessary • Aspirational leaders provide motivation and inspire other members to engage in shared goals • Transactional leaders ensure the board can produce outcomes in an efficient manner 8. Leaders should be groomed to ensure continuity of leadership • Term limits are a common way to support development of future leaders
Simple administrative practices and processes made routine	9. Advance planning through an annual calendar, well designed agendas, and materials delivered in advance of meeting is key to effectively using board member time 10. Meetings should focus on debate of key issues rather than staff presentations on progress • Meetings should have a clear agenda, and start and end on time • Materials should be sent in advance of meetings to allow participants time to formulate opinions

Source: "The Dynamic Board: Lessons from High-Performing Nonprofits"

EXHIBIT 38: PROPOSED COMPOSITION OF STOP TB PARTNERSHIP COORDINATING BOARD

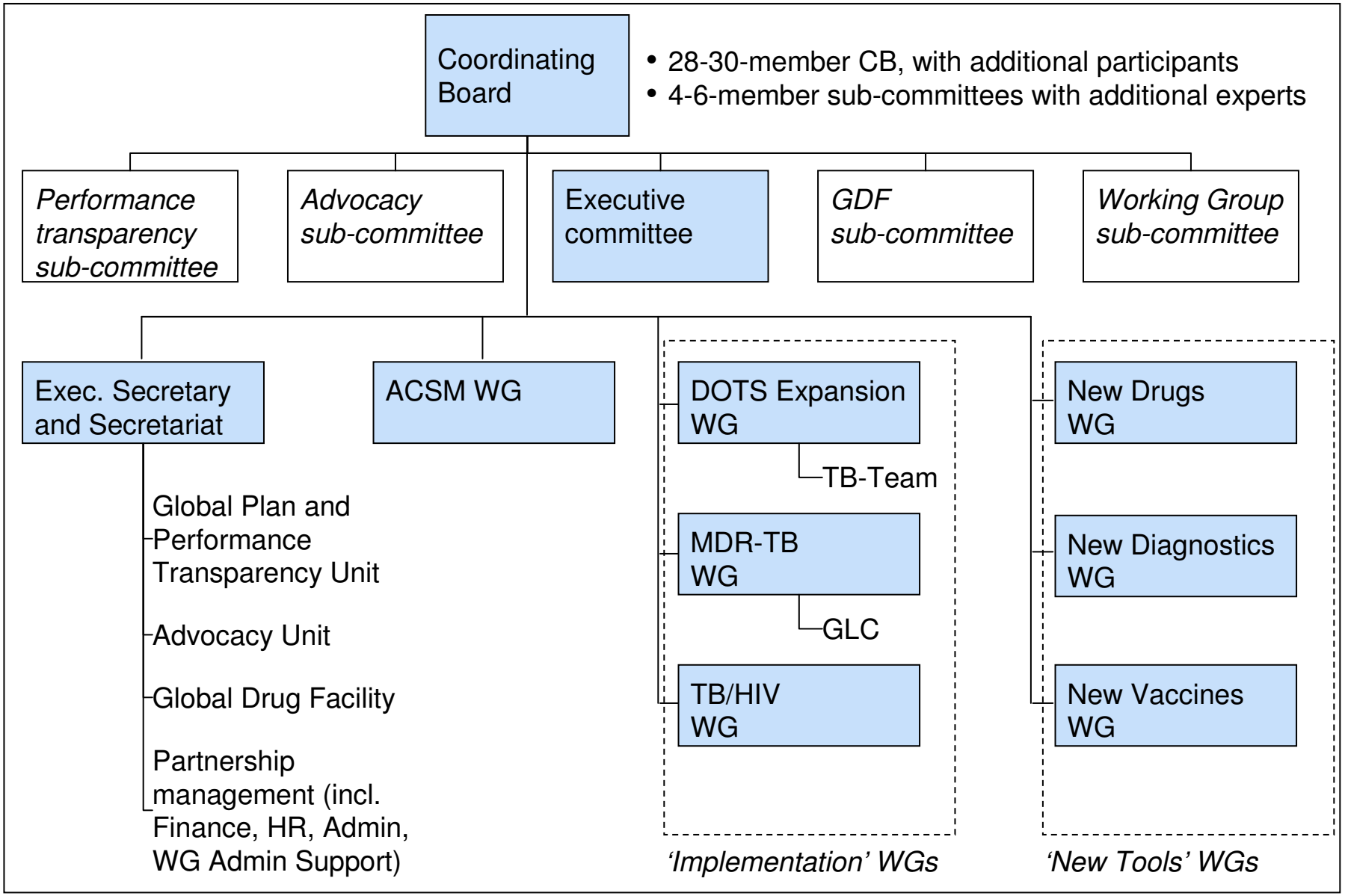
Constituency	Members		Comments
• Country governments	9	AFRO (2), SEARO (2), WPRO (2), AMRO (1), EMRO (1), EURO (1)	• 2 for regions with greater incidence and more HBCs
• Affected communities	1*		
• Multilateral organizations	2	*WHO*** and one other	
• Donors			• Could be elected based on total annual contribution to TB control, and/or total annual contribution to Secretariat plus GDF
– Multilateral	2-3	*World Bank* and 1-2 others	
– Bilateral	2-3	*USAID* and 1-2 others	
• Private foundations	1*		
• Technical agencies	4	*Union, KNCV, CDC*, and one other	
• Non-technical NGOs	2	One Northern, one Southern	• E.g., community groups
• Corporate sector	1*		
• Working Groups			• Each WG 'super-group' can decide on Board attendance based on the agenda for discussion
– Implementation WGs	1*		
– Research WGs	1*		
– ACSM	1*		
• STAG WHO	1	STAG Chair	
Total	**28-30**		

* Constituencies with one Board Member (except STAG) can bring up to two other participants to Coordinating Board meetings

** *Italicized* members are founding permanent members of the Board

Source: Interviews and team analysis

EXHIBIT 39: POSSIBLE ORGANIZATION STRUCTURE FOR PARTNERSHIP*



* Reflecting current Working Group structures

Source: Team analysis

EXHIBIT 40: RESOURCE IMPLICATIONS OF RECOMMENDATIONS*

ESTIMATES FOR DISCUSSION

Recommendations	Estimated additional resource required: FTEs in Partnership	Ongoing annual funding	Non-recurrent support
Recommendation 1 Recommendation 2 Recommendation 8	• 2-3 FTE in Global Planning and Performance Transparency Unit of Secretariat, with experience in strategic planning across both private and public/international sectors	• $150-300k	• One-time investment ($300-600k) in qualified external support to develop Partnership strategy building on strategies of individual Partnership bodies
Recommendation 3	• TBD based on further analysis	• --	• --
Recommendation 4	• Incremental to existing TB Team resource, to reach 2-3 FTE	• $150-300k	• Evaluation and setup (estimated $1.0m)
Recommendation 5	• --	• --	• --
Recommendation 6	• --	• --	• --
Recommendation 7	• Incremental to existing resources, to reach 3-4 FTE for administrative support	• --	• Resourcing for 3-year reviews, equiv. to 2–3 FTE for 3-4 months every 3 years, ideally provided by Partners
Recommendation 9	• --	• --	
Recommendation 10	• --	• --	

* Estimated and ranged, to be further discussed and refined with relevant Partnership bodies

Source: Team analysis

Independent External Evaluation of the Stop TB Partnership – Appendix A: Interviewees

April 21, 2008

Independent external evaluation of the Stop TB Partnership
conducted by McKinsey & Company

GLOBAL INTERVIEWS

Organization/Unit	Role/Position[1]	Name
American Thoracic Society	Director, International Activities	Fran Du Melle
Bill & Melinda Gates Foundation	Senior Program Officer, Tuberculosis	Peter M. Small
BioMerieux	President of International Affairs and Public Relations	Jean-Francois de Lavison
Centers for Disease Control	Director, Division of Tuberculosis Elimination	Kenneth Castro
CIDA (Canada)	TB Programme Officer, Health and Nutrition Directorate (HAND)	Christina Foley
DFID (U.K.)	Communicable and Non-Communicable Diseases Team	Delna Ghandhi, Stewart Tyson
Ecuadorian Coalition of PLWHA Huellas+		Maximo Dario Abarca Runruil
Eli Lilly	Head of International Aid Unit	Patrizia Carlevaro

[1] *In all sheets the Role/Position description is as at the time of the interview*

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
Foundation for Innovative New Diagnostics (FIND)	Chief Executive Officer	Giorgio Roscigno
German Leprosy Association		Ary van Wijnen
Global Alliance for TB Drug Development	Director, Policy	Nina Schwalbe
Global Alliance for TB Drug Development	Chief Executive Officer	Maria Freire
Global TB Drug Facility, Stop TB Partnership Secretariat	Operations Manager	Robert Matiru
Global TB Drug Facility, Stop TB Partnership Secretariat	GDF Principal Officer	Tim Ryan
Global Fund for AIDS, TB and Malaria (GFATM)	Chair, Technical Review Panel	Peter Godfrey-Fausett
GFATM	Senior Health Advisor to the Global Fund	Stefano Lazzari
GFATM	Director, Performance Evaluation and Policy	Bernhard Schwartlander
Green Light Committee	Procurement Officer	Fabienne Jouberton (GDF-WHO)

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
Green Light Committee	Secretariat	Fuad Mirzayev (WHO)
Green Light Committee	Secretariat	Irina Sahakyan (WHO)
Health Systems and Services, WHO	ADG for Infectious Disease	Anders Nordstrom
Heineken International	Corporate Medical Advisor	Stefaan van der Borght
IFRC Mozambique	Secretary General	Fernanda Teixeira
Institute of Health Sector Development	Consultant	Karen Caines
International Union Against TB and Lung Disease	Executive Director	Nils Billo
International Union Against TB and Lung Disease	Director of Scientific Activities	Donald A. Enarson
International Union Against TB and Lung Disease	Tuberculosis Division	Hans Rieder
KNCV	Coordinator, International Program Support Unit	Peter Gondrie
KNCV	Executive Director and Regional rep Netherlands	Martien Borgdorff
Medicines Sans Frontieres	Director of MSF's Campaign for Access to Essential Medicines	Tido von Schoen-Angerer

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
Ministry of Foreign Affairs, Italy	First Counsellor; Chief, Central Technical Unit	Pier Francesco Zazo
Ministry of Health, Brazil	Vice Minister	Jarbas Barbosa da Silva Junior
National Group of TB People	Director	Pervaiz Tufail
Netherlands (MINBUZA)	Senior Health Advisor, Social and Institutional Development Department	Harry van Schooten
NIAID	Chief of the Complications and Co-Infections Research Branch	Barbara E. Laughon
PEPFAR	Principal Deputy Coordinator and Chief Medical Officer	Tom Kenyon
Secretariat, Stop TB Partnership	Executive Secretary	Marcos Espinal
Secretariat Stop TB Partnership	Former Executive Secretary	Jacob Kumaresan
Secretariat, Stop TB Partnership	Resource Administrator	Anant Vijay
Secretariat Stop TB Partnership	Medical Officer	Dermot Maher
Secretariat, Stop TB Partnership	Communications Officer	Judith Mandelbaum-Schmid
Secretariat, Stop TB Partnership	Team Leader (External Relations)	Sarah England
Secretariat, Stop TB Partnership	Principal Officer	Louise Baker
Secretariat, Stop TB Partnership	Country-Level ACSM Officer	Nicole Schiegg

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
Special Programme for Research and Training in Tropical Diseases	Director	Robert Ridley
Subgroup on Laboratory Strengthening	Chair	John Ridderhof
Subgroup on TB & poverty	Chair	Bertie Squire
Swiss Tropical Institute		Christian Auer
TB/HIV mobilization, Brazil	Consultant Specialist	Ezio Tavora dos Santos Filho
TBCAP	Deputy Executive Director, International Union Against TB (IUATLD)	Paula Fujiwara
Treatment Action Group	Executive Director	Mark Harrington
UNAIDS	HIV/TB Adviser Epidemic Monitoring and Prevention, Policy Evidence and Partnerships	Alasdair Reid
UNAIDS	Associate Director and Chief Scientific Adviser to UNAIDS, Department of Policy, Evidence and Partnerships	Catherine Hankins

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
United Nations	Special Envoy to Stop TB	Jorge Sampaio
U.S. President's Emergency Plan for AIDS Relief (PEPFAR)	Principal Deputy Global AIDS Coordinator, Chief Medical Officer	Thomas Kenyon
USAID	Chief, Infectious Diseases Division Bureau for Global Health (Chair)	Irene Koek
USAID	TB Team Leader, Office of Health, Infectious Diseases and Nutrition	Susan Bacheller
WHO	ADG/HTM	Hiroki Nakatani
WHO (HTM/STB) Switzerland	Coordinator, Policy and Strategy	Diana Weil
WHO – Afghanistan	Medical Officer	Syed Karam Shah
WHO – AFRO	Regional Advisor	Wilfred Nkhoma

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
WHO – DG's office	Representative of the Director – General for Partnerships and UN Reform	Alex Ross
WHO – DG's office	Representative of the Director – General for Partnerships and UN Reform	Denis Aitken
WHO – DG's office	Adviser	Ian Michael Smith
WHO – EMRO	Deputy Director	Dr. Jama
WHO – EMRO	Regional Advisor	Akihiro Seita
WHO – EMRO	Regional Representative Afghanistan	Faizullah Kakar
WHO – EURO	Medical Officer	Lucica Ditiu
WHO – EURO	Medical Officer, Stop TB	Pierpaolo de Colombani
WHO – EURO	Regional Advisor	Richard Zaleskis
WHO – Scientific & Technical Advisory Group	Chair	Roberto Tapia Conyer

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
WHO – PAHO	Director	Mirta Roses Periago
WHO – Stop TB Department	Director	Mario Raviglione
WHO – Stop TB Department	Coordinator, Tuberculosis Monitoring and Evaluation	Christopher Dye
WHO – Stop TB Department	Medical Officer, TB Strategy and Health Systems, AFRO focal point	Guliano Gargioni
WHO – Stop TB Department	Coordinator a. i., Tuberculosis Monitoring and Evaluation	Katherine Floyd
WHO – Stop TB Department	Medical Officer, TB Strategy and Health Systems, EURO focal point	Malgosia Gremzska
WHO – Stop TB Department	Medical Officer, TB Strategy and Health Systems, Public Private Mix focal point	Mukund Uplekar

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
WHO – Stop TB department	Coordinator, TB/HIV and Drug Resistance	Paul Nunn
WHO – Stop TB department	Medical Officer TB Strategy and Health Systems, AFRO Francophone focal point	Pierre-Yves Norval
WHO – WPRO	Regional rep Japan	Nobukatsu Ishikawa
WHO – WPRO	Regional Advisor	Pieter Van Maaren
Working Group on MDR TB and WHO - STB department	Medical Officer, MDR-XDR TB Team Leader	Ernesto Jaramillo (Secretariat of the WG)
Working Group on MDR TB	Chair	Thelma E. Tupasi
Working Group on New TB Drugs	Policy Officer	Heather Ignatius
Working Group on new TB Vaccines	Chair	Michel Greco
Working Group on new TB Vaccines	Secretary New Vaccines WG	Ulrich Fruth (Secretariat of the WG)

GLOBAL INTERVIEWS

Organization/Unit	Role	Name
Working Group – Advocacy, Communication, and Social Mobilization Working Group	Chair	Paul John Sommerfeld
Working Group - DOTS Expansion; and WHO - STB department	Coordinator, TB Strategy and Health Systems	Leopold Blanc (Secretariat of the WG)
Working Group – New TB Diagnostics		Andrew Ramsay (Secretariat of the WG)
Working Group – TB/HIV	Chair	Diane V. Havlir
Working Group – TB/HIV, and WHO - STB department	Medical Officer, TB/HIV Team Leader	Haileyesus Getahun (Secretariat of the WG)
World Bank	Acting Director of Health Nutrition and Population	Cristian Baeza
World Bank	Coordinator, Global Partnerships for Communicable Diseases	Olusoji Adeyi
Zambia		Winstone Zulu

Independent External Evaluation of the Stop TB Partnership – Appendix B: Summary of Country Findings

April 21, 2008

Independent external evaluation of the Stop TB Partnership
conducted by McKinsey & Company

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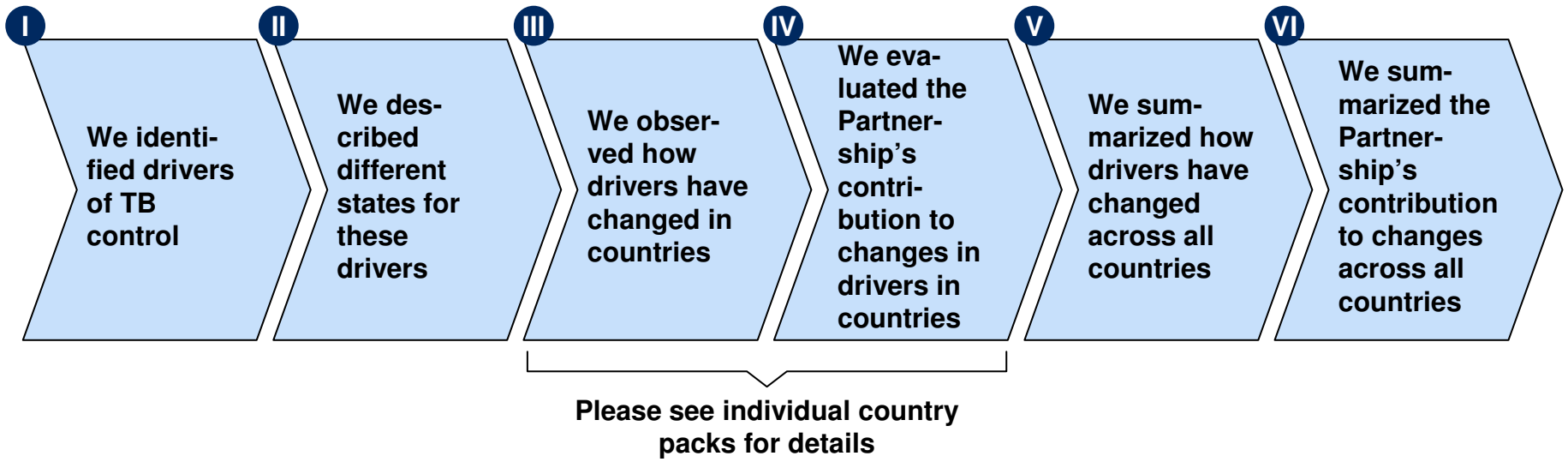
WE HAVE USED A 6-STEP APPROACH TO SUMMARIZE THE PARTNERSHIP'S CONTRIBUTION TO TB CONTROL IN COUNTRIES



WE IDENTIFIED 9 DRIVERS OF TB CONTROL IN COUNTRIES

1. **Sustained funding and resource mobilization for NTP (excluding MDR)**
2. **Access to quality care for drug-sensitive TB**
   - Convenient access to TB centers
   - Availability of high-quality first-line drugs in NTP centers
   - Availability of high-quality SS+ diagnostics, (e.g., microscopes, reagents) in NTP centers
   - Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers
   - Access to trained staff
   - Involvement of the non-NTP sector
3. **ACSM**
4. **Coordination**
5. **Performance management**
6. **Contribution of TB to other disease programs**
7. **Holistic patient approach**
8. **TB-HIV**
   - Coordination and collaboration between TB and HIV communities
   - Access to ARVs
9. **MDR-TB**
   - Sustained funding and resource mobilization for NTP (excluding regular TB)
   - Convenient access to TB centers with MDR capability
   - Access to high-quality second-line drugs in NTP centers
   - Access to MDR-TB diagnosis (DST and culture)
   - Access to trained MDR staff

II WE DESCRIBED DIFFERENT STATES FOR THESE DRIVERS, FROM POOR (0) TO VERY GOOD (3)

Drivers of TB control	States 0	1	2	3
1 Sustained funding and resource mobilization for NTP (excluding MDR)	• Funding available for ~50% of estimated cost of TB control • Funding unreliable or unsustainable (e.g., GDF)	• Funding available for <50% of estimated cost of TB control • Funding unreliable	• Funding available for >50% of estimated cost of TB control • Funding unreliable or unsustainable (e.g., GDF)	• Funding available for >90% of estimated cost of TB control, and reliable and sustainable (e.g., government/GFATM)
2 Access to quality care for drug-sensitive TB • Convenient access to TB centers	• Majority of population has multiple barriers to access (distance, cost, etc.)	• For the majority of population, distance is the major barrier to access	• For the majority of population, cost is the major barrier to access	• For the majority of population, there are very few barriers to access to TB centers
• Availability of high-quality first-line drugs in NTP centers	• Drug supply very limited	• Drug supply insufficient, or unreliable, or low quality	• Drug supply sufficient and reliable (at 90% level), and of acceptable quality	• Drug supply sufficient and reliable (at ~100% level), and also high-quality (e.g., FDC, patient kits)
• Availability of high-quality SS+ diagnostics (e.g., microscopes, reagents) in NTP centers	• SS+ diagnostic supply very limited	• SS+ diagnostic supply insufficient, or unreliable, or low quality	• SS+ diagnostic supply sufficient and reliable (at 90% level), and of acceptable quality	• SS+ diagnostic supply sufficient and reliable (at ~100% level), and also high quality
• Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers	• SS- diagnostic supply very limited	• SS- diagnostic supply insufficient, or unreliable, or low quality	• SS- diagnostic supply sufficient and reliable (at 90% level), and of acceptable quality	• SS- diagnostic supply sufficient and reliable (at ~100% level), and also high quality
• Access to trained staff	• Insufficient staff numbers and poorly trained staff	• Either insufficient numbers or poor training	• Sufficient staff numbers • Some concerns about training	• Sufficient staff numbers • Highly skilled healthcare staff
• Involvement of the non-NTP care providers (e.g., private sector, military)	• No involvement despite potential to play positive role	• Limited involvement despite potential to play positive role	• Some non-NTP care providers involved with quality (standardized) treatment and monitoring and reporting capabilities	• All non-NTP care providers involved, use standardized high quality treatment regimens, and monitor and report effectively

II WE DESCRIBED DIFFERENT STATES FOR THESE DRIVERS, FROM POOR (0) TO VERY GOOD (3) (CONTINUED)

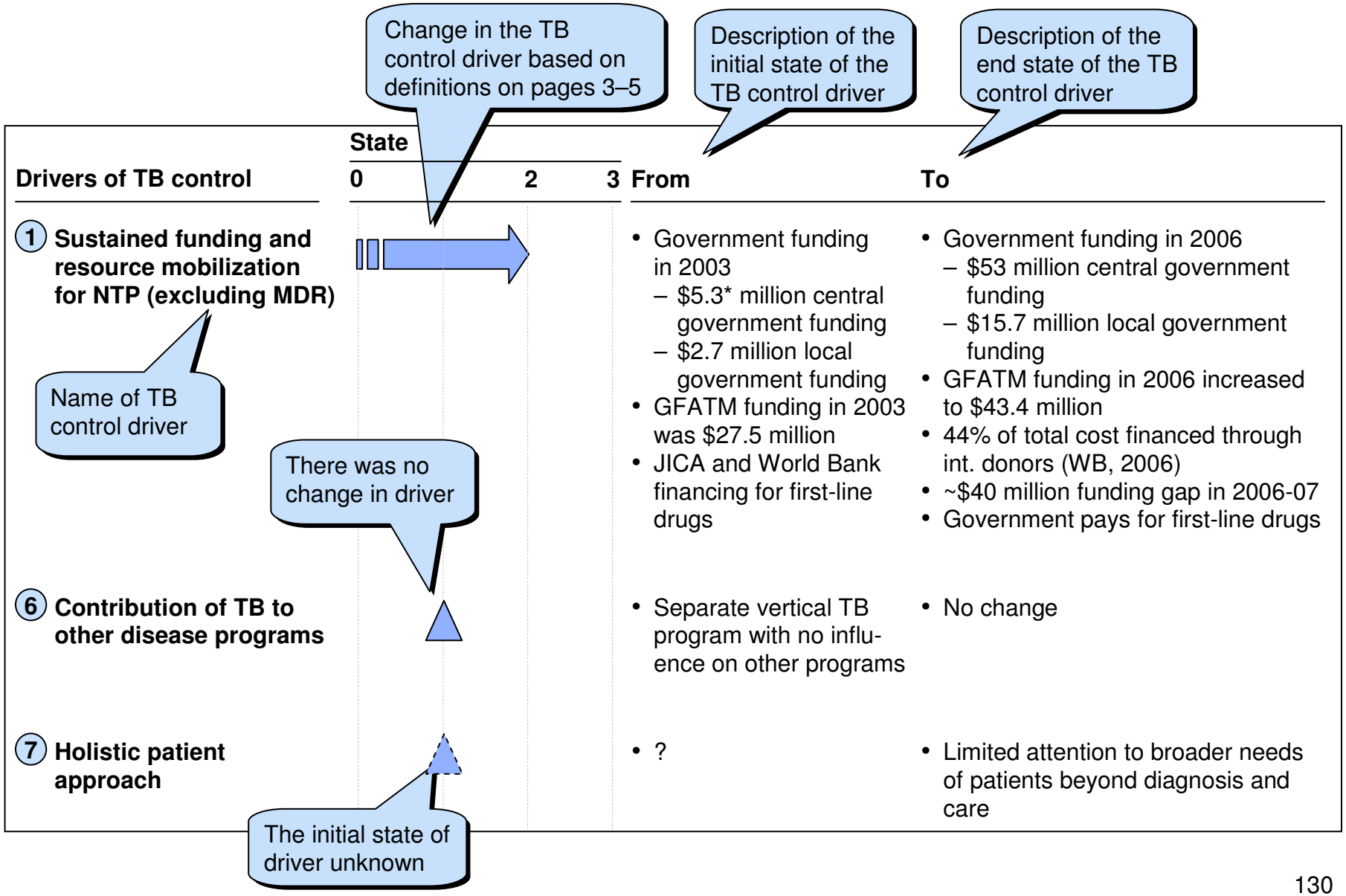
Drivers of TB control	States 0	1	2	3
3 **ACSM**	• Only government health system engaged in TB control	• Government and other healthcare organizations (private sector, faith-based, etc.) engaged in TB control	• Government healthcare, other healthcare organizations, and other government ministries engaged in TB control	• Broad community engagement in addition to health system and other government ministries
4 **Coordination**	• No organization has full visibility on TB-related activities in the country • No overall coordination of TB-related activities	• An organization (e.g., national partnership, ICC) has visibility over TB activities across the board	• An organization has visibility over activities and provides some direction	• An organization has full visibility over all actors in the TB landscape, and coordinates most important activities
5 **Performance management**	• There is no clear process for managing performance of TB control act ivies in country	• There is a country-level plan with clear metrics and targets, but there is little monitoring of performance, and few actions taken to correct/improve performance	• There is a country-level plan with clear metrics and targets with good performance monitoring, but with few actions taken to correct/ improve performance	• There is a country-level plan with clear metrics and targets, with good perfor-mance monitoring, and with clear actions taken to correct/improve performance
6 **Contribution of TB to other disease programs**	• Improvements to the TB program have been detrimental to other disease control programs or to broader health care	• Improvements to the TB program have had no impact on other disease control programs or on broader health care	• TB control programs have demonstrably improved one aspect of broader health care (e.g., lab capacity, training)	• Improvements to the TB control program have also improved the health system in many aspects (e.g., lab capacity, training)
7 **Holistic patient approach**	• No/minimal consideration of patients' rights and other needs (e.g., nutritional support)	• Most applicable components of patient rights are observed and implemented	• Most applicable components of patients rights and some broader needs are addressed (e.g., nutritional support, employment support)	• All of the patients' broader needs are addressed (e.g., nutritional support, access to professional counseling, jobs, support groups)
8 TB-HIV • Coordination and Collaboration between TB and HIV communities	• No interaction	• Some guidelines with collaboration and regular meetings	• Pilot programs for cross-testing and counselling	• Full collaboration including >90% cross-testing, coordination guidelines, joint monitoring and evaluation, etc.

11 WE DESCRIBED DIFFERENT STATES FOR THESE DRIVERS, FROM POOR (0) TO VERY GOOD (3) (CONTINUED)

Drivers of TB control	States 0	1	2	3
8 TB-HIV (continued) • Access to ARVs	• No access to ARVs for HIV+ TB patients	• Some access to ARVs but unaffordable	• Full access to ARVs but unaffordable	• Full access to ARVs with minimal costs for all HIV+ TB patients
9 **MDR-TB** • Sustained funding and resource mobilization for NTP, specifically for MDR	• Funding available for <50% of estimated cost of MDR-TB control • Funding unreliable	• Funding available for ~50% of estimated cost of MDR-TB control • Funding unreliable or unsustainable	• Funding available for >50% of estimated cost of MDR-TB control • Funding unreliable or unsustainable	• Funding available for >90% of estimated cost of MDR-TB control, and reliable and sustainable
• Convenient access to TB centers with MDR capability	• Majority of population has multiple barriers to access (distance, cost, etc.)	• For the majority of population, distance is the major barrier to access	• For the majority of population, cost is the major barrier to access	• For the majority of popula-tion, there are very few barriers to access to TB centers with MDR capability
• Access to high-quality second-line drugs in NTP centers	• Drug supply very limited	• Drug supply insufficient, or unreliable, or low quality	• Drug supply sufficient and reliable (at 90% level), and of acceptable quality	• Drug supply sufficient and reliable (at ~100% level), and also high-quality (e.g., FDC, patient kits)
• Access to MDR-TB diagnosis (DST and culture)	• No DST/culture capabilities	• DST performed in distant reference labs costly to reach	• DST capabilities being developed in several locations in the country	• Full DST capabilities that allow all suspected cases to be tested for MDR
• Access to MDR staff	• Insufficient staff levels/poor training in MDR	• Either insufficient staff level or poor training in MDR	• Sufficient staff level with some concerns about training in MDR	• Sufficient and highly skilled healthcare staff trained in diagnosis and treatment of MDR-TB

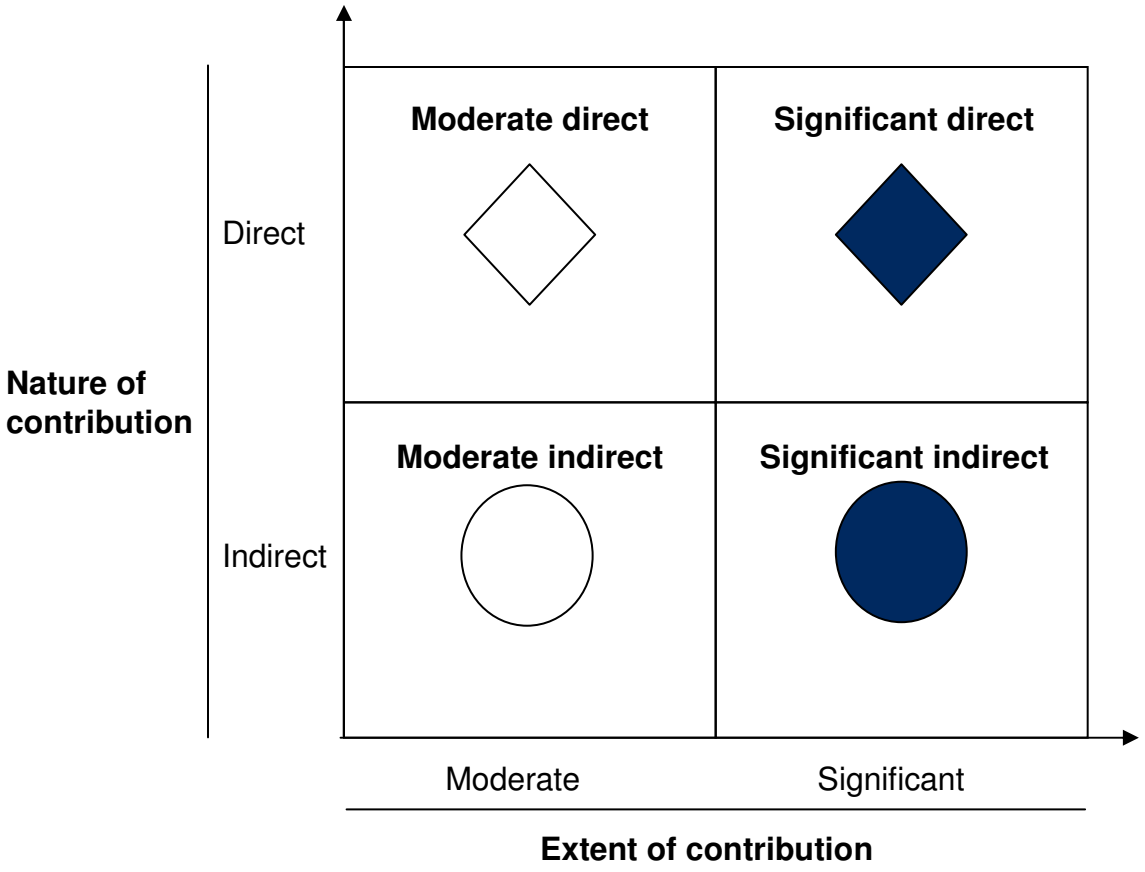
III WE OBSERVED HOW THESE DRIVERS HAVE CHANGED IN COUNTRIES

ILLUSTRATIVE



Ⅳ WE CLASSIFIED THE PARTNERSHIP'S CONTRIBUTION TO THE CHANGE IN DRIVERS IN 4 WAYS, DEPENDING ON THE NATURE AND EXTENT OF CONTRIBUTION

Different types of Partnership contribution*



Definitions

Direct contribution

- Direct contribution to country/ appropriate officials, e.g., GDF drugs delivered, hihg-level mission
- Contributed by
  - Partnership body or mechanism, e.g., GDF, GLC, Working Group,
  - Partner, at Partnership request, e.g., ISAC, specific technical assistance, etc.

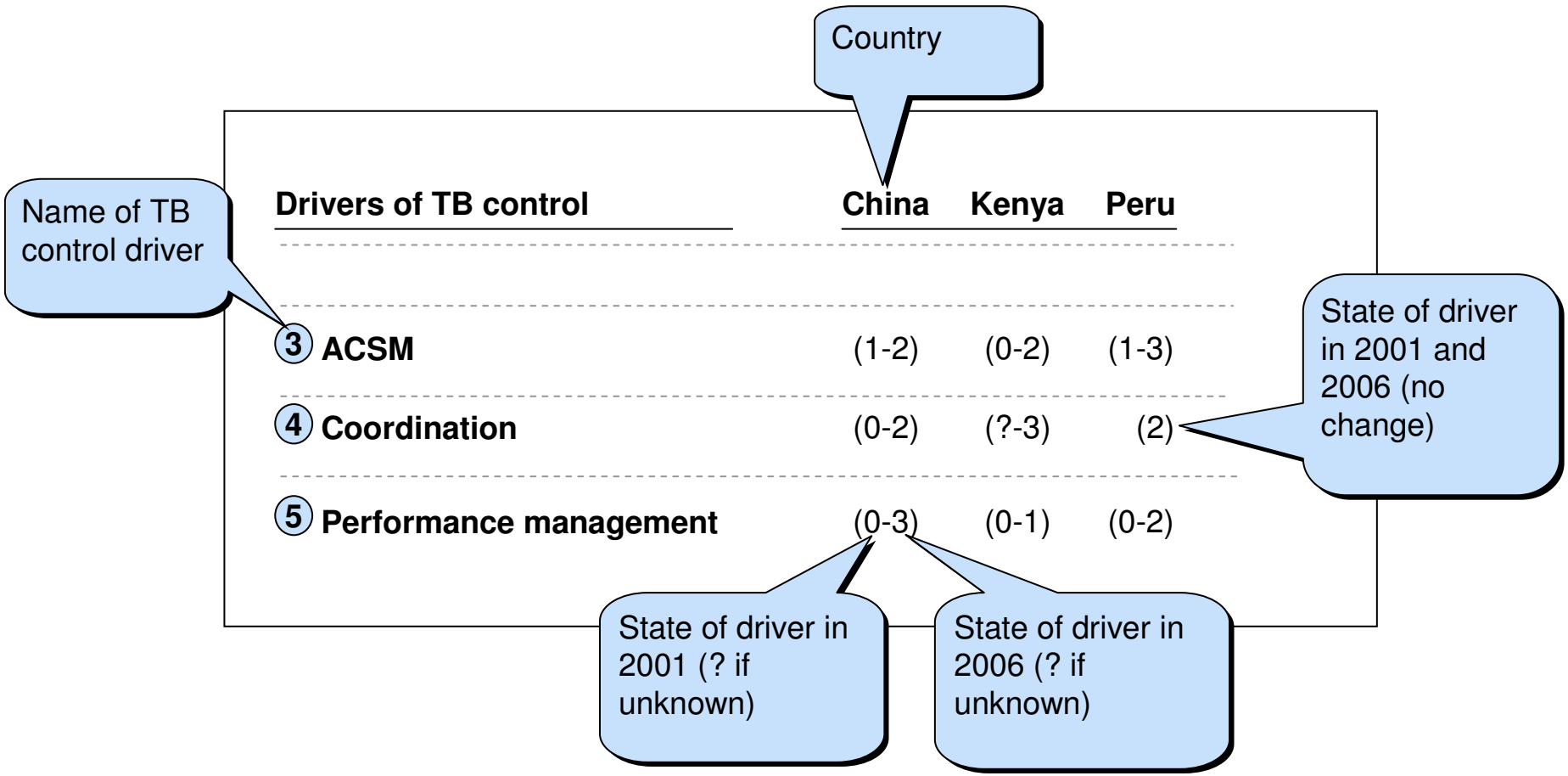
Indirect contribution

- Contribution resulting from global/general Partnership advocacy and/or guidance documents
- Second-order consequence of another *direct* Partnership contribution, e.g., Partners' Forum increased levels (direct contribution) which were used to increase access to diagnostics (indirect contribution)

* "N/A" is assigned when there was no change in driver; "No/minimal contribution" is assigned when Partnership has had minimal contribution to change in driver; "?" is assigned when Partnership contribution was unclear

V WE SUMMARIZED HOW DRIVERS HAVE CHANGED ACROSS ALL COUNTRIES

ILLUSTRATIVE



VI WE SUMMARIZED THE PARTNERSHIP'S CONTRIBUTION TO CHANGES ACROSS ALL COUNTRIES

ILLUSTRATIVE

Name of TB control driver

Country

Drivers of TB control	China	Kenya	Peru	Indonesia
• Availability of high-quality first-line drugs in NTP centers	●	◆	○	◇
• Availability of high-quality SS+ diagnostics in NTP centers	-	-	N/A	?
• Availability of high-quality SS- diagnostics in NTP centers	●	-	N/A	◆

Partnership contribution to change in country; see key for definitions

Key

- ◆ Significant direct
- ● Significant indirect
- ◇ Moderate direct
- ○ Moderate indirect
- \- No/minimal contribution
- N/A No change in driver
- ? Contribution unclear

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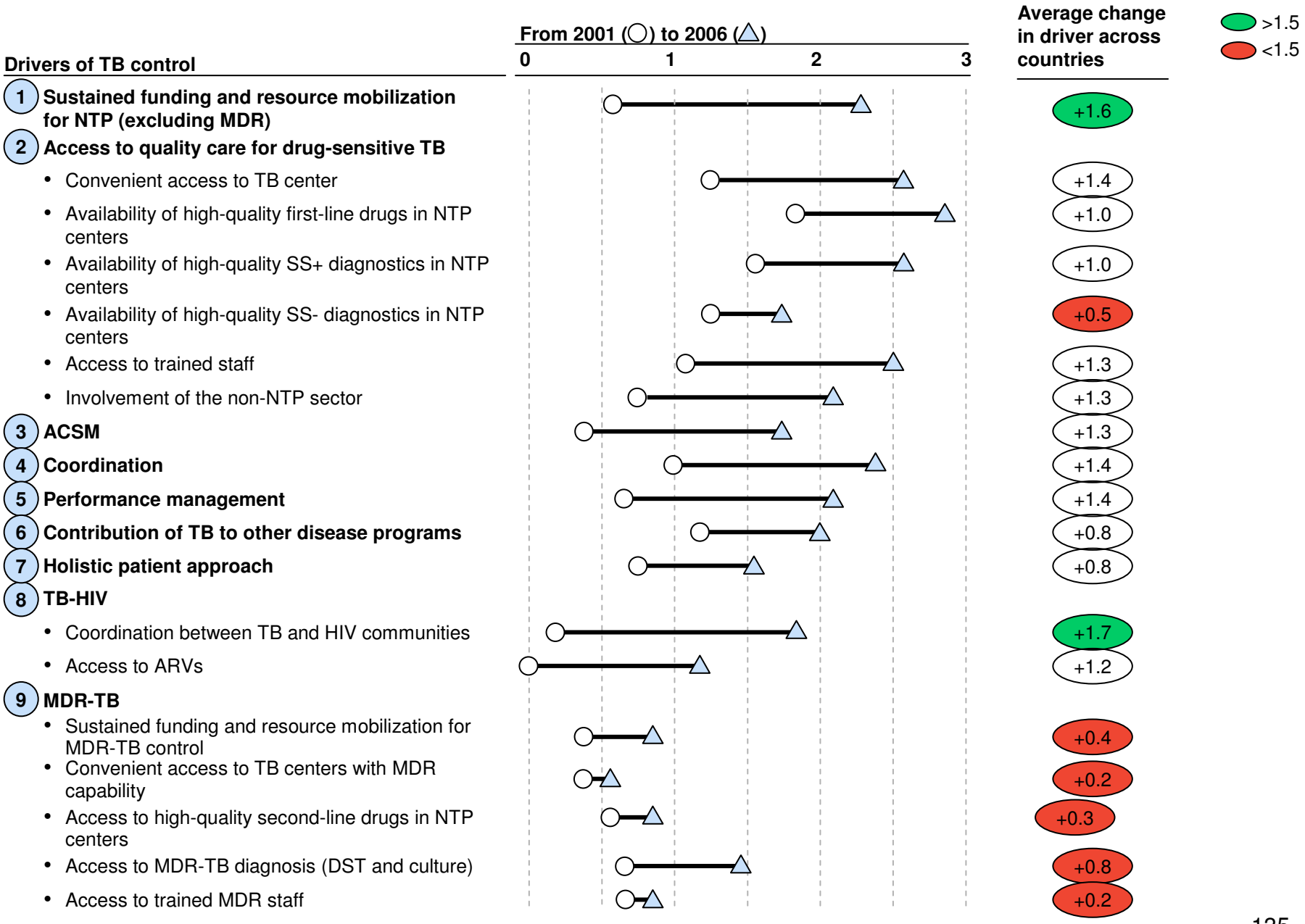
- Explanation of approach
- **Summary of how TB control has changed in countries 2001-06**
- Summary of the Partnership impact on changes observed in countries
- Examples of good practice observed in countries
- Country feedback on opportunities for improvement for the Partnership

SUMMARY OF CHANGES IN TB CONTROL DRIVERS ACROSS COUNTRIES



CHANGES IN TB CONTROL DRIVERS 2001-06 BY COUNTRY

Key

(x-y)	X = State of driver 2001, Y = State of driver 2006
(z)	Z = State of driver 2001 and 2006 (no change observed)
(?–w)	? = State of driver 2001 unknown, W = State of driver 2006

NB for definition of driver states please see page 4-6

Drivers of TB control	China	Kenya	Peru	Indonesia	Burkina Faso	Uzbekistan	India	Morocco
1 Sustained funding and resource mobilization for NTP (excluding MDR)	(0-2)	(0-1)	(1-3)	(0-2)	(0-2)	(1-2)	(1-3)	(2-3)
2 Access to quality care for drug-sensitive TB								
• Convenient access to TB centres	(0-3)	(0-2)	(3)	(1-2)	(1-2)	(2-3)	(0-3)	(3)
• Availability of high-quality first line drugs in NTP	(1-2)	(2-3)	(2-3)	(2-3)	(2-3)	(1-3)	(1-3)	(3)
• Availability of high-quality SS+ diagnostics	(2)	(1-2)	(3)	(0-2)	(2-3)	(0-3)	(1-3)	(3)
• Availability of high-quality SS- diagnostics	(2)	(1-2)	(1)	(0-1)	(0-1)	(2-3)	(?-1)	(3)
• Access to trained staff	(1-3)	(1-2)	(1-2)	(1-2)	(0-2)	(1-2)	(1-3)	(3)
• Involvement of the non-NTP sector	(?-3)	(1-2)	(1-3)	(1-2)	(0)	N/A	(0-2)	(2-3)
3 ACSM	(1-2)	(0-2)	(1-3)	(0-1)	(0-2)	(0-1)	(?-1)	(1-2)
4 Coordination	(0-2)	(?-3)	(1-2)	(1-2)	(1-3)	(0-2)	(?-2)	(3)
5 Performance management	(0-3)	(0-1)	(0-2)	(2)	(0-1)	(0-2)	(?-3)	(3)

* Please see page 4-6 for definitions of the state of drivers

CHANGES IN TB CONTROL DRIVERS 2001 – 2006 BY COUNTRY (CONTINUED)

Key

(x-y)	X = State of driver 2001, Y = State of driver 2006
(z)	Z = State of driver 2001 and 2006 (no change observed)
(?–w)	? = State of driver 2001 unknown, W = State of driver 2006

NB for definition of driver states please see page 4-6

Drivers of TB control	China	Kenya	Peru	Indonesia	Burkina Faso	Uzbekistan	India	Morocco
6 Contribution of TB to other disease programs	(1)	(?-3)	(?-2)	(1-2)	(1-3)	(2)	(1)	(1-2)
7 Holistic patient approach	(?-1)	(1)	(?-3)	(?-1)	(0-2)	(0-2)	(?-1)	(2)
8 TB-HIV								
• Coordination between TB and HIV	(0-2)	(1-3)	(0-2)	(0)	(0-2)	(0-2)	(0-2)	N/A
• Access to ARVs	(?)	(0)	(0-1)	(0)	(0-3)	(0-2)	(?-1)	N/A
9 MDR-TB								
• Sustained funding and resource mobilization for MDR-TB control	(0)	(0)	(0-3)	(0)	(0)	(0-1)	(0-1)	(3)
• Convenient access to TB centers with MDR capability	(0)	(0)	(0-1)	(0)	(0)	(0-1)	(0)	(3)
• Access to high-quality second-line drugs in NTP	(0-1)	(0)	(1-2)	(0)	(0)	(0-1)	(0-1)	(3)
• Access to MDR-TB diagnosis (DST and culture)	(0-2)	(0-1)	(1-2)	(0)	(0-1)	(0-1)	(1-2)	(3)
• Access to trained MDR staff	(1)	(0)	(1-2)	(0)	(0)	(0)	(0-1)	(3)

* Please see page 4-6 for definitions of the state of drivers

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PARTNERSHIP CONTRIBUTION TO IMPROVING TB CONTROL ACROSS COUNTRIES VISITED

Contribution

- ◆ Significant direct
- ◇ Moderate direct
- \- No/minimal contribution
- ● Significant indirect
- ○ Moderate indirect
- N/A No change in driver
- ? Contribution not assessed

Drivers of TB control	China	Kenya	Peru	Indonesia	Burkina Faso	Uzbekistan	India	Morocco
1 Sustained funding & resource mobilization (excluding MDR)	◆	◆	◆	○	◇●	○	◆	●
2 Access to quality care for drug-sensitive TB								
• Convenient access to TB center	●	○	○	-	-	○	○	N/A
• Availability of high-quality first line drugs in NTP	●	◆	○	◇	◇	◆	◆	N/A
• Availability of high-quality SS+ diagnostics	-	-	N/A	?	○	○	-	N/A
• Availability of high-quality SS- diagnostics	●	-	N/A	◆	-	○	?	N/A
• Access to trained staff	●	○	-	○	-	○	-	N/A
• Involvement of the non-NTP sector	-	○	●	○	N/A	N/A	◇●	○
3 ACSM	-	◆	◆	●	-	○	◇	●
4 Coordination	-	N/A	◇	○	-	-	-	N/A
5 Performance management	◆	◇	◆	-	◇	○	?	N/A
6 Contribution of TB to other disease programs	N/A	N/A	-	○	-	N/A	N/A	●
7 Holistic patient approach	N/A	N/A	-	○	○	○	?	○
8 TB-HIV								
• Coordination between TB and HIV	○	○	○	-	○	○	○	N/A
• Access to ARVs	N/A	N/A	N/A	-	○	?	?	N/A
9 MDR-TB								
• Sustained funding and resource mobilization for MDR-TB control	N/A	◇	◆	N/A	N/A	○	-	N/A
• Convenient access to TB centers with MDR capability	N/A	N/A	-	N/A	N/A	○	N/A	N/A
• Access to high-quality second-line drugs in NTP	◇	◆	◆	N/A	N/A	◇●	◇	N/A
• Access to MDR-TB diagnosis (DST and culture)	○	-	◇	N/A	-	◇●	-	N/A
• Access to trained MDR staff	N/A	N/A	-	N/A	N/A	●	-	N/A

SYNTHESIS OF PARTNERSHIP CONTRIBUTION TO TB CONTROL IN COUNTRIES VISITED, BY DRIVER

Drivers	Partnership contribution	Example(s)
1 **Sustained funding and resource mobilization (excluding MDR)**	• **Significant:** Contributed to increasing national governments' financial commitment to TB control through high-level missions and international events (e.g., Partners' Forum)	• At the 2004 Partnership Partners' Forum, Chinese Vice Minister of Health committed to meeting global TB control targets by 2005, which was one of the key drivers that led to the 10-fold increase in central government funding for TB control in the country
2 **Access to quality care for drug-sensitive TB**		
• Convenient access to TB centers	• **Moderate:** Contribution to expansion primarily through increased funds or guaranteeing reliable drug supply	• Kenyan NTLCP extended TB care to district level as GDF grant service increased overall funding for TB control
• Availability of high-quality first line drugs in NTP	• **Significant:** Increased availability and quality of first-line drugs through being a reliable supplier of high-quality drugs and influencing the quality of non-GDF supplies	• GDF has supplied a substantial share of first line drugs in Kenya and India (see case studies for details)
• Availability of high-quality SS+ diagnostics	• **Minimal**	• Uzbekistan adoption of DOTS advocated for by Partnership
• Availability of high-quality SS- diagnostics	• **Mixed/unclear:** Contribution through endorsing technical guidance on and raising the profile of SS- diagnosis	• Following Partnership guidance and post-PF, SS- diagnosis was free in China
• Access to trained staff	• **Moderate:** Increased number and level of training through guidelines and material for staff training	• In Indonesia, KNCV was active in TB staff training using WHO and Partnership material
• Involvement of the non-NTP sector	• **Moderate:** Influenced involvement of non-NTP actors through raising the profile of PPM	• In India and Kenya, raised awareness of PPM leading to programs in country
3 **ACSM**	• **Significant:** Contributed to multi-sectoral ACSM efforts through high-level missions, representatives, and advocacy material	• Partnership sent representatives as part of GDF technical mission to discuss ACSM strategy in Kenya
4 **Coordination**	• **Minimal**	• The national STBP in Peru was inspired by the Partnership
5 **Performance management**	• **Significant:** Improved performance management primarily through GLC and GDF missions	• In Burkina Faso, annual GDF evaluation increases impetus to reach goals and provides suggestions to improve

SYNTHESIS OF PARTNERSHIP CONTRIBUTION TO TB CONTROL IN COUNTRIES VISITED, BY DRIVER (CONTINUED)

Drivers	Partnership contribution	Example(s)
6 **Contribution of TB to other disease programs**	• **Minimal**	• Morocco Partnership supported dissemination of PAL
7 **Holistic patient approach**	• **Moderate:** Contributed to improvements through guidance and material in most countries that have advanced	• In Burkina Faso, local partners supported program design in line with Partnership guidance
8 **TB-HIV**		
• Coordination between TB and HIV	• **Moderate:** Contribution primarily through raising the profile of the co-infection in publications and local partner activity	• In Kenya, local Partnership partners, e.g., CDC and WHO joined the TB-HIV Steering Committee and contributed to collaboration between TB and HIV communities
• Access to ARVs	• **Minimal**	• N/A
9 **MDR-TB**		
• Sustained funding and resource mobilization for MDR-TB control	• **Minimal** with the exception of Peru, where Partnership contributed to increasing government funding for MDR through high-level missions	• GLC and other high-level missions led to 70% financing for second-line drugs in Peru by government
• Convenient access to TB centers with MDR capability	• **Minimal**	• N/A
• Access to high-quality second-line drugs in NTP	• **Significant:** GLC increased availability of second-line drugs through being a reliable supplier of high-quality drugs	• In Peru, DOTS-Plus was rolled out to 87% of population* through GLC approved drugs*
• Access to MDR-TB diagnosis (DST and culture)	• **Significant:** Contributed to establishment of DST capabilities through technical guidance by GLC	• In Indonesia, first capabilities put in place for GLC supported pilots
• Access to trained MDR staff	• **Minimal contribution**	• In Uzbekistan, MDR-TB training led by MSF (field) and CDC/Gauting (laboratory) in line with DOTS-Plus and lab guidelines

* See case study for details

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EXAMPLES OF GOOD PRACTICE OBSERVED IN COUNTRIES, BY DRIVER

Driver	Country	Good practice example
Sustained funding and resource mobilization (excluding MDR)	China	• Delhi Partners' Forum increased government commitment to TB control*
	Indonesia	• The response of case detection rate to increase in funding*
	Peru	• CARE, a private NGO, is the primary recipient of GFATM funds in Peru and has been very effective in disbursement of funds and following-up on implementation
Access to quality care for drug-sensitive TB	China	• Rapid ramp-up of DOTS implementation following increase in government commitment allowing country to meet global TB control targets in 2005
	India	• Rapid expansion of DOTS with the use of a supporting technical partner (WHO) • Providing 100% supervision for treatment within the NTP program • Existence of a TB research centers that conduct operational research and training* • Use of an NGO (REACH) to provide a bridge between the NTP and the private sector* • Performance management at a regional level with quarterly tracking and intervention*
	Kenya	• GDF as a reliable supplier of high-quality first-line TB drugs with an impact on quality of non-NTP drugs* • KAPTLD (Kenya Association for the Prevention of Tuberculosis and Lung Diseases) program to involve the private section in conjunction with Sanofi Aventis and with provision of economic incentives*
	Uzbekistan	• GDF and KfW supplied drugs for whole program; now all direct procurement done through GDF
	Burkina Faso	• National procurement system (CAMEG) provides – Steady supply of high-quality TB drugs and medical supplies – Rigorous tender process, access to low prices, quality assurance for drugs, further quality testing within NTP
	Indonesia	• Local NGO leading in TB control offering integrated TB-HIV and MDR treatment in its facilities
ACSM	Burkina Faso	• PAMAC leverages >170 community associations and coordination mechanisms (between associations and government health system/personnel) established for HIV/AIDS to apply to TB
	Indonesia	• ACSM activities of NGO (KUIS) led to increased funding at district level*
	Morocco	• Use of Global Plan to Stop TB*
	Peru	• Involvement of non-NTP sectors in TB care*

* Case study available

EXAMPLES OF GOOD PRACTICE OBSERVED IN COUNTRIES, BY DRIVER (CONTINUED)

Driver	Country	Good practice example
Coordination of activities	Indonesia	• Creation of website with all contact details and activities of partners
	Kenya	• Level of oversight and coordination of NTLCP of non-NTP activity
	Peru	• Formation of national and regional partnerships*
Performance management	China	• Implementation to improve performance management of – Internet-based reporting system – Administrative awards/sanction system
	Morocco	• Clear hierarchy of national, regional, and local objective; at national level objectives are to – Create 80-100 new microscopy labs – Create 10-15 new labs for culture – Develop 16 regional warehouses for TB and respiratory disease medications – Build 10 regional reference centers for TB and respiratory diseases – Build 16 regional TB labs – Develop 10 regional NTP and respiratory disease coordination units • Workforce, facilities, and funding needs for above described clearly
Contribution of TB to other disease programs	Indonesia	• Work on planning has helped districts in other disease areas
	Kenya	• TB program infrastructure and training served as a model for other disease areas
Holistic patient approach	Peru	• Nutritional support, employment, and counseling opportunities for TB patients
TB-HIV • Coordination between TB and HIV	Burkina Faso	• Strength of TB-HIV coordinated testing/treatment approach driven from TB program side of collaboration
• Access to ARVs	Kenya	• Efforts of TB community to collaborate leading to high level of cross-testing
MDR-TB	Peru	• Developing and executing a successful MDR program in a developing country – Utilization of NGO in pilot – Commitment of national government – Establishment of technical review system
	Uzbekistan	• All efforts supported by GLC, MSF, CDC, Gauting

* Case study available

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- Explanation of approach
- Summary of how TB control has changed in countries 2001-06
- Summary of the Partnership impact on changes observed in countries
- Examples of good practice observed in countries
- **Country feedback on opportunities for improvement for the Partnership**

COUNTRY FEEDBACK ON OPPORTUNITIES FOR THE PARTNERSHIP GOING FORWARD

Driver	Recommendations based on 2001-06 involvement	Recommendations based on expected future needs
Sustained funding and resource mobilization (excluding MDR)	• Translate communication into at least UN languages, e.g., Spanish, Russian • Better follow through GDF's mandate, e.g., government funding for TB control in Kenya and Burkina Faso has not increased as required • Better follow up on the government's promises on the Maputo declaration, and similar international treaties	• Secure more government commitment over and above Global Fund • Mobilize and coordinate more for funding of TB control for specific areas, e.g., MDR detection (DST), second-line drugs, laboratory networks
Access to quality care for drug-sensitive TB	**GDF** • Ensure NTP notified in advance regarding the content and timing of drug shipments • Work more closely with NTP on the introduction of new formulations (e.g., pediatric patient packs) • Ensure capacity building and funding of first-line drug supply before removing GDF support • Improve coordination between the NTP, WHO in country, GTZ and GDF to avoid delays in delivery • Reduce WHO overhead fee to ensure GDF prices are competitive • Clarify legal status of GDF to ensure agreements can be signed with NTP • Better align with National Drug Procurement Systems* • Provide better guidance on use of FDCs • Support local labs to do bioequivalence • Expand limited supplier base that are prequalified **Other** • Make language of ISTBC less obligatory, e.g., Indonesian medial association raised doctors' unwillingness to sign in due to fear of obligations • Provide additional technical assistance to role out new treatments (e.g., paediatric drugs) and adapt to national programs	**GDF** • Revisit and improve coordination with GFATM especially on GLC/GDF procurement • Follow up on impact of implementation in the field (e.g., 6-month vs. 8-month regimen, FDCs) **Other** • Disseminate lessons from Peru's experience with DOTS implementation in prisons and provide technical assistance to other countries • Offer/coordinate more technical assistance to train frontline staff and managers • Build stronger relationship with NTP managers • Encourage more NGOs to get involved with supporting TB programs, especially those working in more rural areas

* Case study available

COUNTRY FEEDBACK ON OPPORTUNITIES FOR THE PARTNERSHIP GOING FORWARD (CONTINUED)

Driver	Recommendations based on 2001-06 involvement	Recommendations based on expected future needs
ACSM	• Translate communication into at least UN languages, e.g., Spanish, Russian	• Consider how to engage uneducated – tailor communication (language, simplicity, etc.) • Support NTP in increasing NGO and wider community involvement in TB care
Coordination of activities		• Share lessons from Peru's experience with national and regional partnerships with the international community • Support reinvigoration of national partnerships
Performance management		• Develop means to better understand case detection rates • Assist in predicting and acquiring adequate monitoring capabilities
Health systems strengthening		
Holistic patient approach		
TB-HIV	• Ensure published guidelines are applicable internationally rather than to specific regions – TB-HIV guidelines tailored to Africa, not applicable in Asia	• Encourage governments to take concrete steps in assessing the burden of TB-HIV and to develop a strategy to tackle the co-infection • Provide technical assistance for TB-HIV care and advocate importance of TB in the HIV community – pressure governments to evaluate scale of problem and develop a strategy to tackle – Encourage/support the NTP to conduct an assessment of TB-HIV, e.g., a prevalence survey and develop strategy to tackle the co-infection • Model better coordination of TB and HIV communities at the global level • Catalyze harmonization of TB and HIV/AIDS treatment protocols (DOTS vs. monitoring of ARV treatment) at international level

* Case study available

COUNTRY FEEDBACK ON OPPORTUNITIES FOR THE PARTNERSHIP GOING FORWARD (CONTINUED)

Driver	Recommendations based on 2001-06 involvement	Recommendations based on expected future needs
MDR-TB	• Address concerns about shortages in second-line drugs supplies • Reduce price of GLC drugs to make competitive locally for India • Better communicate the GLC process to countries including price of drugs and expected timing of the procurement process*	• Encourage the NTPs to conduct drug resistance surveys and speed up the scale-up of MDR-TB pilots • Encourage NTPs to rapidly rollout a treatment strategy – Assist in finding funds – Identify mechanisms for supporting the training of MDR-TB staff for future scale-up of DOTS-Plus • Continue to encourage the Chinese government to react to MDR-TB through – Following up on the 2007 resistance survey to ensure timely and effective completion – Taking the necessary steps in MDR-TB control as they emerge from the survey • Continue publicizing China's progress in MDR – similar to what was done for DOTS implementation in the Partners Forum in 2004 – Replicate this in other countries • Increase attention of funding partners and country for MDR detection and treatment resource mobilization

* Case study available

Independent External Evaluation of Stop TB Partnership – Appendix C: Detail of country visits

April 21, 2008

Independent external evaluation of the Stop TB Partnership conducted by McKinsey & Company

CONTENTS

- **Overview of approach**


Burkina Faso


China


India


Indonesia


Kenya


Morocco


Peru


Uzbekistan

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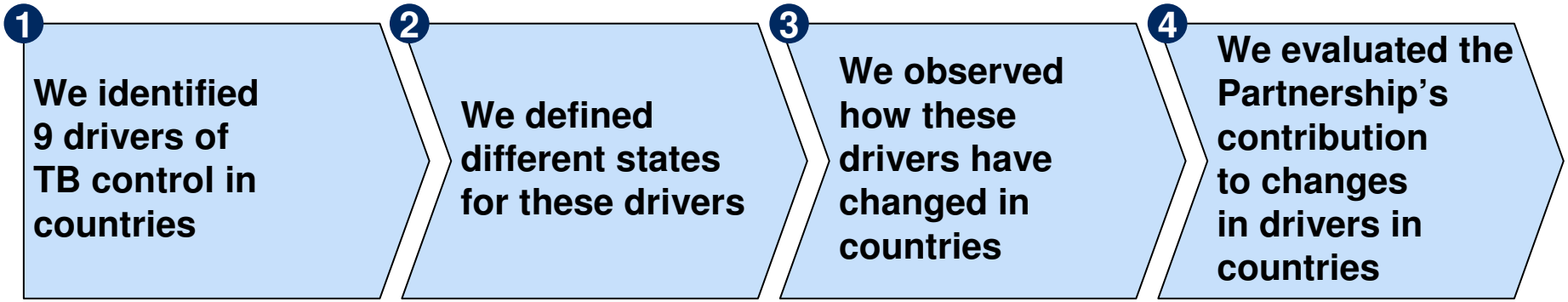
WE HAVE USED A 4-STEP APPROACH IN ANALYZING PARTNERSHIP'S CONTRIBUTION TO TB CONTROL IN COUNTRIES



1 WE IDENTIFIED 9 DRIVERS OF TB CONTROL IN COUNTRIES

1. **Sustained funding and resource mobilization for NTP (excluding MDR)**
2. **Access to quality care for drug-sensitive TB**
   - Convenient access to TB centers
   - Availability of high-quality first-line drugs in NTP centers
   - Availability of high-quality SS+ diagnostics (e.g., micro-scopes, reagents) in NTP centers
   - Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers
   - Access to trained staff
   - Involvement of the non-NTP sector in provision of TB care
3. **ACSM**
4. **Coordination**
5. **Performance management**
6. **Contribution of TB to other disease programs**
7. **Holistic patient approach**
8. **TB-HIV**
   - Coordination and collaboration between TB and HIV communities
   - Access to ARVs
9. **MDR-TB**
   - Sustained funding and resource mobilization for NTP (excluding regular TB)
   - Convenient access to TB centers with MDR capability
   - Access to high-quality second-line drugs in NTP centers
   - Access to MDR-TB diagnosis (DST and culture)
   - Access to trained MDR staff

2 WE DEFINED DIFFERENT STATES FOR THESE DRIVERS

0 Poor
3 Very good

Drivers of TB control	States 0	1	2	3
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**	• Funding available for <50% of estimated cost of TB control • Funding unreliable	• Funding available for ~50% of estimated cost of TB control • Funding unreliable or unsustainable (e.g., GDF)	• Funding available for >50% of estimated cost of TB control • Funding unreliable or unsustainable (e.g., GDF)	• Funding available for >90% of estimated cost of TB control, and reliable and sustainable (e.g., government/GFATM)
2 **Access to quality care for drug-sensitive TB** • Convenient access to TB centers	• Majority of population has multiple barriers to access (distance, cost, etc.)	• For the majority of population, distance is the major barrier to access	• For the majority of population, cost is the major barrier to access	• For the majority of population, there are very few barriers to access to TB centers
• Availability of high-quality first-line drugs in NTP centers	• Drug supply very limited	• Drug supply insufficient, or unreliable, or low quality	• Drug supply sufficient and reliable (at 90% level), and of acceptable quality	• Drug supply sufficient and reliable (at ~100% level), and also high quality (e.g., FDC, patient kits)
• Availability of high-quality SS+ diagnostics (e.g., microscopes, reagents) in NTP centers	• SS+ diagnostic supply very limited	• SS+ diagnostic supply insufficient, or unreliable, or low quality	• SS+ diagnostic supply sufficient and reliable (at 90% level), and of acceptable quality	• SS+ diagnostic supply sufficient and reliable (at ~100% level), and also high quality
• Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers	• SS- diagnostic supply very limited	• SS- diagnostic supply insufficient, or unreliable, or low quality	• SS- diagnostic supply sufficient and reliable (at 90% level), and of acceptable quality	• SS- diagnostic supply sufficient and reliable (at ~100% level), and also high quality
• Access to trained staff	• Insufficient staff numbers and poorly trained staff	• Either insufficient numbers or poor training	• Sufficient staff numbers • Some concerns about training	• Sufficient staff numbers • Highly skilled healthcare staff
• Involvement of the non-NTP sector in provision of TB care (e.g., private sector, military, etc.)	• No involvement despite potential to play positive role	• Limited involvement despite potential to play positive role	• Some non-NTP care providers involved with quality (standardized) treatment and monitoring and reporting capabilities	• All non-NTP care providers involved, use standardized high quality treatment regimens, and monitor and report effectively

2 WE DEFINED DIFFERENT STATES FOR THESE DRIVERS (CONTINUED)

Drivers of TB control	States 0	1	2	3
3 **ACSM**	• Only government health system engaged in TB control	• Government and other healthcare organizations (private sector, faith-based, etc.) engaged in TB control	• Government healthcare, other healthcare organizations, and other government ministries engaged in TB control	• Broad community engagement in addition to health system and other government ministries
4 **Coordination**	• No organization has full visibility on TB-related activities in the country – No overall coordination of TB-related activities	• An organization (e.g., national partnership, ICC) has visibility over TB activities across the board	• An organization has visibility over activities *and* provides some direction	• An organization has full visibility over all actors in the TB landscape, and coordinates most important activities
5 **Performance management**	• There is no clear process for managing performance of TB control act ivies in country	• There is a country-level plan with clear metrics and targets, but there is little monitoring of performance, and few actions taken to correct/ improve performance	• There is a country-level plan with clear metrics and targets, with good performance monitoring, but with few actions taken to correct/improve performance	• There is a country-level plan with clear metrics and targets, with good performance monitoring, and with clear actions taken to correct/ improve performance
6 **Contribution of TB to other disease programs**	• Improvements to the TB program have been detrimental to other disease control programs or to broader health care	• Improvements to the TB program have had no impact on other disease control programs or on broader health care	• TB control programs have demonstrably improved one aspect of broader health care (e.g., lab capacity, training)	• Improvements to the TB control program have also improved the health system in many aspects (e.g., lab capacity, training)
7 **Holistic patient approach**	• No/minimal consideration of patients' rights and other needs (e.g., nutritional support)	• Most applicable components of patient rights are observed and implemented	• Most applicable components of patients rights and some broader needs are addressed (e.g., nutritional support, employment support)	• All of the patients' broader needs are addressed (e.g., nutritional support, access to professional counseling, jobs, support groups, etc.)

2 WE DEFINED DIFFERENT STATES FOR THESE DRIVERS (CONTINUED)

Drivers of TB control	States 0	1	2	3
8 TB-HIV				
• Coordination and collaboration between TB and HIV communities	• No interaction	• Some guidelines with collaboration and regular meetings	• Pilot programs for cross-testing and counseling	• Full collaboration including >90% cross-testing, coordination guidelines, joint monitoring and evaluation, etc.
• Access to ARVs	• No access to ARVs for HIV+ TB patients	• Some access to ARVs but unaffordable	• Full access to ARVs but unaffordable	• Full access to ARVs with minimal costs for all HIV+ TB patients
9 MDR-TB				
• Sustained funding and resource mobilization for NTP, specifically for MDR	• Funding available for <50% of estimated cost of MDR-TB control • Funding unreliable	• Funding available for ~50% of estimated cost of MDR-TB control • Funding unreliable or unsustainable	• Funding available for >50% of estimated cost of MDR-TB control • Funding unreliable or unsustainable	• Funding available for >90% of estimated cost of MDR-TB control, and reliable and sustainable
• Convenient access to TB centers with MDR capability	• Majority of population has multiple barriers to access (distance, cost, etc.)	• For the majority of population, distance is the major barrier to access	• For the majority of population, cost is the major barrier to access	• For the majority of population, there are very few barriers to access to TB centers with MDR capability
• Access to high-quality second-line drugs in NTP centers	• Drug supply very limited	• Drug supply insufficient, or unreliable, or low quality	• Drug supply sufficient and reliable (at 90% level), and of acceptable quality	• Drug supply sufficient and reliable (at ~100% level), and also high quality (e.g., FDC, patient kits)
• Access to MDR-TB diagnosis (DST and culture)	• No DST/culture capabilities	• DST performed in distant reference labs costly to reach	• DST capabilities being developed in several locations in the country	• Full DST capabilities that allow all suspected cases to be tested for MDR
• Access to MDR-TB trained staff	• Insufficient staff levels/poor training in MDR	• Either insufficient staff level or poor training in MDR	• Sufficient staff level of staff with some concerns about training in MDR	• Sufficient and highly skilled health care staff trained in diagnosis and treatment of MDR-TB

3 WE OBSERVED HOW THESE DRIVERS HAVE CHANGED IN COUNTRIES

Change in the TB control driver based on definitions on pages 3–5

Description of the initial state of the TB control driver

Description of the end state of the TB control driver

Drivers of TB control	State 0 → 2 → 3	From	To
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**		• Government funding in 2003 – $5.3 million central government funding – $2.7 million local government funding • GFATM funding in 2003 was $27.5 million • JICA and World Bank financing for first-line drugs	• Government funding in 2006 – $53 million central government funding – $15.7 million local government funding • GFATM funding in 2006 increased to $43.4 million • 44% of total cost financed through int. donors (WB, 2006) • ~$40 million funding gap in 2006–07 • Government pays for first-line drugs
6 **Contribution of TB to other disease programs**		• Separate vertical TB program with no influence on other programs	• No change
7 **Holistic patient approach**		• ?	• Limited attention to broader needs of patients beyond diagnosis and care

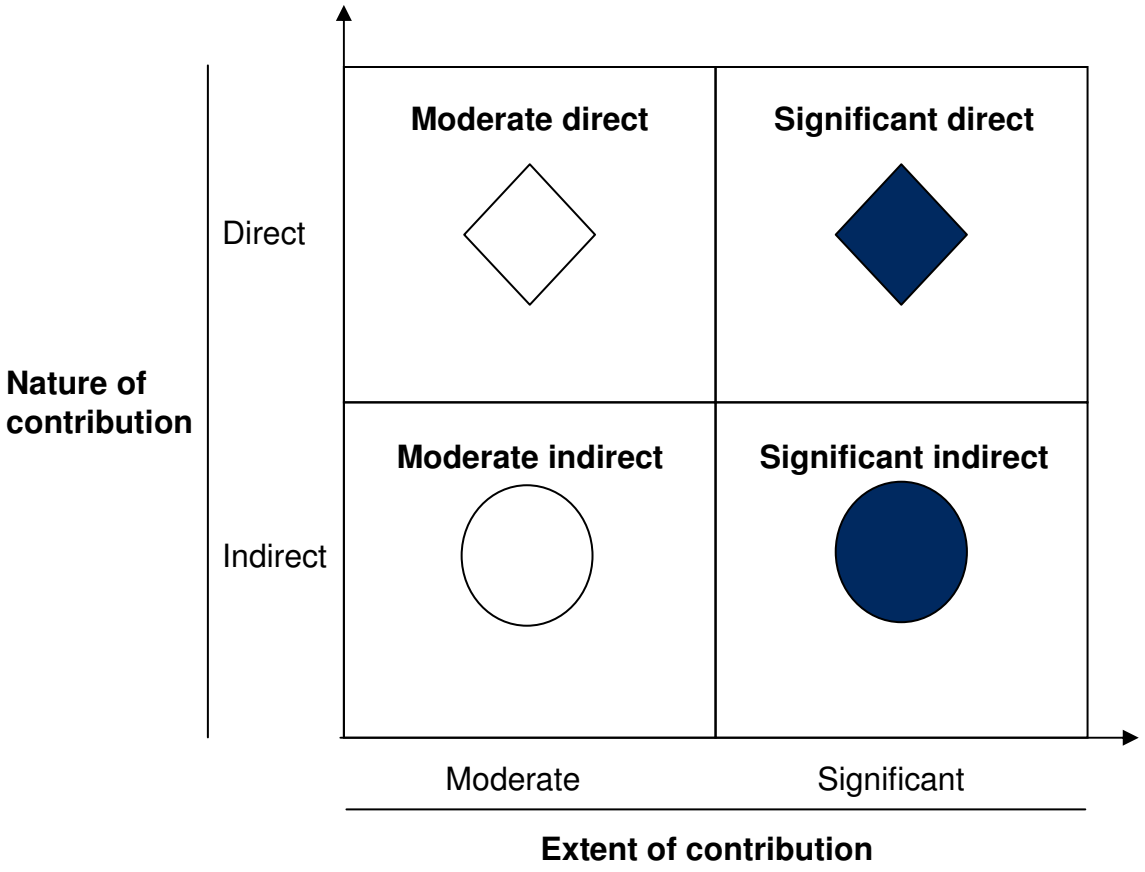
Name of TB control driver

There was no change in driver

The initial state of driver unknown

4 AND FINALLY, WE CLASSIFIED PARTNERSHIP CONTRIBUTION TO THE CHANGE IN DRIVERS IN 4 WAYS DEPENDING ON THE NATURE AND EXTENT OF CONTRIBUTION

Different types of Partnership contribution*



Definitions

Direct contribution

- Direct contribution to country/ appropriate officials, e.g., GDF drugs delivered, TB ambassador meetings with head of state
- Contributed by
  - Partnership body or mechanism, e.g., GDF, GLC, Working Group,
  - Partnership Partner, at Partnership request, e.g., ISAC, specific technical assistance, etc.

Indirect contribution

- Contribution resulting from global/general Partnership advocacy and/or guidance documents
- Second-order consequence of another *direct* Partnership contribution, e.g., Partners' Forum increased levels (direct contribution) which were used to increase access to diagnostics (indirect contribution)

* "N/A" is assigned when there was no change in driver; "No/minimal contribution" is assigned when Partnership has had minimal contribution to change in driver; "?" is assigned when Partnership contribution was unclear

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EXECUTIVE SUMMARY

- Burkina Faso had ~3,800 new TB cases diagnosed in 2007 and ~6,000 patients under treatment. Detection levels are low at ~20-25% of WHO estimated incidence of ~200 TB cases per 100,000 population. The TB program was established in 1995. MDR levels in Burkina Faso remain poorly understood due to lack of systematic DST capabilities while TB/HIV co-infection is estimated at 30%

- In the period 2001–06, Burkina Faso made progress in its TB control program
  - DOTS coverage has held at 100%, case detection rates increased to 22% (from 17% in 2001), and treatment success rates increased to 72% (from 60% in 2001)
  - These improvements arise from increase and decentralization of detection and treatment facilities. Additional training of healthcare staff and nutrimental support of patients have improved success rates
  - Improvements were supported by >300% increased funding from GFATM, other partners, and GDF

- The contribution of Partnership has primarily been through technical assistance (support in grant writing, program design, etc.), the support of GDF for first line drugs, and the recent “pilot” approval by GLC for second line drugs

- There are several examples of TB control in Burkina Faso that could be applicable in other countries
  - A strong centralized procurement system that has prevented any TB drug stock-outs since the late 1990’s
  - Leveraging community associations already working in HIV/AIDS for TB outreach and advocacy
  - Collaboration to develop joint strategy between NTP and HIV/AIDS program in country

- The biggest challenges facing TB control in Burkina Faso in 2006 are to improve indications of disease control, especially detection rates, and to implement systematic MDR testing. The MoH/NTP plan is to establish a culturing facility with GFATM funds

- Interviewees suggest that going forward, Partnership could contribute to TB control in Burkina Faso by
  - Providing technical assistance to evaluate barriers of improving TB indicators and designing implementable programs once barriers are identified
  - Increasing mobilization for systematic evaluation and treatment of MDR

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OVERVIEW OF TB CONTROL IN BURKINA FASO

Burkina Faso has ~3,800 new TB cases diagnosed in 2007 and ~6,000 patients under treatment. Detection levels are low at ~20-25% of WHO estimated incidence of ~200 TB cases per 100,000 population. TB program was established in 1995. MDR levels in Burkina Faso remain poorly understood due to lack of systematic DST capabilities while 30% of TB patients are also HIV+

Nature of TB care in NTP

- DOTS
  - 8-month regime (going to 6 months in 2008) with first 2 months observed daily at TB centers, community clinics, etc.
  - Use 4-FDC for 2 months then 2-FDC for 4–6 months
  - Detection and treatment free to all smear positive patients
- MDR
  - Track “chronic” cases but no standard culturing to identify MDR cases and second line drugs not standard supply
  - University of Brescia started MDR identification program
- TB-HIV
  - Concerted policy for TB-HIV in 2006 for standard cross-monitoring (TB program ahead in adopting this standard)

Nature of the TB control program

- Strong national TB program (goes by PNT, PNLAT, or PNAT) since 1995 covering
  - Implement treatment standards including DOTS approach
  - Establish “Centers for Detection and Treatment”
  - Provide free first line drugs (procured by CAMEG and GDF)
- TB care is integrated; personnel and facilities used in TB also provide many other medical treatment
- TB program structure (roles and responsibilities defined at central, district and community levels) is among strongest in country, so HIV/AIDS program is leveraging TB structure
- Very small non-government TB efforts since free TB drugs only offered through government program

Key partners involved

- WHO has strong presence in country with 1 dedicated TB point person
- Primary bilateral funding partners in TB include France, Denmark, Netherlands, and Italy which contribute to a common flexible fund accounting for ~20% of health budget
- GFATM (Rd 4 award 2005 onwards)
- GDF grant since 2005 supply between 40-60% of TB drugs
- GLC just approved for 2008 second line drugs for 50 “MDR”* cases (exception made by GLC not confirmed by DST)
- The Union (French section) provides technical assistance and support for a few delegates per year to attend conference

Other points of interest

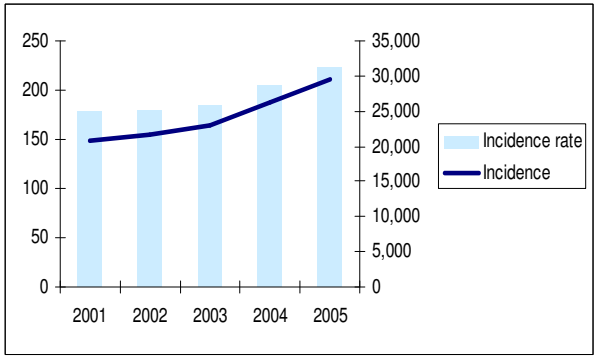
- Despite long-standing and structured TB program (i.e., well executed DOTS, advocacy, consistent drug supply, etc.), detection rate remains very low
- CAMEG supplies Burkina Faso with all generic drugs, medical consumables and some specialty products
  - Established in 1995 and considered an effective system
  - GDF currently considering options to align processes
- Highly collaborative among multiple partners and government departments (readily discuss and co-develop plans)
- PAMAC** coordinates local associations for HIV/AIDS and TB related activities

* MDR cases not confirmed by DST

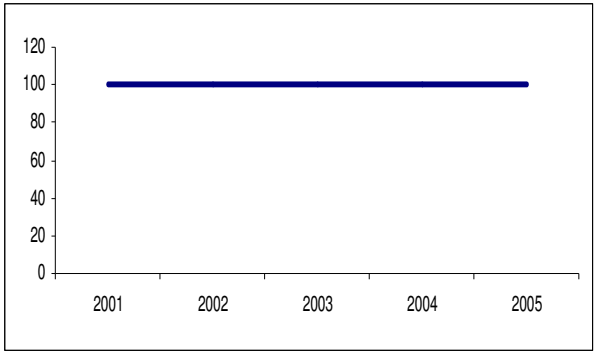
** PAMAC: national program to established with HIV/AIDS program for coordinating community association activities

OVERVIEW OF KEY TB METRICS IN BURKINA (FROM WHO GLOBAL TB DATABASE)

TB incidence (total and per 100,000)



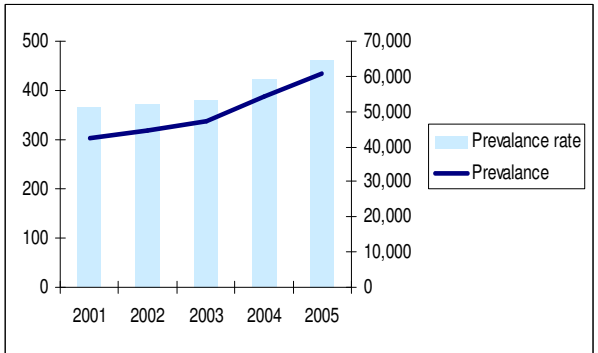
DOTS coverage %



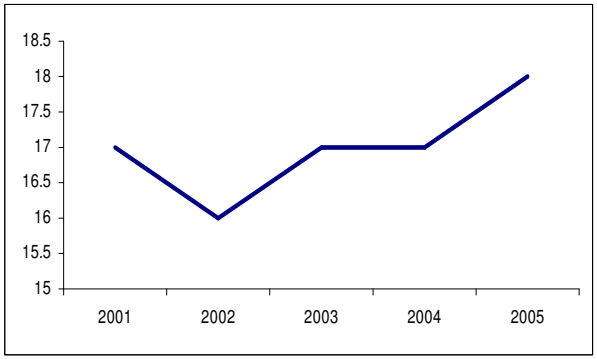
DOTS coverage %

- Growing concern as treatment failures increase from 2.5% to 7.0% in 2000-05
- No in-country systematic DST/culturing or program for culturing failed cases so MDR is not well understood
- University of Brescia is assessing TB in Burkina Faso currently (many samples tested are still sensitive to first line)
- NTP plans to establish culturing center with GFATM funds

Prevalence (total and per 100,000)



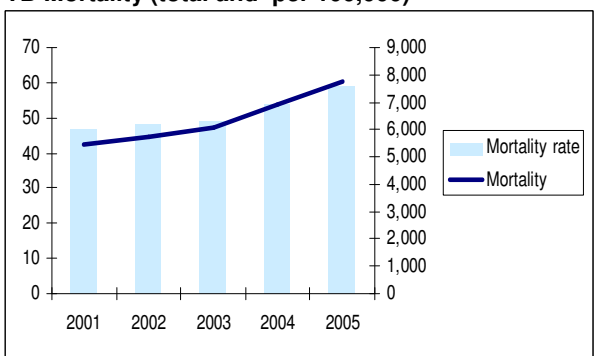
Case detection rate % (DOTS, SS+)



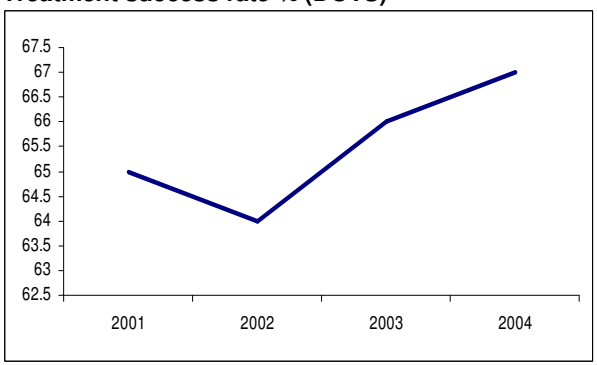
TB-HIV

- Study conducted indicates 30% of TB SS+ patients are co-infected with HIV (HIV+ rate in Burkina Faso estimated at 4.2%)
- ~70% TB patients are tested for HIV
- HIV/AIDS program in Burkina Faso is more nascent compared to TB
- Developed a concerted strategic plan within MoH to address co-infection
- Have begun actively monitoring TB in HIV+ patients

TB Mortality (total and per 100,000)



Treatment success rate % (DOTS)



Comments/concerns about data

- Low case detection rate continues to be poorly understood
- Treatment failures that are still drug sensitive raise concerns about robustness of DOTS programs

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EVOLUTION OF KEY DRIVERS OF TB CONTROL IN BURKINA FASO AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
① **Sustained funding and resource mobilization for NTP (excluding MDR)**	→	• $1m government funding in 2001 • $0.3m from partners in 2001	• $1.1m government funding in 2005 • $0.7m from partners in 2005 • $43.2m GFATM Rd 4 disbursement • First year of GDF grant (in kind for 30-60% of treatments over 3 years)	**Moderate direct** • GDF grant 2005-08 for 30-60% of treatments **Significant indirect** • WHO assistance in securing GFATM Rd 4 grant in TB with application aligned to Global Plan
② **Access to quality care for drug-sensitive TB**				
• Convenient access to TB centers	→	• TB at district hospital level – distance major obstacle for access	• Expand to 81 CDTs • Detection and DOTS at community level • Dispersed rural population continues to face access challenges	**No/minimal contribution** • Mostly driven by government focus on decentralization
• Availability of high-quality first-line drugs in NTP centers	→	• MoH provision of free drugs for identified TB since 1995 • Consistent supply of FDCs and single drugs • Centralized access	• Supplementary drugs from GDF for increased cases • Stock of 3 months based on total cases • Decentralized to reach rural areas	**Moderate direct** • GDF grant allowed for additional funds/resources to be used for increasing stock amounts
• Availability of high-quality SS+ diagnostics (e.g., microscopes, reagents) in NTP centers	→	• Available at central/ urban area medical facilities	• Supplies adequate and consistent across NTP	**Moderate indirect** • Securing GFATM funding by aligning to Global Plan allowed for funds for more supplies
• Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers	→	• None for TB		**No/minimal contribution**
• Access to trained staff	→	• Trained staff at district hospital level	• Training of staff in centers up to the community level	**No/minimal contribution**

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN BURKINA FASO AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
② **Access to . . . (cont. . .)** • Involvement of the non-NTP sector in provision of TB cared		• Small programs of faith-based organizations treating TB	• Small programs of faith-based organizations treating TB	**N/A**
③ **ACSM**		• NTP and faith-based organizations	• Increased cross-ministerial involvement • PAMAC (civil society associations) in TB since 2005 • NGOs working in HIV/AIDS starting TB efforts	**No/minimal contribution**
④ **Coordination**		• NTP established from 1995 has overall responsibility and visibility into program	• NTP collaborates with multiple agencies to have increased visibility into overall TB landscape	**No/minimal contribution**
⑤ **Performance management**		• Some target setting, monitoring, and evaluation but no clear plan or follow-through on reaching targets	• Increased accountability due to needs to reach targets for continued grants from GFATM, GDF, etc.	**Moderate direct** • GDF annual evaluation increases impetus to reach goals and provides suggestions to improve
⑥ **Contribution of TB to other disease programs**		• Separate TB program with minimal influence on other programs	• Increase staff levels and training who also provide non-TB care • Investments in centers, labs, and equipments • Provides foundation for some HIV/AIDS programs	**No/minimal contribution** • Government increased view on importance of multi-sectoral approach and health system strengthening

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN BURKINA FASO AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
⑦ **Holistic patient approach**	→	• No/minimal consideration of patients' rights and beyond	• Community TB sensitivity and support training • Nutrimental support for TB patients	**Moderate indirect** • Encouraged by partners to follow STB strategy • Technical assistance in program design
⑧ **TB-HIV** • Coordination and collaboration between TB and HIV communities	→	• No interaction	• Recently developed guidelines for cross-testing, counseling, and treatment • Initiated across national programs – not all other programs coordinated	**Moderate indirect** • WHO, Union, global community emphasis on co-infection
• Access to ARVs	→	• No coordinated treatment	• ARVs available to all TB+ patients	**Moderate indirect** • WHO, Union, global community emphasis on co-infection
⑨ **MDR-TB** • Sustained funding and resource mobilization for NTP (excluding regular TB)	▲	• No visible funding for MDR-TB control	• No visible funding for MDR-TB control • Will apply GFATM Rd 8	**N/A**
• Convenient access to TB centers with MDR capability	▲	• No/minimal access to TB centers with MDR-TB capabilities	• No/minimal access to TB centers with MDR-TB capabilities	
• Access to high-quality second-line drugs in NTP centers	▲	• No or very limited supply	• GLC approved drugs for 50 cases (10 paid by MoH, 40 by GFATM)	**N/A** • GLC approved second line drug "pilot" as an exception (since no DST)
• Access to MDR-TB diagnosis (DST and culture)	→	• No DST capabilities	• University of Brescia research efforts • Plans to establish testing center	**No or minimal contribution**
• Access to trained MDR-TB staff	▲	• No staff trained	• Minimal staff with capabilities (if any, only at National Lab)	**N/A**

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EXAMPLES OF GOOD PRACTICE FROM BURKINA FASO

- Good practice examples include
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

Driver of TB control	Example
② **Access to quality care for drug-sensitive TB** • Availability of high-quality first-line drugs in NTP centers	• National procurement system (CAMEG) provides – Steady supply of high quality TB drugs and medical supplies – Rigorous tender process, access to low prices, quality assurance for drugs, further quality testing within NTP
③ **ACSM**	• PAMAC leverages >170 community associations and coordination mechanisms (between associations and government health system/personnel) established for HIV/AIDS to apply to TB
⑧ **TB-HIV** • Coordination and collaboration between TB and HIV communities • Access to ARVs	• Strength of TB/HIV coordinated testing/treatment approach driven from TB program side of collaboration

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RECOMMENDATIONS TO PARTNERSHIP BASED ON BURKINA FASO VISIT FINDINGS

Driver of TB control	Recommendations based on 2001–06 involvement	Recommendations based on future needs
1 **Sustained funding and resource mobilization for NTP (excluding MDP)**	• Overall level of TB funding by government of Burkina Faso appeared to have not changed	• Mobilize and coordinate more for funding of TB control – MDR detection (DST), second line drugs – Coordination with GFATM who is primary TB funder
2 **Access to quality care for drug-sensitive TB** • Availability of high-quality first-line drugs in NTP centers	• GDF providing additional support for first-line drugs above MoH support	• Find means to work with country procurement systems – Strengthens country system – Reduces interfaces (new agent for GDF each year) – Eases entry into country of TB drugs
	• Increased to 81 CDTs from largely centralized access • Minimal involvement still of non-NTP	• Encourage more NGOs to get involved with supporting TB program in Burkina Faso, especially those working in more rural areas
5 **Performance management**	• Despite long-standing program, case detection rate remains low	• Develop means to better understand case detection rates
8 **TB-HIV** • Coordination and collaboration between TB and HIV communities • Access to ARVs		• Catalyze harmonization of TB and HIV/AIDS treatment protocols (DOTS vs. monitoring of ARV treatment) at international level
9 **MDR-TB** • Sustained funding and resource mobilization for NTP (excluding regular TB)	• Limited understanding of MDR situation in country due to lack of DST/ culturing facilities and systematic program	• Increase attention of funding partners and country for MDR detection and treatment resource mobilization

CASE STUDY – GDF COULD BETTER ALIGN WITH BURKINA FASO'S NATIONAL DRUG AND MEDICAL SUPPLY PROCUREMENT SYSTEM, CAMEG

Prequalification	Vendor selection	Receipt of products	Distribution	Review and planning
• International solicitation for qualified suppliers – Able to provide at 25 products – On-site pharmacist – Adequate stock space – Record of delivery, quality, etc.	• Pre-qualified vendors place tenders for lots of products requested • Selection based on price but also delivery terms, track record (no recalls, etc.)	• Products delivered by suppliers to Ouagadougou (pricing includes delivery) • Store 40 receives products and performs quality testing	• Central Store receives tested products • Regions pick up supplies • Districts pick up supplies from regional depots	• Review of procured prices against UNICEF/WHO benchmarks • Budget and plan for next years necessary products • Publication of prequalification and tender documents

GDF does not currently have process to for its agents to "prequalify" or submit tender to CAMEG

Problems have arisen with GDF agent's customs paperwork and duties to be paid – GDF review requested support from CAMEG

GDF drug delivery must currently must be coordinated and received by NTP

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INTERVIEW AGENDA FROM BURKINA FASO COUNTRY VISIT

Date	Meeting	Interviewees
October 16, 2007	• WHO TB point person • Coordinating team from PNT	• D.E. Traore • M. Dembele • V. Bomkoungou • O. Dieudonnee • A. Yombi • T. Saouaitogo • C. Ki
	• Director of CMLS	• J. Sanou
	• Coordinator of CNLS/GF Program Director	• W. Traore
	• Director of PAMAC – TB Program	• TBD
October 17, 2007	• CAMEG – Director of purchasing and logistics	• K. Kabore
	• CDT Sector 30	• N. Zioui • M. Ouedraogo • F. Ouedraogo • A. Doye
	• Coordinator of PADS	• Z. Balima
	• WHO – Representative	• A. Baba-Moussa
October 18, 2007	• Agence FranÇaise • Médecins Sans Frontiéres • Coordinating team from PNT – debriefing session	• R. Cazal-Gamelsy • D. Georene • Same as above

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EXECUTIVE SUMMARY

- China is the second highest TB burden country in the world after India with ~1.3 million new TB cases per year in 2005, which corresponds to ~100 TB cases per 100,000 population. The country has the highest estimated MDR burden in the world with ~140,000 cases estimated in 2007–08. WHO estimates TB-HIV burden at 0.4 per 100,000 in 2005

- In the period 2001–06 China made substantial progress in DOTS implementation
  - DOTS coverage reached 100% (from 68% in 2001), case detection rates increased to 80% (from 31% in 2001), and treatment success rates remained over 90% as the program expanded
  - To achieve this, stringent targets were set and monitored staff were trained, and access to free diagnosis and care was expanded to smear negative cases
  - Improvements were supported by increases in government funding from $8 million in 2003 to $68 million in 2006

- The contribution of Partnership has primarily been through the Partnership Partners' Forum in Delhi in 2004, where the Vice Minister of Health committed to meeting global targets. Subsequently, increased government commitment translated into more funding and better monitoring for TB control in China

- There are several examples of TB control in China that could be applicable in other countries
  - An Internet-based reporting system that allows tracking of referrals from the non-NTP sector
  - The policy of not providing TB care in the non-NTP sector rather than trying to involve them in provision
  - Use of a cascaded system of targets and close monitoring to rapidly improve results

- The biggest challenges facing TB control in China in 2006 are providing care to migrant populations and developing a treatment strategy and program for MDR TB. The MoH is currently conducting a nation wide drug resistance survey to understand the size of the problem while isolated treatment pilots are being conducted

- Interviewees suggest that going forward, Partnership can contribute to TB control in China by
  - Continuing to monitor and publicize China's progress especially in the areas of MDR-TB and TB-HIV, and celebrating the country's success in DOTS implementation
  - Coordinating appropriate technical support and access to high quality drugs to roll out MDR programs

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OVERVIEW OF TB CONTROL IN CHINA

With ~1.3 million new TB cases per year, which corresponds to ~100 TB cases per 100,000 population, China is the second highest TB burden country in the world after India. Country reached global targets for case detection and treatment success rates in 2005. China has the highest estimated MDR burden in the world* with ~140,000 cases estimated in 2007–08. WHO estimates TB-HIV burden at 0.4 per 100,000 in 2005

Nature of TB care in NTP

- DOTS
  - 6-8 month standard regime
  - DOT primarily through village doctors; family members and elderly involved in some cases with training
  - Aim for 100% of TB cases referred to the TB program from all health care providers (referral from non-TB facilities and contribute to 30% of case detection
  - Diagnosis and treatment free for smear positive and smear negative cases
- MDR
  - No programmatic management of MDR within NTP
- TB-HIV
  - No regular cross-testing, no treatment policy

Nature of the TB control program

- Vertical TB program NCTB (National Center for Tuberculosis Prevention and Control) within the CDC (Center for Disease Control and Prevention)
  - NCTB responsible for strategy setting and guidelines also other responsibilities . . .
  - Drug procurement transferred to provinces
- CDC-operated TB dispensaries go to the provincial and county level – depending on size, could be exclusively for TB or shared with other communicable diseases
- The hospital system (private sector equivalent) is required to refer all TB suspects to the CDC, and
- All non-TB facilities are required to notify TB suspects through the internet-based reporting system

Key partners involved

- MoH/NTP leads and coordinates TB efforts
- WHO provides technical assistance, e.g., to formulate policy, contribute to capacity building, help with GFATM applications and implementation as requested by the NTP
- Damien Foundation is the only international NGO operating in TB control – basic DOTS, now also started MDR-TB pilot projects in 3 provinces
- GLC approved 354 second-line treatments
- DFID and World Bank jointly involved in funding of TB control in 16 provinces. Support will end by 2009

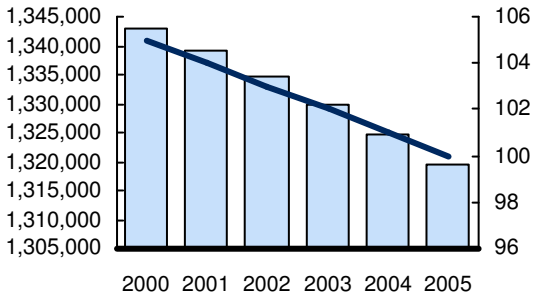
Other points of interest

- Vice Minister of Health attended the Partners' Forum in Delhi in 2004 – committed to meeting global targets by end of 2005 which is one of the key drivers of jump in DOTS implementation (see case study on last slide)
- World Bank estimates that 44% of Chinese TB program is financed through international sources (2006)
- In 2003, China introduced an internet-based reporting system for communicable diseases – Hospitals and CDC centers down to county level are equipped with this capability
- Although TB diagnosis and treatment are free in the CDC system, some patients are charged for additional tests or side effect drugs

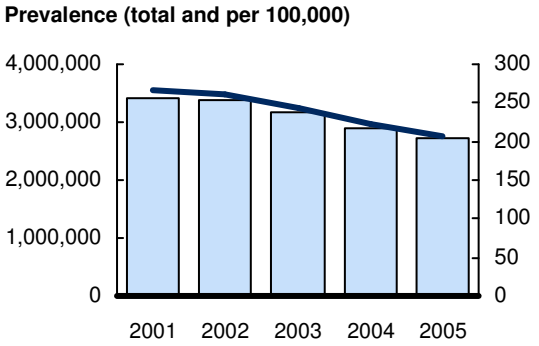
Source: The MDR-TB/XDR-TB Response Plan 2007–08

OVERVIEW OF TB METRICS IN CHINA (FROM WHO GLOBAL TB DATABASE)

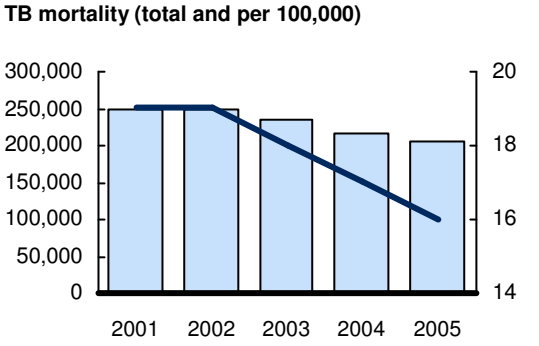
TB incidence (total and per 100,000)



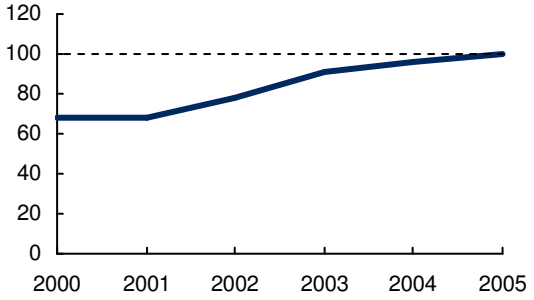
Prevalence (total and per 100,000)



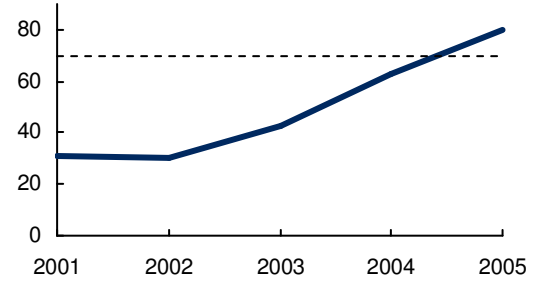
TB mortality (total and per 100,000)



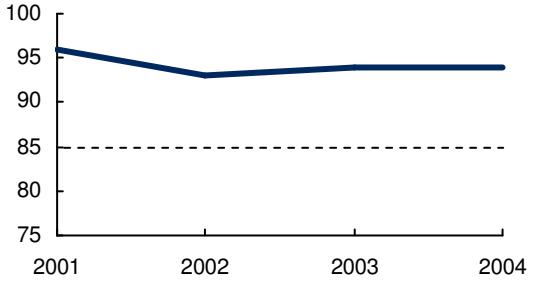
DOTS coverage %



Case detection rate % (DOTS, SS+)



Treatment success rate % (DOTS)



MDR-TB

- The MDR/XDR Global Response Plan estimated China's burden at ~140,000 cases in 2007–08, which corresponds to 8.9% of total TB cases
- The MoH is conducting a national drug resistance survey during 2007/2008
- GLC has approved 354 treatments for MDR-TB patients in 2007
- GFATM pilots (Rd 5 – 4,700 patients)
- The Damien Foundation is running pilot MDR projects in 3 provinces

TB-HIV

- WHO estimates the TB-HIV incidence at 3,864 cases (2005), or 0.4 cases per 100,000
- Local Global Fund projects in 14 provinces recently started

Comments/concerns about data

- Some concern raised by international community of over reporting of TB metrics
- Some concern raised by the international community that TB-HIV co-infection may be underreported

Source: WHO Global TB database; country interviews

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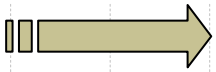
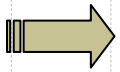
EVOLUTION OF KEY DRIVERS OF TB CONTROL IN CHINA AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**		• Government funding in 2003 – $5.3* million central government funding – $2.7 million local government funding • GFATM funding in 2003 was $27.5 million • JICA and World Bank financing	• Government funding in 2006 – $53 million central government funding – $15.7 million local government funding • GFATM funding in 2006 increased to $43.4 million • 44% of total cost financed through int. donors (WB, 2006) • ~$40 million funding gap in 2006–07 • Government pays for first-line drugs	**Significant direct** • Vice Minister's attendance to the Partners' Forum in Delhi in 2004 was one of key drivers of the ten-fold increase in the central government funding for TB Control
2 **Access to quality care for drug-sensitive TB** • Convenient access to TB centers		• DOTS not across entire country	• Expansion of DOTS to non-DOTS centers • 90% of migrant workers also have access to TB care	**Significant indirect** • Increased government commitment post-PF led to the expansion of TB care coverage
• Availability of high-quality fist-line drugs in NTP centers		• Access to first-line drugs for SS+ cases	• Access to first line drugs for all SS+; for only 50% SS- cases • Quality concerns: high incidence of side effects • Procurement at the provincial level leads to varying standards, e.g., some provinces buy FDCs	**Significant indirect** • Increased government commitment post-PF led to – Extension of free drugs program to SS- cases – Central government funding of first-line TB drugs
• Availability of high-quality SS+ diagnostics (e.g., microscopes, re-agents) in NTP centers		• Rechecking of all SS+, 10% SS-	• Introduced EQA in 2003 • Concerns expressed by the NCTB about quality in recently expanded areas	**No//minimal contribution**

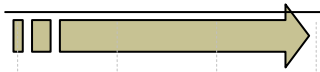
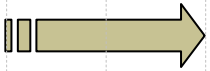
* RMB conversion based on current exchange rate

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN CHINA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

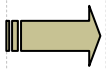
Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
2 Access to quality care for drug- sensitive TB (continued)				
• Availability of high-quality first line SS- diagnostics* (X-ray, culture) in NTP centers		• No EQA system	• Introduced EQA, 2003 • Concerns expressed by the NCTB about quality in recently expanded areas	**Significant indirect** • Increased government commitment post-PF contributed to rising levels of trained staff, as well as to the introduction of an EQA system
• Access to trained staff		• Trained staff at more central levels	• Training of TB staff in centers and village doctors • Increased staff levels, e.g., 20% increase in Henan	
• Involvement of the non-NTP sector in provision, of TB care		• ?	• High referral rate from the hospital sector into NTP • Hospital system enrolled on the internet-based reporting system • Pilot projects to introduce DOTS in non-NTP sector • Education, justice involved in yearly planning sessions in provinces	**No//minimal contribution**
3 ACSM		• TB control strictly a MoH effort • Damien Foundation involved in several provinces	• Involvement of education sector – Part of planning and strategy; classes • Involvement of Women's Federation • Continued Damien involvement in 3 provinces	**No//minimal contribution** • Setting the topic for World TB Day (funding provided by the central and/or local CDC)
4 Coordination		• No visibility or direction to TB-related activities in the country	• Provincial and prefatory level have leading groups (education, prisons, health, communication, pharmaceutical)	**No//minimal contribution**

* The government program provides free access to smear microscopy, X-ray and drugs for each patient

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN CHINA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
5 **Performance management**		• No real targets for the TB program; weak monitoring and evaluation process	• Full accountability for meeting global targets at all levels • Internet-based reporting system • System of administrative awards and sanctions	**Significant direct** • After attending the Partnership Partners' Forum, the Vice Minister of Health committed to meeting Global Plan targets by 2005 and put in place a system of accountability for monitoring progress towards them
6 **Contribution of TB to other disease programs**		• Separate vertical TB program with no influence on other programs		**N/A**
7 **Holistic patient approach**		• ?	• Limited attention to broader needs of patients beyond diagnosis and care	**N/A**
8 **TB-HIV** • Coordination and collaboration between TB and HIV communities		• No interaction	• GFATM (Rd 5) projects in 14 pilot provinces	**Moderate indirect** • In line with global Partnership advocacy on TB-HIV, WHO encouraged Chinese NTP to include the TB-HIV components in the GFATM grant application
• Access to ARVs		• ?	• ?	• N/A

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN CHINA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
9 MDR-TB				
– Sustained funding and resource mobilization for NTP (excluding regular TB)		• No visible funding for MDR-TB control	• Second-line treatment is still not part of the NTP budget	**N/A**
– Convenient access to TB centers with MDR capability		• No/minimal access to TB centers with MDR-TB capabilities	• Establishing MDR-TB centers in pilot provinces alleviated the distance problem in these provinces • However, overall access to MDR-TB diagnosis and care remains difficult	**N/A**
– Access to high-quality second-line drugs in NTP centers		• No or very limited supply	• GLC approved GFATM round 5 projects will start in 2008 in 4 provinces • Damien Foundation running pilot projects* • Provisional agreement by National Drug Administration to allow import of unregistered products** in framework of GLC/GFATM	**Moderate direct** • GLC approved GFATM projects for supply of high-quality second-line drugs • WHO supported Chinese NTP in GFATM applications
– Access to MDR-TB diagnosis (DST and culture)		• No DST capabilities	• Establishing DST capabilities in provinces, provincial and national reference laboratories, e.g., Henan has 14 prefectures with DST capabilities	**Moderate indirect** • General Partnership advocacy encouraged Chinese government to act on MDR-TB
– Access to trained MDR staff		• ?	• Staff levels are insufficient for a potential rollout	• N/A

* Damien Foundation is using locally procured second line drugs but testing for bio-equivalence
** Not normally possible to import drugs into China. External suppliers not registered and products do not receive customs clearance

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EXAMPLES OF GOOD PRACTICE FROM CHINA

- **Good practice examples include**
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

Drivers of TB control	Example
① **Sustained funding and resource mobilization for NTP (excluding MDR)**	• Delhi Partners' Forum increased government commitment to TB control*
② **Access to quality care for drug-sensitive TB**	• The NTP has rapidly ramped up DOTS implementation following increase in government commitment • Country met global TB control targets in 2005
⑤ **Performance management**	• To improve performance management, the MoH and NCTB have implemented – An internet-based reporting system – Administrative awards/sanction system

* See case study for details on increased government commitment in China

CASE STUDY – INCREASED GOVERNMENT COMMITMENT FOLLOWING THE PARTNERS' FORUM IN DELHI HAS BEEN ONE OF THE KEY BOOSTERS OF DOTS IMPLEMENTATION

Partnership contribution

Vice Minister of Health committed to meeting TB control targets in the Partners' Forum in Delhi

SARS epidemic in 2003 exposed weakness of the public health system

Sustained economic development increased funds for health care

Chinese people started demanding better health care services as they became wealthier

Increased government commitment to the control in China after 2004

Indicators of increased government commitment

Increase in Funding

- Central government funding has increased from 4 million RMB to 40 million RMB between 2003 and 2006
- Local government funding has increased from 2 million RMB to 12 million RMB in the same period

New Policies

TB is set as one of objectives of the national 5-year plan

- Policies have been put in place that held the health care staff at all levels responsible for meeting the case detection and treatment success rate targets of the Global Plan
  - Extension of free treatment to smear negative and migrants (2006)
  - Requirements for regions to come up with plans to meet targets
  - Decentralization of **drug procurement**

Setting and monitoring of Targets

- TB control targets have been distributed and displayed publicly in CDC centers
- Awards and sanctions (e.g., changes to salary) have been introduced
- Internet-based reporting system established to facilitate patient reporting and tracing (2003)

Results of increased government commitment

- China has met TB control plan targets as of 2005 with
  - Case detection rates rising from 45% in 2003 to 80% in 2006
  - Treatment success rates remaining over 90% since 2003
- Referral and reporting rate from the hospital system increased (~100% in the Henan province)
- Awareness regarding TB and the TB control program has increased in the Chinese society
- The national program started expanding into MDR-TB and TB-HIV projects, with Rd 5 Global Fund applications
- New legislation on TB control has been drafted; proposal drafted to limit movement of MDR-TB cases

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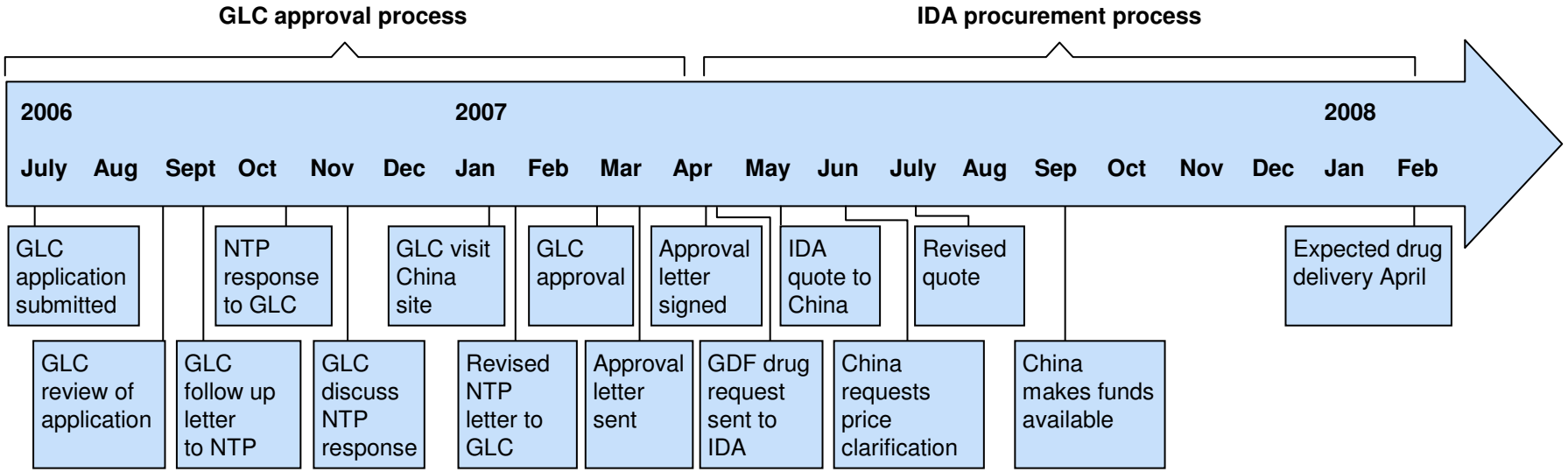
RECOMMENDATIONS TO THE PARTNERSHIP BASED ON CHINA VISIT FINDINGS

Driver	Recommendations based on 2001–06 involvement	Recommendations based on future needs
③ **ACSM**		• Support NTP in increasing NGO and wider community involvement in TB care
⑧ **TB-HIV**		• Encourage/support the NTP to establish surveillance for Tb/HIV
⑨ **MDR-TB**	• Partnership needs to better communicate the GLC process to countries including price of drugs, and expected timing of the procurement process*	• Continue to encourage government to react to MDR-TB through – Following up on the 2007 resistance survey to encourage timely and effective completion – Taking the necessary steps in MDR-TB control as they emerge from the survey – Continue publicizing China's progress in MDR: similar to what was done for DOTS implementation in the Partners' Forum in 2004 • Consider GLC approach to countries with high estimated MDR-TB burden, i.e., should the GLC be proactive in reaching out to these countries? • Identify mechanisms for supporting the training of MDR-TB staff for future scale up DOTS+

* See case study for details of GLC involvement in China

CHINA'S EXPERIENCE WITH GLC AND EMERGING RECOMMENDATIONS



The GLC application process

- Process between the first application and signing the agreement took ~9 months (July 2006-April 2007)

The IDA procurement process

- Process from the day drugs were requested to delivery took ~11 months (April 2007-April 2008 (expected))
- The primary reasons for the delay were
  - Different price quotes of Amikacin in initial application ($0.24 per injection), and the IDA quote at later stage ($7.322 pi)*
  - Gaining approval from government authorities to import drugs

- Partnership should consider how to speed up GLC approval process
  - China felt that they would have benefited from more technical assistance during the application process**
- There is a need to better inform the countries on
  - The fact that price quotes are subject to change along during the application process
  - The estimated duration of the application and procurement processes

* The initial price quote ($0.24 pi) was from a supplier that was not yet prequalified by the WHO
** Chinese officials are concerned about future funding as delays in spending GFATM money can lead to disadvantages for fund applicants

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CHINA COUNTRY VISIT – INTERVIEW LIST

Organization	Role	Name
National Center for TB Control and Prevention	Director	Wang Li Xia
Henan CDC, Institute for TB Control and Prevention	Chief Physician	Zu Jiying
MoH Department for International Cooperation	Consultant	Ding Baoguo
MoH Division of TB Control		Liu Haitao
MoH Division of TB Control	Director	Wan Liya
Henan CDC	Chief Doctor, Associate Director	Zhang Gengrang
Henan/Kaifeng and county visit		Multiple representatives/leaders
WHO	Medical Officer STB	Cornelia Hennig
Damien Foundation	Chief Representative	Alex Jaucot
UNOPS (CFA GFATM)	Head	Xu Lingfeng
DFID	Health Sector Manager	Qiao Jianrong
DFID	Human Dev. Advisor	John Leigh
World Bank Beijing	Health Operations Officer	Shuo Zhang

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EXECUTIVE SUMMARY

- India is the highest TB burden country in the world with ~1.8 million new TB cases per year, which corresponds to ~168 TB cases per 100,000 population. India has the second highest estimated MDR burden in the world after China with ~87,000 cases estimated in 2004. WHO estimates TB-HIV burden at 6 per 100,000 in 2005

- In the period 2001–06 India made substantial progress in DOTS implementation
  - In 2006, DOTS coverage reached 100% (from 45% in 2001), case detection rates reached 66% (from 24% in 2001*), and treatment success rates reached 86%
  - The NTP program was expanded to all states with technical support of WHO, training and monitoring and supervision were improved

- In the later part of this period, India has started to tackle TB-HIV and MDR-TB, publishing guidelines, running pilots and raising funds for TB-HIV and MDR-TB program

- The contribution of the Stop STBP (Partnership) has primarily been through the GDF and through advocacy to increase awareness of the importance of TB control within India
  - GDF has ensured a reliable drug supply to the program through a combination of grant and emergency supply
  - The Partners' forum held in Delhi in 2004 mobilized political and donor support
  - Publication of India's performance in TB control helped maintain government focus on performance
  - Awarding the Kochon prize to Dr Chauhan (NTP) recognized his significant contribution and motivated NTP staff

- There are several examples of TB control in India that could be applicable in other countries
  - Rapid expansion of DOTS with help from a supporting technical partner
  - Existence of a Tuberculosis Research Center that conducts significant operational research and training
  - Performance management at a regional level with quarterly tracking and intervention

- The biggest challenges facing TB control in India in 2006 are
  - Insufficient involvement of the private sector (which treats up to 50% of TB cases)
  - Ensuring sufficient government funding for the program to reduce its considerable reliance on external donors establishing a nationwide network of 24 intermediate reference laboratories to undertake DST and culture for MDR-TB cases
  - Scaling up TB/HIV collaborative activities across a vast continent in which the HIV epidemiology is very heterogeneous

- India interviewees raised several suggestions for how the ST BP can contribute to better TB control in India, including
  - Addressing some of the operational difficulties encountered with ACSM guidance and GDF
  - Helping develop a national partnership
  - Developing a mechanism to provide targeted technical support that is project-based rather than mission based

* In the areas implementing DOTS in 2001, case detection rate was 56%

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OVERVIEW OF TB CONTROL IN INDIA

With ~1.8 million new TB cases per year, which corresponds to ~168 TB cases per 100,000 population, India is the highest TB burden country in the world. The DOTS program has been rapidly expanded and reached 100% coverage in 2006. India has the second highest estimated MDR-TB burden in the world with ~87,000 cases estimated in 2007–08. WHO estimates TB-HIV burden at 6 per 100,000 in 2005

Nature of TB care in NTP

- DOTS
  - 6-month regimen
  - No use of FDC*, uses innovative patient-wise drug boxes, with drugs in blister strips
  - DOTS 100% supervised throughout 6 months by a trained provider at a DOTS center
  - Diagnosis and treatment free for all patients
- MDR
  - 2 states will have MDR-TB run by NTP in 2007
- TB-HIV
  - Regular referral for cross-testing for HIV if risk factors detected
  - Collocation of HIV and TB facilities

Nature of the TB control program

- Central TB program RNTCP
  - Dedicated staff at central, state, district, and subdistrict level for supervision, monitoring, drug procurement and policy
- Majority of staff and infrastructure is provided in the state governments' general health services
- ~50% of care is provided in the private sector
  - TB alliance estimates that 74% of TB drugs by value are consumed in private sector and public sector services outside of the NTP

Key partners involved

- NTP leads and coordinates TB efforts
- WHO provides staff to central program office and to the districts (greater than 120 staff working in TB control). Fund external agency to perform drug management for program
- DFID funds 50% of drug supply
- World Bank loan funds ~50% of government funding
- Other international partners include GFATM, USAID, IUATLD

Other points of interest

- India has its own national Tuberculosis Research Center in Chennai** which
  - Conducts research into new diagnostics and treatments
  - Functions as a WHO SNRL and a national reference laboratory
  - Conducts operational research within a control population
  - Assists the training programs of the NTP

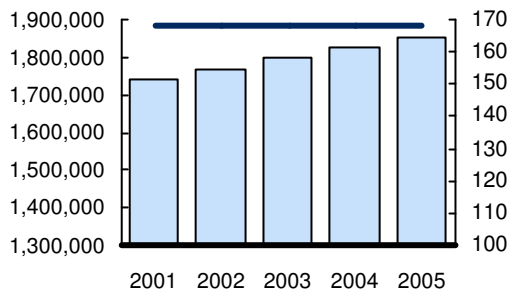
* India program feels current regime working well and FDR cannot be used on an alternate day basis

** In addition to the TRC there are two other national TB institutes in the country

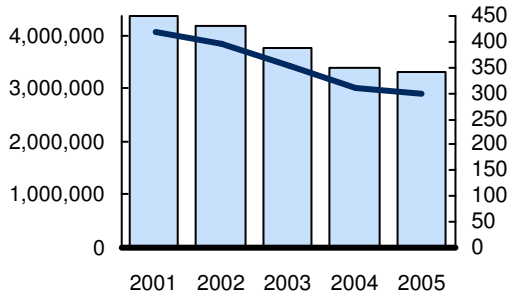
Source: The MDR-TB/XDR-TB Response Plan 2007-2008, WHO TB Control Report and Database

OVERVIEW OF KEY TB METRICS IN INDIA (FROM WHO GLOBAL TB DATABASE)

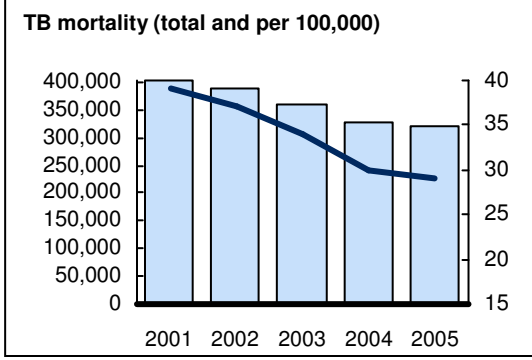
TB incidence (total and per 100,000)



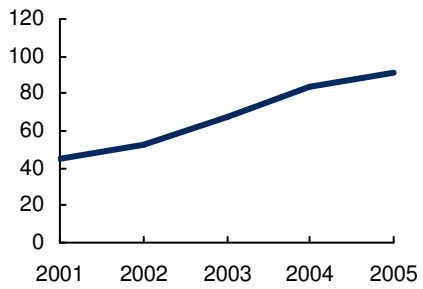
Prevalence (total and per 100,000)



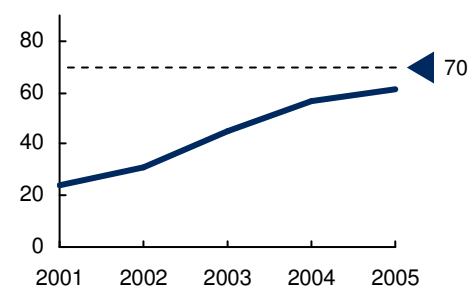
TB mortality (total and per 100,000)



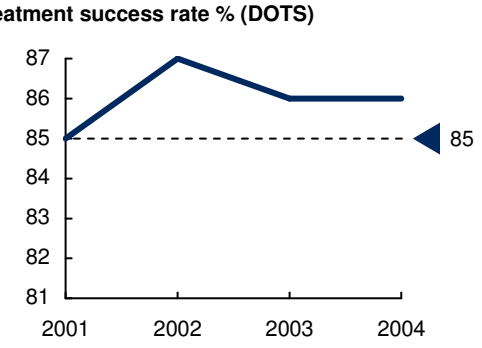
DOTS coverage %



Case detection rate % (DOTS, SS+)



Treatment success rate % (DOTS)



MDR-TB

- Second highest burden county after China with 87,413 estimated drug resistant cases in 2007–08. This corresponds to 4.1% of all TB cases
- 2 state-based surveys 2006/07 showed around 2-3% of TB cases were MDR amongst new smear positive PTB cases

TB-HIV

- Total TB-HIV incidence in 2005 is 65,845 or 6 cases per 100,000 population

Comments/concerns about data

- WHO believes that India has the highest standards of data availably globally
- Annual risk of TB infection survey conducted in 2000-03 will be repeated 2007-09
- Problems arise because of large migratory population meaning case detection can sometimes be >100%
- No national prevalence survey ever conducted but currently conducting a survey in 7 pilot areas that will be repeated in 2009
- No mortality survey ever conducted but currently conducting a survey that will be repeated in 2009

Source: WHO TB Control Report and Database*, MDR/XDR-TB response plan

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EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDIA AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**		• Government funding in 2002 $35 million (>50% World Bank Loan)	• Government funding $46 million in 2006 (including World Bank Loan renewed) • Funding for 50% drugs secured from DFID until 2010 (channelled through GDF) • GFATM funds • Increased political commitment from ministry of health to provide funding to program	**Significant direct** • New Delhi Partners' forum – Prime minister's attendance raised profile in govern-ment and • Made easier for NTP to obtain second round funding approval • Maintained separate funding for TB* – Raised profile of TB success and made it easier to renew WB loan • GDF grant 3 years, 2002–05
2 **Access to quality care for drug-sensitive TB** • Convenient access to TB center		• DOTS coverage <40%	• 100% DOTS coverage (2006) with – 1 microscopy center per 100,000 – Additional community based DOTS supervisors • Patients who have to travel by bus to center receive funds for bus ticket in some districts	**Moderate indirect** • Reliable drug supply through GDF allowed program to expand • Broadcasting of per-formance increased pressure on govern-ment and WHO to improve performance • Major direct driver was WHO technical support for expansion with expertise and personnel

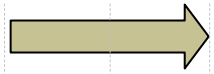
* as opposed to TB funding becoming part of rural health missions project

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDIA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
2 Access to quality care for drug-sensitive TB (continued.) • Availability of high-quality first-line drugs in NTP centers	→	• Drug supply was unreliable • Government experienced problems with tenders	• Reliable drug supply – 50% through GDF – 50% through local procurement • All patients can start treatment within 7 days	**Significant Direct** • GDF – 3-year grant from GDF, 2002–05 – Provision of drugs with DFID funding, 2005–10 – Delivered emergency supplies in 2004* – ''GDF at times has saved" this program's neck''
• Availability of high-quality SS+ diagnostics (e.g., microscopes, reagents) in NTP centers	→	• Restricted access to testing facilities • No external quality assessment (EQA) system	• 1 microscopy center per 100,000, (> 12,000 designated microscopy centers) 13 state level and 3 national referred labs • System for regular quality assessment operational including external validation since 2005	• No/minimal contribution
• Availability of high-quality SS-diagnostics* (x-ray, culture) in NTP centers	▲	• ?	• X-rays available outside of TB program; in some states provided free of charge	• ?
• Access to trained staff	→	• Inadequate staff training	• National training facility and curriculum based at TRC and 2 other nation TB reference centers • Trained more than 500,000 DOTS providers	• No/minimal contribution

* paid for by 5 different sources – GFATM, WHO, USAID, GDF, Indian government

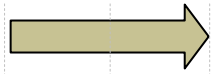
EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDIA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
2 **Access to quality care for drug-sensitive TB (continued.)** • Involvement of the non-NTP sector		• No involvement of non-NTP sector in DOTS provision	• NTP established framework through which private sector can become involved • NGOs accredited as providers of DOTS in community settings • Medical Colleges and other institutions (e.g., Army and railways) starting to adopt DOTS • Pilot projects for PPM across country including with the IMA	**Moderate direct** • New Delhi Partnership Forum and DEWG raised the importance of engaging private sector with NTP **Significant indirect** • WHO prioritized involvement of non- NTP in response to Global Plan and appointed 12 staff to increase levels of involvement
3 **ACSM**		• ?	• NTP developed a communications strategy and developed materials	**Moderate direct** • Guidelines published by ACSM working group helped to shape strategy • Partnership secretariat supported COMBI program but did not follow up with funding or evaluation • Sent a delegation called ACTION but misused WHO name to summon district meetings and upset state management
4 **Coordination**		• ?	• NTP with support of WHO coordinates most activities	• No/minimal contribution

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDIA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
5 **Performance management**		• ?	• NTP has strategic plan and targets • NTP conducts a quarterly evaluation of district and state detection and cure rates • Follow up with districts that do not perform well in evaluation and monitor them more intensely over course of following quarters	• Contribution unclear
6 **Contribution of TB to other disease programs**		• TB program integrated into state-based health facilities and budgets	• No change	• **No change in driver**
7 **Holistic patient approach**		• ?	• Attention to patients' rights to receive high-quality care conveniently, e.g., 10 minutes from home, no more than 10 minutes wait, able to sit down	• Contribution unclear

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDIA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
8 **TB-HIV** • Coordination and collaboration between TB and HIV communities		• No interaction	• HIV and TB programs remain as separate programs at national and state level • New HIV testing centers are being collocated with TB microscopy centers • 14 states nationally (expanding to remaining states) have intensified collaborative activities – Guidelines developed for management and treatment of HIV positive TB patients – Guidelines also in HIV program viewed as less standardized and less well implemented – TB patients with risk factors (opportunistic infection or drug use) referred for testing – Intensified TB case finding in ART and VCT centers	**Moderate indirect** • NTP encouraged by Partnership (via working group participation) to tackle TB HIV – "TB HIV was thrust upon the NTP by STBP in 2001; nothing happened till 2004 as no resources or will in country'' • Guidelines from STBP perceived by both WHO and NTP has not been applicable to Asia despite India's input and comments being provided to the development team
• Access to ARVs		• ?	• All TB patients found to be HIV positive are referred to their local ART center for assessment	• Contribution unclear

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDIA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
9 **MDR-TB** • Sustained funding and resource mobilization for NTP (excluding regular TB)	→	• No funding for MDR	• NTP starting to fund MDR treatments • GFATM funds secured for some states	• No/minimal contribution
• Convenient access to TB centers with MDR capability	▲	• Prior to 2006 states started tackling individually, e.g., Delhi drew up guidelines based on WHO policy and bought drugs itself	• 2006 national guidelines drawn up and standardized regime for DOTS-Plus agreed • 2007 starting to roll out DOTS-Plus as part of NTP (only 2 states currently) • 7 other states are starting programs funded with GFATM, USAID support via WHO	• **No change in driver**
• Access to high-quality second-line drugs in NTP centers	→	• No supply in NTP	• Drugs available within 2 pilot projects	**Moderate direct** • GLC/GDF mechanism used to supply drugs in pilots supported by GFATM
• Access to MDR-TB diagnosis (DST and culture)	→	• Limited DST in national labs	• Established DST capabilities in 2 state labs, with 11 others re-equipped	**No/minimal contribution**
• Access to trained MDR staff	→	• ?	• Trained staff for pilots in 2 states • Staff levels are insufficient for a potential rollout	**No/minimal contribution**

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EXAMPLES OF GOOD PRACTICE FROM INDIA

- **Good practice examples include**
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

Drivers of TB control	Example
(2) **Access to quality care for drug-sensitive TB**	• Rapid expansion of DOTS, with the help of a supporting technical partner and the WHO, with a strict process of planning and monitoring of preparatory activities prior to an evaluation of whether the district is ready to start DOTS activities • Providing 100% supervision for treatment within the NTP program by use of both health facility and community-based DOT providers • Existence of a strong Tuberculosis Research Center that conducts operational research (on model population) and training for the NTP staff • Use of NGO Reach to provide a bridge between the NTP and the private sector • Performance management at a regional level with quarterly tracking and intervention

THE RNTCP HAS A STRONG SYSTEM FOR MONITORING PERFORMANCE THAT COULD SERVE AS A MODEL FOR OTHER PROGRAMS

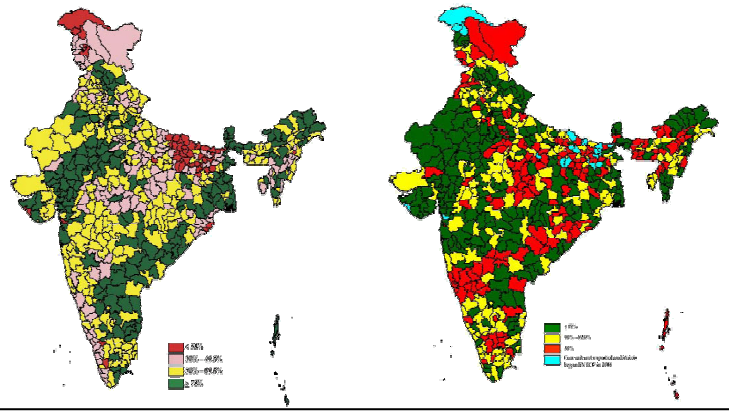
Clear definition of indicators

Quarterly Report Methodology: New Indicators

Indicators	Formula	Comments
% new smear positive out of total new pulmonary cases	Nos. of NSP cases registered in the quarter / Total Nos. of new pulmonary (NSP + NSN) cases registered in the same quarter x 100	Expected value is 50%. Shaded black if value is <45% or >70%
% of new extra pulmonary cases out of all new cases % of retreatment cases out of all smear positive cases	Nos. of new extrapulmonary cases registered / Nos. of new cases registered (NSP + NSN + new extra pulmonary) x 100 Total Nos. of smear positive retreatment cases (Relapse, Failure, Treatment after default, Others) registered / Total Nos. of smear positive cases (new smear positive pulmonary cases + smear positive retreatment cases) x 100	Expected value is 10 - 15%.
% of pediatric cases out of all new cases	Total Nos. of new pediatric cases registered (new smear positive pulmonary pediatric cases + new smear negative pulmonary pediatric cases + new extra pulmonary pediatric cases) / Total Nos. of new cases registered (NSP+ NSN + new extrapulmonary) x 100	
% smear positive patients living in the district placed on DOTS	Nos. of sputum positive patients put on RNTCP DOTS during the quarter in the district / (Nos. of sputum positive patients diagnosed during the respective quarter – Nos. of sputum positive patients referred for treatment outside the district) x 100	Expected value > 95%
% of smear positive patients living in the district placed on RNTCP Non-DOTS treatment regimen % of initial defaulters	Nos. of sputum positive patients put on RNTCP Non-DOTS during the quarter in the district / (Nos. of sputum positive patients diagnosed during the respective quarter – Nos. of sputum positive patients referred for treatment outside the district) x 100 Nos. of sputum positive patients diagnosed who are neither put on RNTCP DOTS nor RNTCP Non-DOTS in the district, or referred for treatment outside the district during the quarter / (Nos. of sputum positive patients diagnosed during the respective quarter – Nos. of sputum positive patients referred for treatment outside the district) x 100	Expected value less than 5%
% of new smear positive cases started on RNTCP DOTS within 7 days of diagnosis *	Nos. of sputum positive patients diagnosed who are started on treatment within 7 days of diagnosis / Total nos. of sputum positive patients diagnosed x 100	Data obtained from TB register
% of new smear positive cases registered within one month of diagnosis *	Nos. of sputum positive patients diagnosed and started on treatment under RNTCP, who are registered within 1 month of diagnosis / Total nos. of sputum positive patients diagnosed x 100	Data obtained from TB register
% of interviewed new smear positive cases who received DOT during IP as per guidelines *	Nos. of interviewed NSP cases who received DOT as per guidelines (=21/24 doses) / Total nos. of NSP cases interviewed x 100	Data obtained from patients interviewed during supervisory field visits
% of cured NSP cases having end of treatment follow-up sputum examination done within 7 days of last dose *	Nos. of NSP cases registered during the quarter having an outcome cured, who had their end of treatment sputum examined within 7 days of last dose / Total Nos. of NSP cases registered during the respective quarter with treatment outcome of cured x 100	Data obtained from TB register

* Districts which have not reported have been shaded light grey; districts which have submitted inaccurate or incomplete (ensure that the numerator, denominator and percentage are recorded) reports, have been left blank.
NSP - New smear positive pulmonary cases; NSN – New smear negative pulmonary cases;

Quarterly reporting of results



Formalized system for supervision and data collection

Supervision and Monitoring Activities and Tools under RNTCP for Each Level of Programme Implementation

Unit responsible (persons)	S & M Activities	Tools
Central Unit [Deputy Director General (DDG)/ Chief Medical Officers (CMOs)/ WHO India team/ NRL/CTD RNTCP-WHO Consultants]	• Undertake programme reviews with State TB officers at national level twice a year • Conduct periodic review of RNTCP in the states with the DTOs during state level review meetings • Conduct Central level internal evaluations of at least 2 districts every month • NRL Team to visit IRL (for On-site evaluation and Panel testing) at least once every year	Programme reviews Annual programme report (National) 6-monthly programme review with State TB Officers (STOs) Quarterly and annual State Reports District evaluation reports Monthly activity reports of STOs Monthly reports of RNTCP-WHO Consultants Report from Medical College ZTFs
State TB Cell (STO/MO/STDC Director/ IRL Microbiologists/ RNTCP-WHO Consultants)	• Visit all districts in the state at least once every 6 months • Undertake state level internal evaluations of atleast 2 districts every quarter • IRL team to visit DTC at least once a year • Conduct quarterly review meetings with the district TB officers at state level. Meeting to be chaired by Health Secretary/ Director General of Health Services (DGHS)	Annual programme report (State and districts) Quarterly programme review with District TB Officers (DTOs) Quarterly District/TU reports District evaluation reports Monthly activity reports/tour diaries of DTOs Tour diary of STO/supervision checklist Report from Medical College STF
District TB Centre (District TB Officer/ 2nd MO DTC)	• Reserve 3–5 days in a week for field visits (between DTO and 2nd MO) • Visit all TB Units every month. • Visit all Microscopy Centres every quarter • Visit the homes of at least 3 randomly selected NSP patients and their DOT providers on every field visit day. • Visit to Medical College if any, every month • Conduct DTCS review meetings every quarter – to be chaired by DM • Conduct monthly review meeting at the DTC – to be chaired by DM/CMO	Annual district report Quarterly TU reports Monthly programme review Monthly PHI reports Quality assurance report Tour diary of DTO/supervision checklist Monthly activity reports of MOTCs, STSs and STLSs RNTCP TB register Supervision register Referral for treatment register Supervisory checklist
Medical Officers (TB Control)	• Reserve at least 7 days in a month for field visits. • Visit all Microscopy Centres every month. • Visit most of the participating private as well as public Peripheral Health Institutions (PHIs) every quarter. • Visit the homes of at least 3 randomly selected NSP patients along with their DOT providers on every field visit day. • Conduct fortnightly review meeting with STS/STLS	RNTCP TB register RNTCP Laboratory register Supervision register PHI monthly reports OSE QA reports of STLS Supervisory checklist
STLS	• Visit all the Microscopy Centres at least once every month. • Conduct OSE at the DMC	Laboratory Register OSE Checklist
STS	• STS should visit all DMCs and PHIs at least once every month. The STS should visit all the smear positive patients within one month of starting treatment.	TB register Laboratory register Treatment cards Referral for treatment register Supervisory checklist

Source: TBC India 2007

REACH DEMONSTRATES HOW A COMMUNITY-BASED NGO CAN BUILD THE LINK BETWEEN PUBLIC AND PRIVATE SECTORS

In India, around 50% of TB care is in the private sector. Patients attending private sector have to pay for treatment and drugs (leading to high dropout), and their care is not regularly supervised.

REACH* activities since 2003 in Chennai

- Sensitize private hospitals and practitioners to the RNTCP program and encourage referral
- Recruit private hospitals and private practitioners to provide TB diagnosis and care within the RNTCP
  - RNTCP pays a small fee to providers for services
  - RNTCP provides free drugs
  - RNTCP monitors and supervises programs
  - REACH acts as the middleman between
- Provide staff support for the programs in the private sector
  - Run TB centers in some private hospitals
  - Follow up with defaulters
- Educate pharmacies to refer potential TB patients to government TB center or REACH TB center
- Raise community awareness of TB through street theatres, pamphlets, posters, and talks

Impact

- Increased referral rate into the RNTCP program
- 15 private hospitals now provide diagnosis and care for TB patients
- Approximately 130 pharmacies started to refer patients to RNTCP
- Improved community awareness in 500 households vs. baseline at start of campaign

Pharmacy now referring patients to RNTCP

* REACH – Resource Group for Education and Advocacy of Community Health

Source: In-country interviews and team analysis

THE TRC HAS PLAYED AND CONTINUES TO PLAY A PIVOTAL ROLE IN THE DEVELOPMENT OF RNTCP

Background

- TRC was formed in 1956 as the TB Chemotherapy Center in Chennai
- TRC has 600+ staff, 3 campuses, a TB model site, and center for epidemiology
- Focused on evolving comprehensive methodologies for strengthening the case-finding and case-holding components of the RNTCP both in rural and urban areas

National research institutions are pivotal in

- Supporting RNTCP with technical expertise and training
- Providing local validation of international recommendations
- Influencing the introduction of new technologies

Activities of the TRC

Reference lab
- WHO supra-national reference lab for drug sensitivity testing in South East Asia, and a national reference lab for RNTCP

Basic research
- Conduct microbiological research on different TB strains
- Run trials on new drugs, new diagnostics, and new vaccines
- Develop laboratory techniques for clinical trial protocols of drugs, diagnostics, and vaccines
- Carry out epidemiological studies on TB in India

Operational research
- Have a model DOTS program where TRC can test and monitor impact of changes to program and social factors influencing TB epidemiology

Training
- Develop comprehensive training modules for members of RNTCP, e.g., lab technicians, medical officers, students, health workers
- Trained over 4,000 staff members

Source: Interviews; team analysis

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RECOMMENDATIONS TO THE PARTNERSHIP BASED ON INDIA VISIT FINDINGS

Drivers of TB control	Recommendations based on 2001-06 involvement	Recommendations based on future needs
(2) **Access to quality care for drug-sensitive TB** – **First-line drug supply**	• Improve coordination between the NTP, WHO in country, GTZ, and GDF to avoid delays in delivery • Reduce overhead fee to ensure GDF prices are competitive – 2% GDF overhead feed plus 2.9% GTZ fee is starting to make GDF uncompetitive • Expand limited pre-qualified supplier base – Indian suppliers becoming overburdened and having difficulty fulfilling orders	
(2) **Access to quality care for drug-sensitive TB**	• Provide additional technical assistance that is project based and not mission based to roll out new treatments (e.g., paediatric TB) and adapt them to the national program setting to facilitate uptake	• Support self-sufficiency of Indian program by high-level missions to government to fund staff, drugs, and operating costs required • Involve Indian national research programs and expertise in the global research program to accelerate adoption of techniques and share local learnings • Accredit treatment approaches to help convince the private sector that RNTCP programs are effective (doubts expressed by non-governmental sector on both the duration of treatment and the alternate-day approach)
(3) **ACSM**	• Ensure ACSM programs rolled out to countries (e.g., COMBI) are adequately supported and prepared to avoid previous failures	• Provide more coordinated advice to in-country ACSM efforts (Currently DFID, USAID, World Bank, Partnership all providing separate and different advice)

RECOMMENDATIONS TO THE PARTNERSHIP BASED ON INDIA VISIT FINDINGS (CONTINUED)

Drivers of TB control	Recommendations based on 2001-06 involvement	Recommendations based on future needs
4 **Coordination**		• Help develop a national Stop TB Partnership to co-ordinate better the efforts of donors, private sector, and technical agencies in country
8 **TB/HIV**	• Ensure published guidelines are applicable internationally rather than to specific regions – TB/HIV guidelines tailored to Africa	• Design implementable model solutions for coordination of HIV and TB program efforts
9 **MDR TB** • **Second-line drug supply**	• Expand limited pre-qualified supplier base	• Facilitate rapid rollout of MDR services with – Technical assistance as required – Mobilization of funding – GLC approval for government programs

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INDIA COUNTRY VISIT – INTERVIEW LIST

Organization	Role	Name
• Ministry of Health/ communicable disease	Chief Medical Officer – Procurement	Mr. Gupta
• NTP	Program Manager	Dr. Saxena
• NTP		Dr. Chauhan
• NTP clinic		Dr. Chandra
• NTP lab		Dr. Chandra
• PPM Indian Medical Association		Dr. RV Asokan
• PPM Indian Medical Association		Dr. Dharam Prakash
• Private healthcare providers		Dr. Puri
• DFID		Billy Stewart
• IUATLD		Nevin Wilson

INDIA COUNTRY VISIT – INTERVIEW LIST (CONTINUED)

Organization	Role	Name
• Reach		Nalini Krishnan
• RNTCP-PPM Chennai		Dr. Subramania Raja
• Strategic Alliance		Ritu Khushu
• TRC		Dr. Thomas + colleagues
• UNOPs	GF LFA	Ramesh Chandra, UNOPS
• USAID		Sanjay Kapur
• WHO	Medical Officer	Dr. Fraser Wares
• WHO	WR	Dr. SJ Habaveb
• WHO	TB Regional Advisor	Dr. Nani Nair
• WHO	National Professional Officer (TB)	Dr. Suvanand Sahu

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EXECUTIVE SUMMARY

- Indonesia is the third highest TB burden country in the world with ~530,000 estimated new TB cases in 2005, which corresponds to ~230 TB cases per 100,000 population. The country has a significant estimated MDR burden with ~100,000 cases estimated in 2007-2008. WHO estimates TB-HIV burden at ~1% of all TB cases in 2005

- In the period 2001-06, Indonesia made substantial progress in DOTS implementation
  - While DOTS coverage remained just under 100% throughout, smear positive case detection rates under DOTS increased from 22% to 66% and treatment success rates approached 90%
  - To achieve this, the NTP negotiated its way through the decentralization of the healthcare system, and secured commitment from many regions/districts to support TB care. Staff were trained and access to free diagnosis and care was maintained
  - Improvements were supported by increases in overall funding from $10 million in 2002 to $59 million in 2007, supported by Global Fund grant and eliminating the funding gap

- The contribution of Partnership has primarily been through facilitating and coordinating technical assistance to the country, and through drug supply (GDF)

- There are several examples of TB control in Indonesia that could be applicable in other countries
  - The use of a central NTP engaging devolved health administrations to promote tuberculosis control
  - The use of partners to help build in country quality drug supply, in particular 4-FDC
  - The use of monitoring and evaluation techniques in ACSM projects (e.g., KuIS)

- The biggest challenges facing TB control in Indonesia in 2007 are resuming momentum of the program following the temporary suspension by the Global Fund, and expanding the program to tackle MDR and TB HIV

- Interviewees suggest that going forward, Partnership can contribute to TB control in Indonesia by
  - Continuing to facilitate technical support, in particular to build Indonesia's own capacity to structure and deliver programs
  - Coordinating appropriate technical support and access to high-quality drugs to roll out MDR programs

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OVERVIEW OF TB CONTROL IN INDONESIA

Indonesia is the third highest TB burden country in the world with ~530,000 estimated new TB cases in 2005, which corresponds to ~230 TB cases per 100,000 population. The country has a significant estimated MDR burden with ~100,000 cases estimated in 2007-2008. WHO estimates TB-HIV burden at ~1% of all TB cases in 2005

Nature of TB care in National TB Program

- DOTS
- 6-month regime – 2 months intense, 4 months continuation
- Primarily community-based DOTS with supervision by family members
- Diagnosis and treatment free for SS+ and X-ray + cases
- No inclusion of MDR in NTP
- TB HIV: no regular cross-testing or treatment policy

Nature of the National TB program

- One central national TB department coordinate
- Procures pharma and supplies
- Develops strategy and guidance
- Decentralized, district-led system since 2001; TB is integrated into district system and health centers
- Hospitals separate from NTP, and few have adopted DOTS

Key partners involved

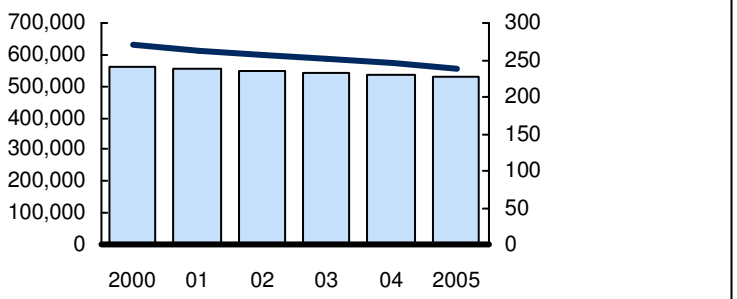
- Major partners
- WHO and KNCV both offer advice to MoH
- USAID via TBCTA major funder since 2002; works mainly through KNCV (4 other partners including MSH)
- Global Fund grant since 2003
- Biggest local partners are PPI and Aziziyah (both providers)
- Gerdunas is the national movement for TB control, incorporating government ministries at national level and local partners in regions/districts

Other points of interest

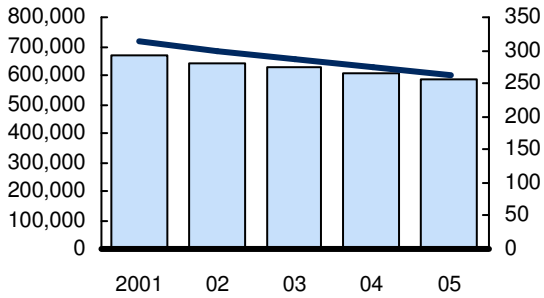
- Global Fund suspended disbursement in February 2007
  - Funding conditionally resumed in August, with final decision due in October

KEY TUBERCULOSIS METRICS IN INDONESIA (FROM WHO GLOBAL TB DATA)

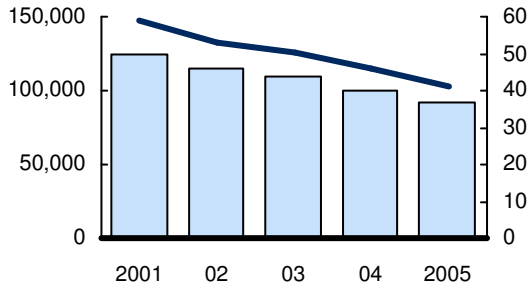
Incidence, all forms



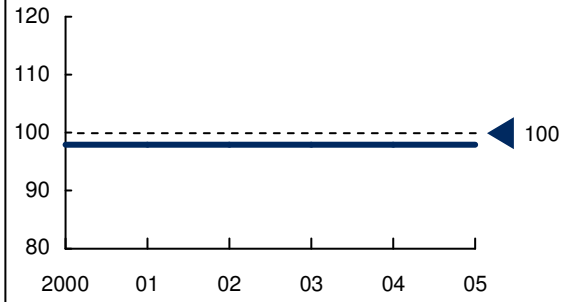
Prevalence, all forms



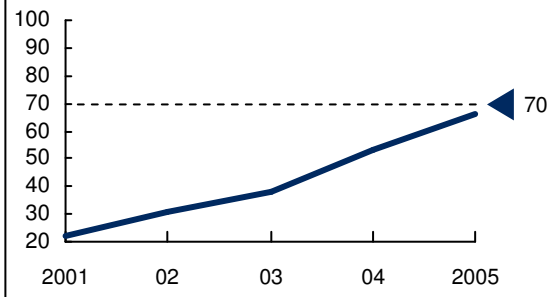
TB mortality



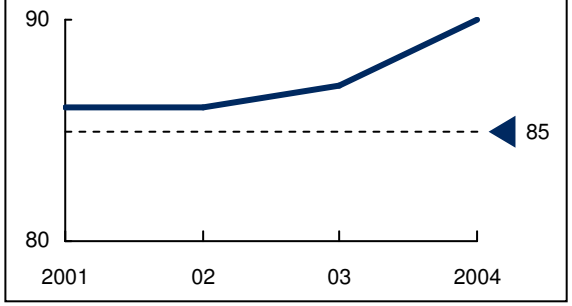
DOTS coverage, %



Case detection rate, %, DOTS, SS+



Treatment success rate, % under DOTS



MDR

- MDR reported to be a growing problem, although lack of focus on MDR so far means data are unreliable
- 10,000 cases (2% of TB cases) estimated to be MDR (MDR/XDR Response Report)
- Anecdotal reports of XDR
- MDR pilot now being established in Yogyakarta
  - GLC evaluation mission to Indonesia (2006)

TB-HIV

- TB-HIV also reported to be growing problem
- Cross-testing projects have begun
- Estimated to be ~1% of total TB cases
  - In Persashabuken Hospital (Jakarta), 50% HIV patients coinfected
  - In PPTI clinic in Jakarta, 13% of TB patients coinfected with HIV in 2006 (up from 9% in 2005)

Concerns about data

- Linkage between high DOTS coverage rate and CDR suggests that DOTS coverage is not the primary driver of CDR

Source: WHO Global TB Database

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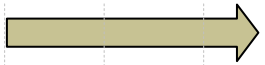
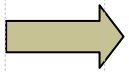
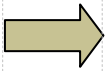
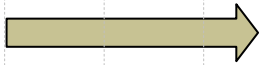
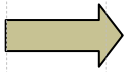
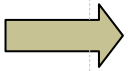
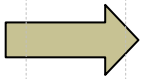
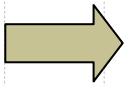
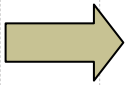
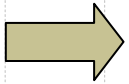
EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDONESIA AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**		• $34 million gap in TB program in 2002 – Government commitment $7 million	• Fully funded by 2006 • Government commitment increased to $24 million • GFATM* ($23 million committed) and TBCTA funding • Increased district funding, though patchy	**Moderate indirect** • Stress and acceptance of DOTS through Partnership • WHO/KNCV helped Global Fund application • CB meeting in Jakarta in 2006 reinforced existing commitment • ISAC country, but minor
2 **Access to quality care for drug-sensitive TB**				
• Convenient access to TB centers		• Distance a big issue in the rural and remote areas	• Density of facilities in remote areas has improved, but still a concern	• **No/minimal contribution**
• Availability of high-quality first-line drugs in NTP centers		• Government provided free 100% first-line drugs since 2003 and no issue with supply	• Switch to FDC – 2003-07, 50% FDC, 50% loose – 2008 onwards: 100% FDC	**Moderate direct** • GDF introduced FDCs • Own manufacturers kept supplying • MSH/KNCV supported local manufacturer in developing own FDC capability, facilitated by Partnership
• Availability of high-quality SS+ diagnostics (e.g., microscopes, reagents) in NTP centers		• ?	• ?	• ?
• Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers		• Very limited SS- diagnostics	• GLC pilot in Yogyakarta beginning to build Dx through culture	**Significant direct** • GLC provided technical advice for culture
• Access to trained staff		• Concern on staffing levels and training	• Training provided (KNCV); but rapid turnover and has been undermined	**Moderate indirect** • KNCV active in training • Partnership, WHO supplied materials

* Global Fund suspended disbursements of grants in Feb 2006. In August, they agreed to resume disbursement assuming all issues resolved by October

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDONESIA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
2 **Access to quality care for drug-sensitive TB (continued)** • Involvement of the non-NTP sector in provision of TB care		• Little involvement by actors outside NTP	• Other health actors involved – Other parts of health system (hospitals) – NGOs (PPI)	**Moderate direct** • Partnership through WHO/KNCV encouraged involvement of health NGOs
3 **ACSM**		• Government-driven program only	• NGOs now directly involved (PPI and Aziziyah)	**Significant direct** • PATH developed NTP expertise in ACSM • KUIS sponsored by USAID • Partnership facilitated and stressed importance
3 **Coordination**		• Gerdunas movement oversees coordination	• CCM, Partners' Forum, thematic working group provide multiple forums, but still not joined up • Web site with details of all partners and areas of work	**Moderate indirect** • WHO assisted in coordination and development of Web site*
4 **Performance management**		• Track data and global plan targets	• Track data and global plan targets	• **No/minimal contribution**
5 **Contribution of TB to other disease programs**		• TB program operating through districts	• District TB planners now seen as source of expertise for district planning	**Moderate indirect** • Training largely delivered with Partnership support
6 **Holistic patient approach**		• ?	• Food parcels now offered • Cash also offered to some patients for successful completion of course	**Moderate indirect** • Endorsed and funded by partners

* Costing tool now being introduced into districts

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN INDONESIA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
8 **TB-HIV** • Coordination and Collaboration between TB and HIV communities • Access to ARVs			• No sustained program yet on TB HIV; first pilots being put in place • Funded by USAID and Family Health International	• **N/A**
9 **MDR-TB** • Sustained funding and resource mobilization for NTP (excluding regular TB) • Convenient access to TB centers with MDR capability • Access to high-quality second-line drugs in NTP centers • Access to trained MDR staff • Access to MDR-TB diagnosis (DST and culture)			• No sustained program yet on MDR; first pilots being put in place with GLC support including capacity for DST	• **N/A** • Private sector/NGOs moving on MDR

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EXAMPLES OF GOOD PRACTICE FROM INDONESIA

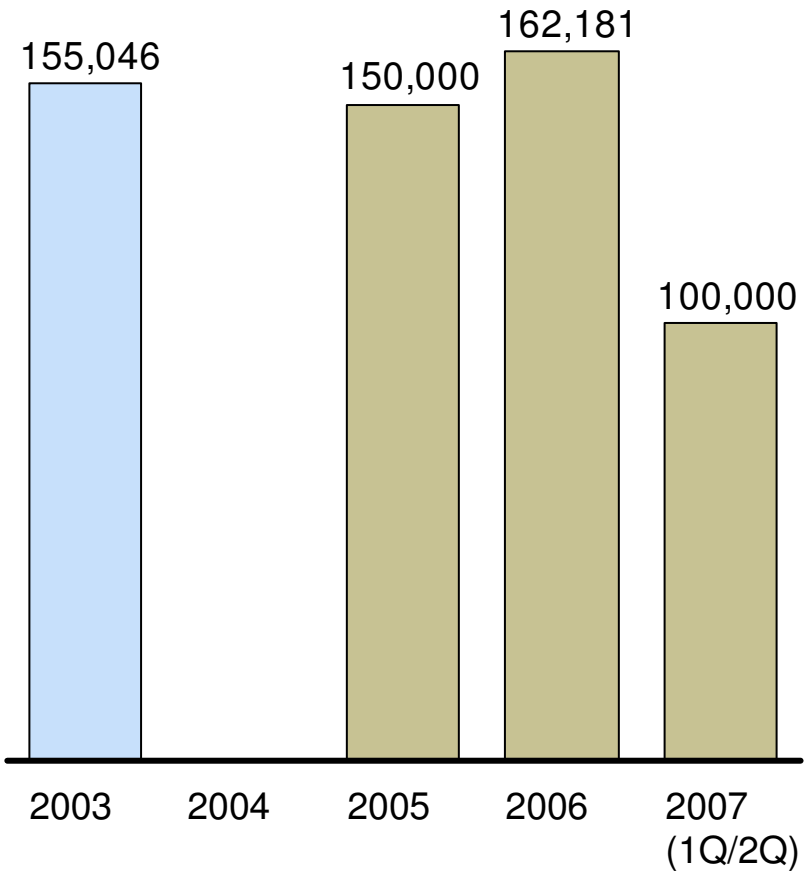
- **Good practice examples include**
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

Drivers of TB control	Example
① **Sustained funding and resource mobilization for NTP (excluding MDR)**	• Response of Case Detection Rate to increase in funding
② **Access to quality care for drug-sensitive TB**	• Local NGO leading in TB control offering integrated TB HIV and MDR treat
④ **Coordination**	• Creation of Web site with all contact details and activities of partners
⑥ **Contribution of TB to other disease programs**	• Working with decentralized healthcare system

GDF HAS SUPPLIED APPROXIMATELY 50% OF INDONESIA'S FIRST-LINE DRUG SUPPLY

Direct procurement
Grant

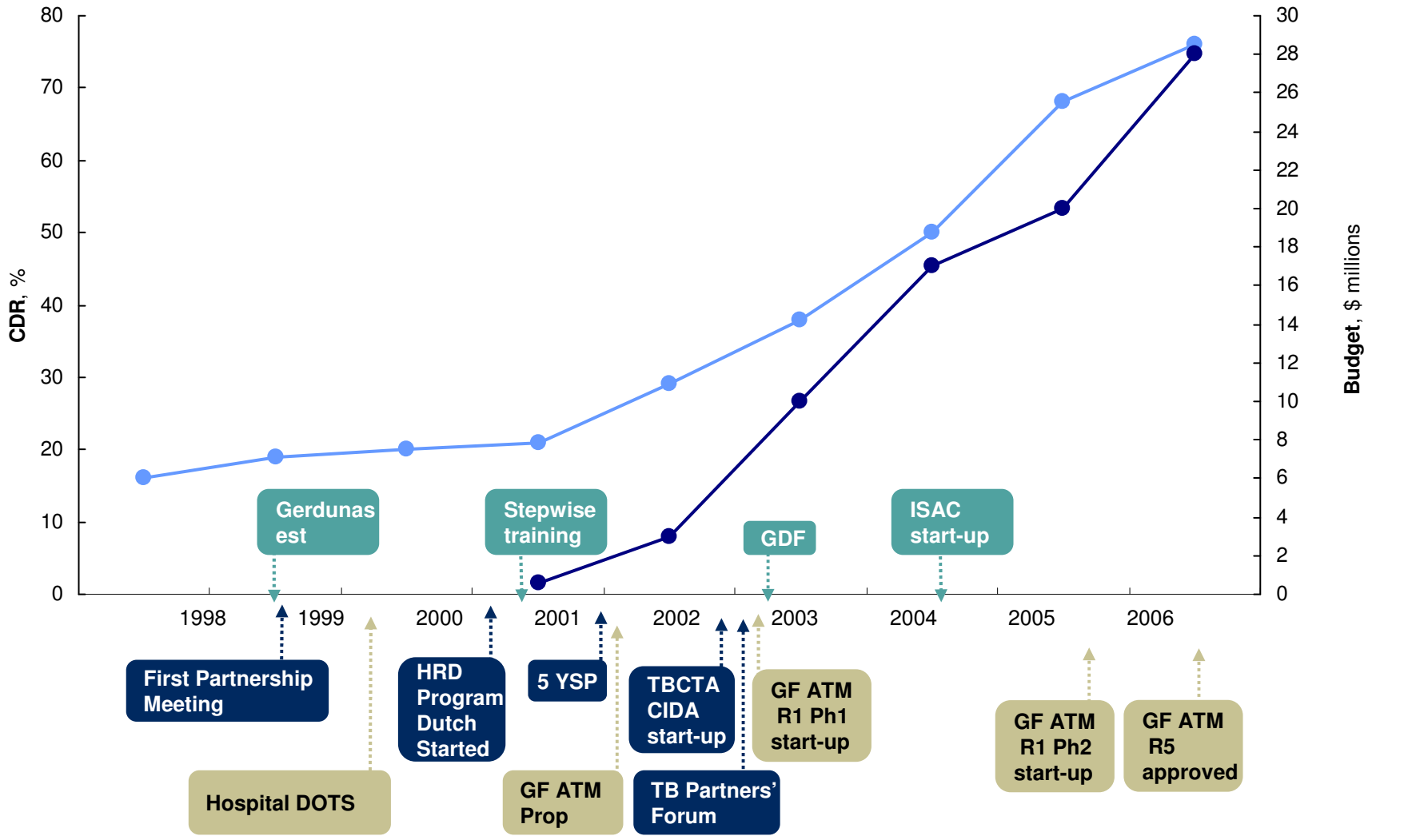
Patient treatments approved by GDF (2003-07)



GDF involvement in Indonesia

- Provision of first-line drugs
  - GDF has been a reliable supplier of high-quality first-line drugs in Indonesia
  - Indonesia was approved a 3-year grant service starting 2003. However, the country switched to direct procurement in 2005-07 through Global Fund resources
- Developing FDC capabilities
  - GDF introduced FDCs to Indonesia
  - Through GDF efforts, local manufacturers are now producing FDCs (first supply of locally produced FDCs arrived in September 2007)

THE INCREASE IN CASE DETECTION RATE IN INDONESIA HAS RISEN WITH FUNDING LEVELS



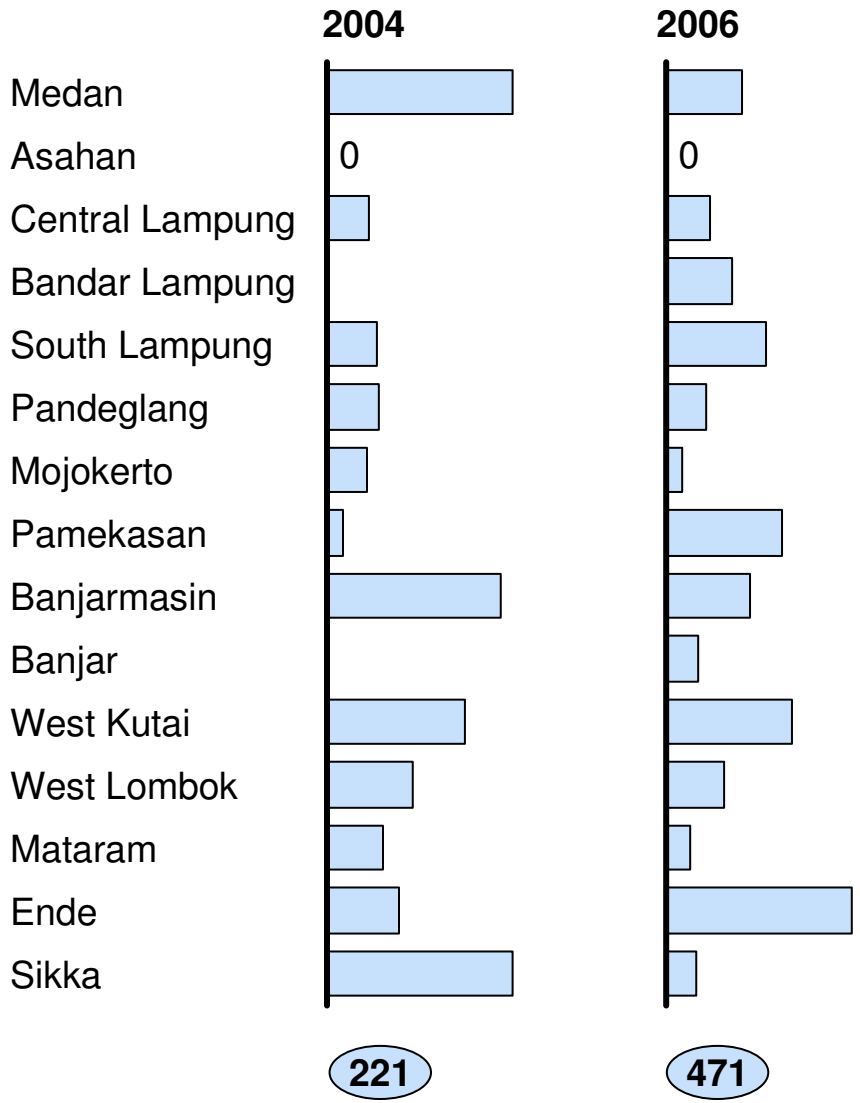
KUIS' ACSM PROGRAMS INCREASED FUNDING BY APPROXIMATELY 200 MILLION

TB funding by district; millions of Rupiah

- KuIS is an advocacy organization comprising the non-government, faith-based, community-based organizations, professional associations, academic societies, mass media as well as corporations concerned about health

- KuIS targeted 16 provinces for ACSM programs, including:
  - Public hearings
  - Visits by prominent individuals
  - Lobbying
  - Seminars
  - Mass media

- Pilot also increased number of presentations in most districts, and recall of key TB messages



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RECOMMENDATIONS TO PARTNERSHIP BASED ON INDONESIA VISIT FINDINGS

Drivers of TB control	Recommendations based on 2001-06 involvement	Recommendations based on future needs
② **Access to quality care for drug-sensitive TB**	• Improve delivery performance of GDF • Provide better guidance on use of FDC • Support local labs to do bioequivalence • Make language of ISTBC less obligatory	
③ **ACSM**		• Consider how to engage uneducated
④ **Coordination**		• Support reinvigoration of national partnership
⑤ **Performance management**		• Assist in predicting and acquiring adequate monitoring capabilities
⑦ **TB-HIV**		• Pressure to evaluate scale of problem and develop a strategy to tackle
⑧ **MDR-TB**		• Encourage to rapidly roll out a treatment strategy • Assist in finding funds

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INDONESIA COUNTRY VISIT – INTERVIEW LIST

Organization	Role	Name
• Aziziyah	Vice Coordinator	Jaorana Amiruddin
• Country Coordinating Committee	–	Dr. Atikah M Zaki
• CDC	Director DTDC	–
• CDC	Planning Officer	–
• CDC	DG	–
• CDC	NTP Manager	Carmelia Basri
• Gedong Gengen Heath Center	–	–
• IDI	–	Dr. Achmad Hudoyo
• Indofarma	Production Manager	Dra Muhidah
• Indofarma	Quality Assurance Manager	Hendrastuti S.
• Indofarma	Production Director	Yuliarti Merati
• Indonesian Medical Association	–	Dr. Pandu Riono
• Indonesian Medical Association	–	Dr. Jemy Naswil
• KNCV	Consultant	Jan EJ. Voskens
• KuIS	Program Officer	Ade Yuanita
• MoH	Director	Dr. Lia Gardenia Partakusuma
• Pershahabtan Hospital	Bureau of Planning	–
• PPTI DKI Jakarta	Supervisor Medis	Dr. Halim Danusantoso
• USAID	Public Health Advisor	Ratna Kurniawati
• WHO	Medical Officer	Dr. Firdosi Mehta
• WHO	Program Officer	T. Candyana Yohan
• Yogyakarta Provincial Health Office	–	–
• Yogyakarta District Drug Warehouse	–	–
• Yogyakarta Government Hospital	–	–
• Yogyakarta Provincial Laboratory	–	–

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EXECUTIVE SUMMARY

- Kenya is a high burden country where TB incidence, prevalence, and mortality have been increasing since 2001. TB incidence reached 219,582 cases (127 per 100,000) in 2005. Kenya has the fourth highest per capita TB-HIV burden in the world with 125 estimated new cases per 100,000 population in 2005, There is no real estimate of the MDR-TB burden, but the country is not one of the 25 priority countries in the MDR/XDR Response Plan

- In the period 2001-06 Kenya made substantial efforts to improve the quality of its DOTS program and develop a coordinated response to TB HIV. The NTP
  - Increased the facilities for diagnosis and treatment to village level (previously more centralized)
  - Improved the training of staff and monitoring of the program
  - Developed and rolled out guidelines on testing for HIV (67% of TB patients had HIV test) and managing TB HIV patients)

- Despite these efforts, Kenya's treatment success rates (80%) and case detection rates (45%) remained below the global targets and have not improved over the period 2001-06. Possible explanations include
  - The rising burden of HIV over the period and declining economic performance (until 2005)
  - Possible underreporting (private providers especially) due to inadequate resources to supervise the program
  - Possible misestimating of incidence and prevalence (no actual survey has been carried out)

- The main contribution of the Stop TB Partnership (Partnership) has been 2 terms of GDF support which provided approximately 50% of first-line drug supply, introduced patient packs, and improved the quality of the national supply. However, over the 6 years of GDF support the country has not found a reliable alternative source for funds (UNITAID to provide transitional financing for 1 year in 2007 only) or developed the capacity to allow the NTP to reliably procure drugs. The Partnership also helped the program move beyond DOTS implementation and consider TB/HIV, MDR, PPM, and ACSM issues through the provision of information, technical support, involvement in working groups and support via ISAC

- There are several examples of TB control in Kenya that could be applicable to other countries
  - The effective coordination and mobilization of numerous NGOs by the NTP around the national strategy
  - The impact of embracing HIV in TB program even if limited HIV facilities (67% testing rate for HIV in 3 years)

- The biggest challenges facing TB control in Kenya for the NTP are securing funding for drug supply post-2007, improving approach to tackling TB in HIV patients, and increasing the number and quality of staff at the community level

- Interviewees suggested that going forward, Partnership could contribute to TB control in Kenya by
  - Setting an example at the global level of closer collaboration with the HIV community
  - Providing additional support to countries to mobilize domestic and international funding for TB drugs and staff, e.g., follow up on national government's commitment to Maputo Declaration
  - Coordinating technical assistance to assist countries in adopting new guidelines and new tools

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OVERVIEW OF TB CONTROL IN KENYA

TB incidence has been on the rise in Kenya since the early nineties and it reached 219,582 (127 per 100,000) in 2005, despite 100% DOTS coverage reported in the country since 1994. There is no real estate of the MDR-TB burden, however, the country is not one of the 25 priority countries in the MDR/XDR Response Plan. Kenya has the fourth highest per capita TB-HIV burden in the world with 125 estimated new cases per 100,000 population in 2005

Nature of TB care in Kenyan NTP

- DOTS
  - Kenya is currently shifting from an 8-month regimen to the 6-month regimen
  - DOTS primarily observed by family members and village elders, in some cases with training
  - Diagnosis and treatment free for all smear-positive cases. X-ray testing is not free of charge
- MDR
  - Second-line drugs not available; GLC-approved drugs are to arrive by end of 2007
- TB-HIV
  - 100% of TB patients are offered HIV testing; 67% have taken the test in 2006

Nature of the TB control program

- NTLCP (National TB and Leprosy Control Program) is vertical from the central to the district level (e.g., dedicated supervisors/trainers), but integrated at service delivery points <__> village health centers where staff are multi-skilled
- Government support for the NTLCP has been increasing with the international attention TB is receiving, e.g., the Stop TB Partners' Forum in 2004, the Maputo Declaration
- More and more partners, e.g., NGOs and faith-based organizations are becoming involved in TB care
- An estimated 90-95% of TB care is provided by the NTP, but potentially >50% of patients will have consulted with another medical provider before reaching NTP

Key partners involved

- NTLCP leads and coordinates TB efforts supported by a dedicated WHO staff member
- GDF has supplied ~50% of first-line TB drugs during 2001-05*
- KAPTLD is an NGO aimed at improving coordination between the players in the private sector, supported by Sanofi Aventis
- MSH technical assistance (especially in GDF missions and development of patient packs), PATH (assistance on developing the ACSM strategy)
- PEPFAR and CDC involvement primarily in TB-HIV
- KANCO is an NGO aiming at improving coordination between the TB and HIV communities
- AMREF provides secretariat for TBICC (TB Interagency Coordinating Committee) and works on TB projects in rural and slum areas

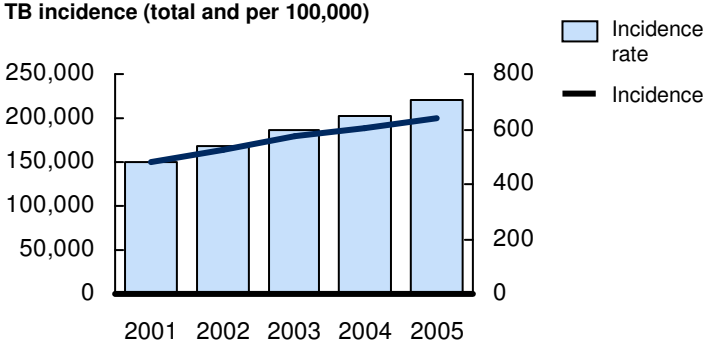
Other points of interest

- Kenya was an ISAC (Intensified Support and Action Country) – the ISAC support was primarily used in developing human resources of the NTLCP
- Kenya is experiencing problems with GFATM disbursement, e.g.
  - GFATM Rd 2 had a component for improving the infrastructure of TB centers in rural areas – the funds have not been fully disbursed, so the infrastructure improvement has not been carried out (equipment has not reached rural areas) as planned

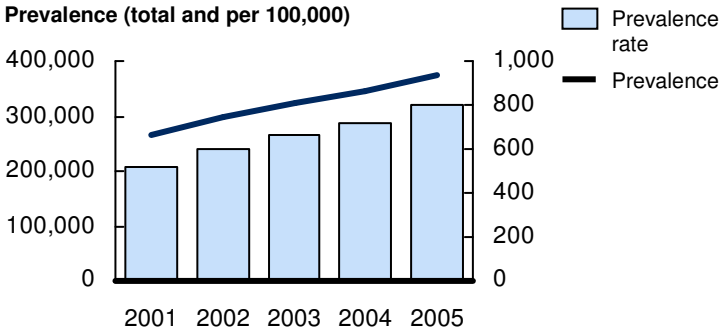
* See case study on the details of GDF involvement in Kenya

OVERVIEW OF TB METRICS IN KENYA (FROM WHO GLOBAL TB DATABASE)

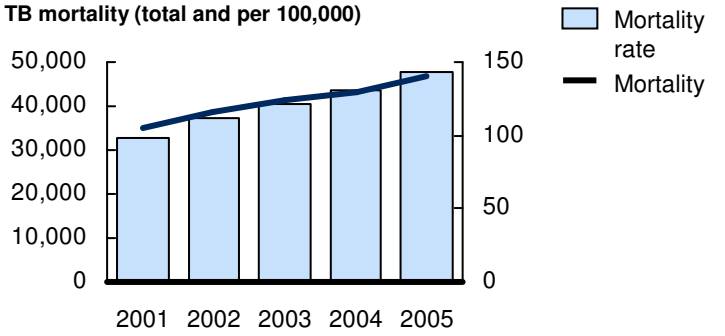
TB incidence (total and per 100,000)



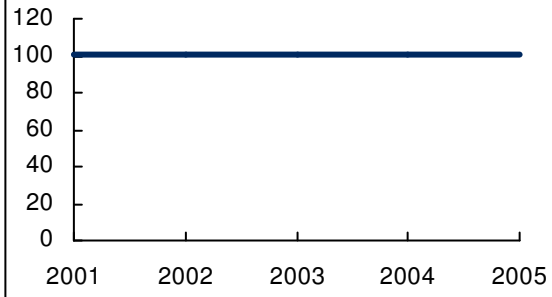
Prevalence (total and per 100,000)



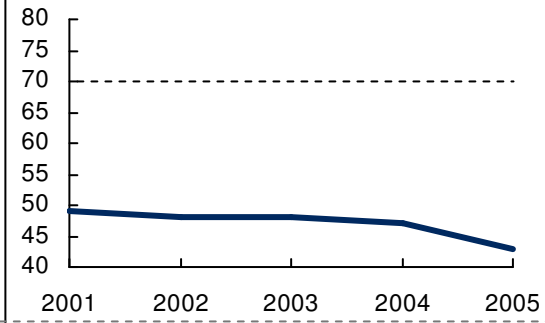
TB mortality (total and per 100,000)



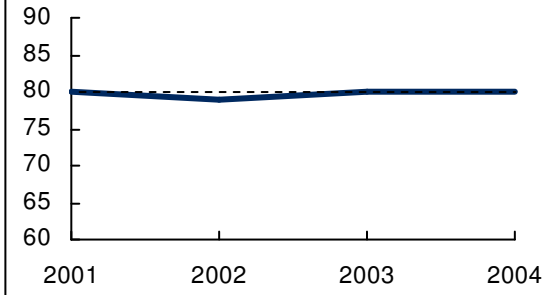
DOTS coverage



Case detection rate (DOTS, SS+)



Treatment success rate (DOTS)



MDR-TB

- No national estimates on MDR-TB burden in Kenya – a drug- resistance survey was carried out in 2002 with CDC support but results not reported)
- Kenya is not identified as one of the 25 priority MDR/XDR countries in the Global MDR/XDR Response Plan of the Stop TB Partnership

TB-HIV

- WHO estimates the TB-HIV incidence at 43,626 (2005); the prevalence of the coinfection in the same year was 21,813, and the total mortality was 15,238
- All 3 indicators have increased in 2001-05 by 15%, 20%, and 15% respectively
- Kenya has the 4th highest per capita TB-HIV incidence (125 per 100,000 population) in the world

Comments/concerns about data

- No TB prevalence/mortality survey has been conducted
- TB data based on mathematical models, and local authorities have raised concern that the assumptions in the models may not have been updated to reflect recent changes

Source: WHO Global TB database; country interviews

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EVOLUTION OF KEY DRIVERS OF TB CONTROL IN KENYA AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**	→	• Dutch funding for TB control until 1999	• GDF providing funding for ~50% of first-line drugs* • Government providing ~$1.4 million for drugs, and ~$1 million for non-drug TB costs (2006)	**Significant direct** • GDF provided 2 terms of grants support for adult drugs (~50% of drug supply) • GDF visits to government official reported to have positively supported government commitment and funding to TB control
2 **Access to quality care for drug-sensitive TB** • Convenient access to TB centers	→	• No TB center in all districts, leading to barriers to access due to distance and cost • 74 facilities in 1997	• Expanded facilities for treatment and testing into community (min. 1 per district, geographically dispersed) • 1,700 facilities in 2007 • Started pilots for active case detection	**Moderate indirect** • NTLCP manager part of DOTS Expansion Working Group – shared experience/lessons with other countries' representatives
• Availability of high-quality first line drugs in NTP centers	→	• No stock-outs starting in 2001	• Patients packs introduced in 2003 – currently 100% of supply • 2004 onwards different weight bands in patient packs** • Government tender requires manufacturers to be certified by GMP • Government QA testing system in place for TB drugs	**Significant direct** • GDF supplied reliable high-quality drugs through grant and emergency procurement services • GDF encouraged government to fund and improve quality of drugs procured • GDF responsible for introduction of patient packs and paediatric drugs
• Availability of high-quality first-line SS+ diagnostics (e.g., microscopes, reagents) in NTP centers	→	• Insufficient lab infra-structure to support DOTS expansion	• Invested in new microscopes to expand DOTS programs • Continuing concern about in adequate infrastructure, e.g., spare parts, electric supply	**No/minimal contribution**

* See case study on the details of GDF involvement in Kenya

** As of 2007, paediatric TB Drugs will also be provided in patient pacts through the GDF

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN KENYA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
2 Access to quality care for drug-sensitive TB (continued)				
• Availability of high-quality SS-diagnostics (X-ray, culture) in NTP centers	→	• X-ray capabilities not widespread and not free of charge	• 388 comprehensive care centers (often collocated with TB centers) have X-ray facilities	**No/minimal contribution**
• Access to trained staff	→	• Insufficient level of trained staff for expansion of DOTS program	• Conducted vertical training programs for TB health staff by the NTLCP and NGOs	**Moderate indirect** • The financial support Kenya received through the ISAC initiative helped strengthen HR of NTLCP
• Involvement of the non-NTP sector in provision of TB care	→	• Low involvement by non-NTLCP actors	• Increased private sector involvement (~10% in urban centers, ~4% in rural areas) supported by KAPTLD* activity • Increased NGO involvement	**Moderate indirect** • Partnership publications raised the profile of PPM and the importance of involving the non-NTP sector • Dr. Chakaya is part of PPM subgroup of Partnership
3 ACSM	→	• Advocacy for TB control strictly an NTLCP effort	• NGOs, private partners, and faith-based organizations support NTLCP efforts for advocacy • Developed national plan for ACSM and applied for GFATM funds	**Significant direct** • Partnership sent representatives as part of GDF technical mission to discuss ACSM strategy • Partnership sent expert to help with GFATM application • Partnership provided materials which were used in national plans (e.g., COMBI project in 2004 and follow-up) and in training of public health officials, e.g., sensitisation manual

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN KENYA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
4 **Coordination**		•	• TBICC meets quarterly • NTLCP has full visibility in TB activity in the country – actors have to go through NTLCP before starting an initiative • KAPTLD attempting to coordinate private providers	• **N/A**
5 **Performance management**		•	• Monitoring and evaluation against Global Plan targets • Improved M&E due to ISAC funds	**Moderate direct** • Partnership endorsed global TB control targets • ISAC funds supported monitoring and evaluation activity in the country
6 **Contribution of TB to other disease programs**		•	• Expansion of TB program provided infrastructure (e.g., microscopes, centrifuge) and lab consumables to rural areas • Requirement for develop-ment of local strategic plans in districts improved planning capabilities • Monitoring and supervision system model for other programs	• **N/A**
7 **Holistic patient approach**		•	• Most elements of patient rights, e.g., free access to diagnosis and treatment, are in place	**N/A** • GDF drug boxes have patient rights pamphlets – though not consistently distributed to patients

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN KENYA AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
8 TB-HIV				
• Coordination and collaboration between TB and HIV communities	→	• National TB and HIV meetings in 1996 and 1999; no visible change in TB-HIV treatment on the ground	• 100% HIV testing and counseling offered to TB patients (67% took the test in 2006) • HIV metrics included in TB reporting • HIV program only recently prioritized TB • Guidelines in both programs re: TB-HIV diagnosis and care	**Moderate indirect** • Local Partnership partners, e.g., CDC and WHO joined the TB-HIV steering committee in 2004 • Partnership raised the profile of TB-HIV in publications • Technical support missions from WHO and KNCV
• Access to ARVs	△	• No access to ARVs in TB centers	• One-stop-shops offer CPTs to HIV patients • All HIV patients referred to HIV program for treatment where ARVs are available*	• **N/A**
9 MDR-TB				
• Sustained funding and resource mobilization for NTP (excluding regular TB)	△	• No visible funding for MDR-TB control	• Second-line treatment is still not part of the NTP budget • GLC-approved pilot project for 280 patients	**Moderate direct** • Received help in drafting GLC recommendations
• Convenient access to TB centers with MDR capability	△	• No/minimal access to TB centers with MDR-TB capabilities	• No change	• **N/A**
• Access to high-quality second-line drugs in NTP centers	△	• No or very limited supply • Second-line drugs available in private sector	• GLC-approved projects will start in 2008	**Significant** • GLC-approved pilot projects for 280 patients – drugs estimated to arrive by end of 2007 • GLC approved a pilot for 50 patients in 2004
• Access to MDR-TB diagnosis (DST and culture)	→	• No DST capabilities	• Developed national laboratory facilities for DST and culture testing	**No/minimal contribution**
• Access to trained MDR staff	△	• No indication of health-care staff with training in MDR-TB care	• Issued guidance on handling of re-treatment cases	• N/A

* According to national statistics, ~250,000 patients need ART (will die within 1 year) and ~160,000 patients receive ART

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EXAMPLES OF GOOD PRACTICE FROM KENYA

- **Good practice examples include**
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

Drivers of TB control	Example
(2) **Access to quality care for drug-sensitive TB**	• GDF has been a reliable supplier of high-quality first-line TB drugs* • KAPTLD (Kenya Association for the Prevention of Tuberculosis and Lung Diseases) program, in conjunction with Sanofi Aventis, for involvement of private sector and importance of economic incentives**
(4) **Coordination**	• Level of oversight and coordination of NTLCP of non-NTP activity
(6) **Contribution of TB to other disease programs**	• How TB program infrastructure and training can benefit overall health system
(8) **TB-HIV**	• There is a lot the TB community can do on TB-HIV control even if full collaboration of the HIV community is not secured

* See case study for Kenya's experience with GDF

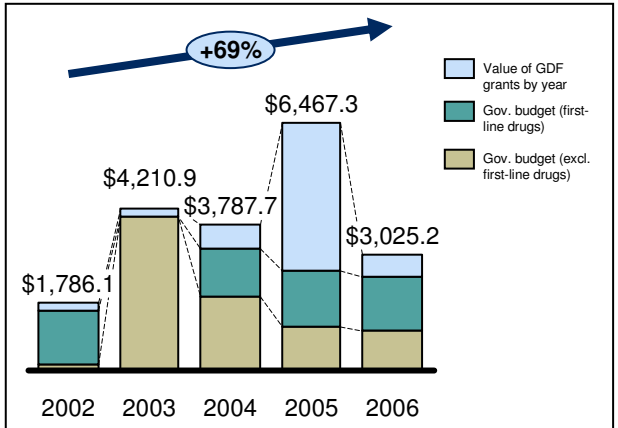
** See case study for details on KAPTLD activity in Kenya

CASE STUDY – GDF CONTRIBUTION TO THE MANAGEMENT AND SUPPLY OF FIRST-LINE TB DRUGS IN KENYA, 2001-06

Substantial contribution
No/minimal contribution

	GDF contribution	Positive contribution
Availability of TB drugs	◔	• Effectively supplied ~50% of first-line drugs via grants, 2001-06 • Provided emergency supply ethambutol at 7-week notice when government mechanisms failed
Cost of TB drugs	◔	• GDF ~$20 per patient vs. Sanofi Aventis in private sector ~$80 per patient • GDF reported – comparably priced to local provider Cosmos
Quality of TB drugs	●	• Provided more effective drugs and with longer expiry than local supplies • Influenced GOK* to insert clause in tender documents that suppliers must be prequalified by WHO or have GMP quality approval • Influenced GOK* storage and distribution (KEMPSAR) to introduce QA on all drugs arriving in stores
Formulations and packaging	●	• Introduced patient packs in 2004 • Introduced formulations for different weight bands • Introduced paediatric patient packs
Government funding/support for TB drugs	◔	• Encouraged the government to fund TB drugs – GOK* MoH has created budget line for TB drugs as a result of first monitoring mission
Local pharma manufacturing capacity	◔	• Visited local suppliers and educated on how to become prequalified
National capabilities for drug management	◔	• Assisted NTLCP in accurate demand prediction and trained staff • Ensured appointment of full time pharmacist to program

Evolution of TB control budget in Kenya (GDF and government budget, 2002-06)



Areas of improvement for GDF involvement

- GDF has not
  - Ensured sustained funding of first-line drug supply before removing GDF support
  - Built capacity for drug procurement before removing GDF support
  - Notified NTP in advance in several instances regarding the content and timing of drug shipments
  - Worked with country team on planned introduction of paediatric formulation (country program does not know what to expect)

* GOK – government of Kenya

Source: In-country interviews

KAPTLD HAS ENGAGED FOR-PROFIT PRIVATE SECTOR IN TB CONTROL THROUGH VARIOUS ACTIVITIES SINCE 1998

Activities

KAPTLD
- Offered sensitization to private healthcare providers (e.g., doctors, public health workers, pharmacists). 900 exposed in 2005
- Provided training in TB diagnosis and treatment to private partners
- Conducted supervision, monitoring and reporting of private partners on behalf of NTLCP
- Initiated agreement between private healthcare providers and Sanofi Aventis for selling TB drugs at cost price**

Sanofi Aventis
- Drugs provided at cost price to private providers through KAPTLD
- Provided support during World TB Day by printing shirts, creating banners, and running news features on TV

CDC
- Fund program via community housing association

Achievements

- 80 units participating in scheme
- Treatment success rate in participating units – private sector has gone up (from ~75% in 1998 to 82% in 2006)

Background

- 1997 – regional meeting of IUATLD (TB programs) held in Nairobi which prompted KAPTLD (originally KAPT IUATLD) to become more active
- Soon after, KAPTLD began reaching out to private providers
- KAPTLD and Sanofi Aventis partnered to subsidize drugs provided in the private sector*

Key challenges to fully engaging private providers

- KAPTLD is resource constrained (e.g., 1 doc, 1 lab, 1 lab technician)
- Presence of uncontrolled drug market means private providers can continue to prescribe what they want
- Large number of health workers still relying on outdated training on TB control
- NTLCP does not want to increase provision in private sector and prefers direct referrals into NTLCP

* Drugs were supplied by Sanofi Aventis under conditions that the provider could put a mark-up of 20%; patients have to pay up front

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RECOMMENDATIONS TO THE PARTNERSHIP BASED ON KENYA VISIT FINDINGS

Drivers of TB control	Recommendations based on 2001-06 involvement	Recommendations based on future needs
(1) **Sustained funding and resource mobilization for NTP (excluding MDR)**	• Overall level of government funding does not appear to have changed – need to better follow through GDF's mandate • Partnership need to better follow up on the GOK's promise on the Maputo Declaration	• No funding planned for drugs postend second term of GDF grant (end 2006) – need to think through funding for first-line drugs after 2007
(2) **Access to Quality Care for drug-sensitive TB**	• GDF has in several instances not notified NTP in advance regarding the content and timing of drug shipments • GDF has not worked with country team on recent paediatric formulation (country program does not know what to expect) • Partnership needs to better ensure capacity building and funding of first-line drug supply before removing GDF support	• Mobilize funding for strengthening of laboratory network
(5) **Performance management**		• Follow up on implementation on the field (e.g., 6-month vs. 8-month regimen, FDCs)
(8) **TB-HIV**		• Advocate importance of TB in the HIV community • Model better coordination of TB and HIV communities at the global level
(9) **MDR-TB**		• Encourage the NTLCP to conduct drug resistance surveys and speed up the scale of MDR-TB pilots

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KENYA VISIT INTERVIEWS

Organization	Role	Name
African Medical and Research Foundation (AMREF)	Principal Research Officer	Julius Tome
DFID		Sandra Erickson
Eldoret district hospital		Representative
Family Health International (FHI)	Director, Technical Support	Dr. John Adungosi
Kenya Aids NGOs Consortium (KANCO)	Executive Director	Allan Ragi
Kenyan Association for prevention of TB and Lung Disease (KAPTLD)	Executive Officer	Dr. Haron Njiru
Kenyan Medical Research Institute (KEMRI)	Principal Research Officer	Lydia Kivihya-Ndugga

KENYA VISIT INTERVIEWS (CONTINUED)

Organization	Role	Name
KEMRI/KAPTLD (Moi Hospital)	Former Head of NTLCP, Coordinating	Dr. Jeremiah
Management Sciences for Health (MSH)	Administrator for MSH	Dr. Mary Wangai
MSH		Dr. Michael Thuo
National Aids Control Council (NACC)	Executive Director	Prof. Alloys Orago
National Aids and Sexually transmitted diseased Control Program (NASCOP)	Executive Director	Lyndon Marani
National TB and Leprosy Control Program (NTLCP)	Head of National Leprosy and TB Control Programme (NLTP)	Dr. Joseph Sitienei
NTLP Division	In charge of MDR-TB control	Dr. Dave Muthama

KENYA VISIT INTERVIEWS (CONTINUED)

Organization	Role	Name
Program for appropriate technology in health (PATH)	Team Leader, TB	John Kembe
Provincial Drug Storage Warehouse, Eldoret		Representative
Rural Health Mission, Eldoret		Representative
Sanofi Aventis	Responsible Access au Medicament	Anthony Gitau
USAID and CDC		Dr. Joseph Odhiambo, Bedan Gichanga
WHO	WHO (Former Deputy Head of NLTP)	Dr. Joel Kangangi

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OVERVIEW OF TB CONTROL IN MOROCCO

Morocco is not an high-burden country. It adopted DOTS in 1990s, and reached global targets for case detection and treatment success rates in 2004. WHO estimated 28,000 new cases (95/100,000 population) in 2005, with low TB/HIV prevalence (0.17/100,000)

Nature of TB care in Morocco NTP

- DOTS adopted in 1991
  - Cat 1: 2 SHRSs/4 RHs
  - Cat 2: 2 SHRZEs/1 RHZE/5 RHEs supervised
  - Cat 3: 2RHZ/4RH
  - Cat 4: 3 Kan-Ethion-Oflox-Etham/18-21 Ethion-Oflox-Etham

Nature of the TB control program

- National TB program sets norms and strategy. Has developed strategy for 2006-2015
- Regional and local structure for TB care: anti-TB coordination unit in 63 provinces and prefectures
- Screening, diagnosis, and treatment are mostly carried out by primary care system ("horizontally") … specialists in health system
- Private sector refers many patients to NTP
- Prisons and armed forces also follow NTP guidelines

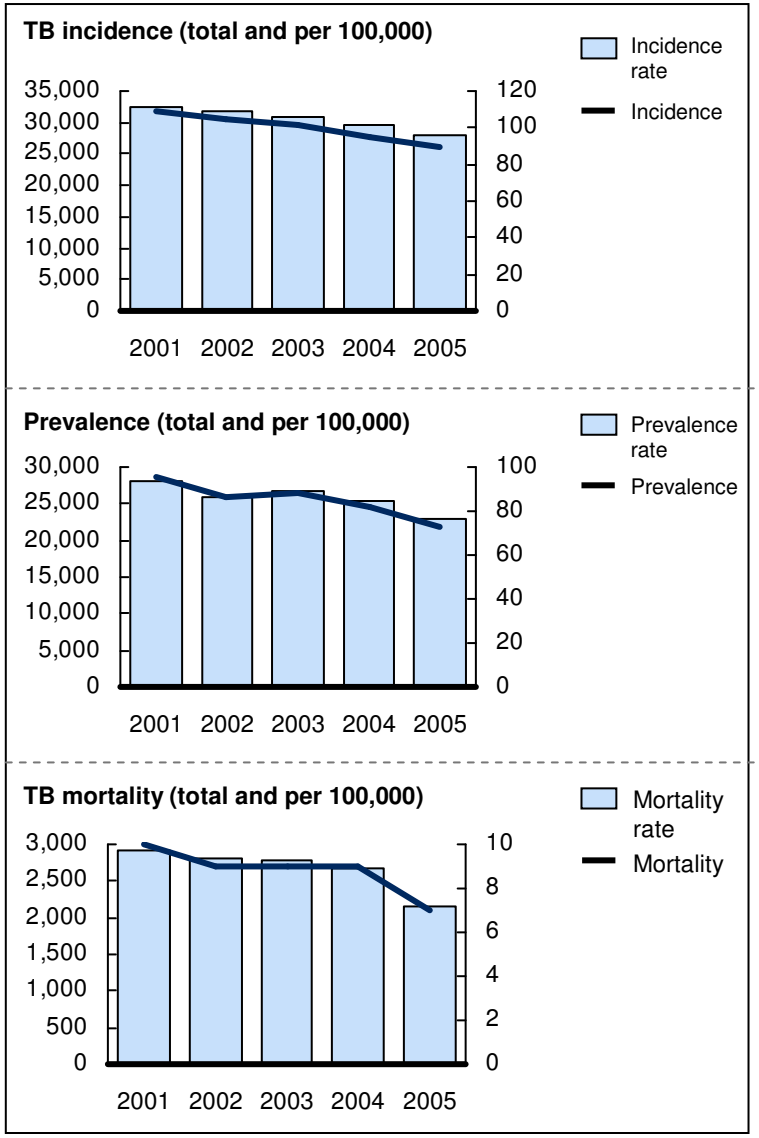
Key partners involved

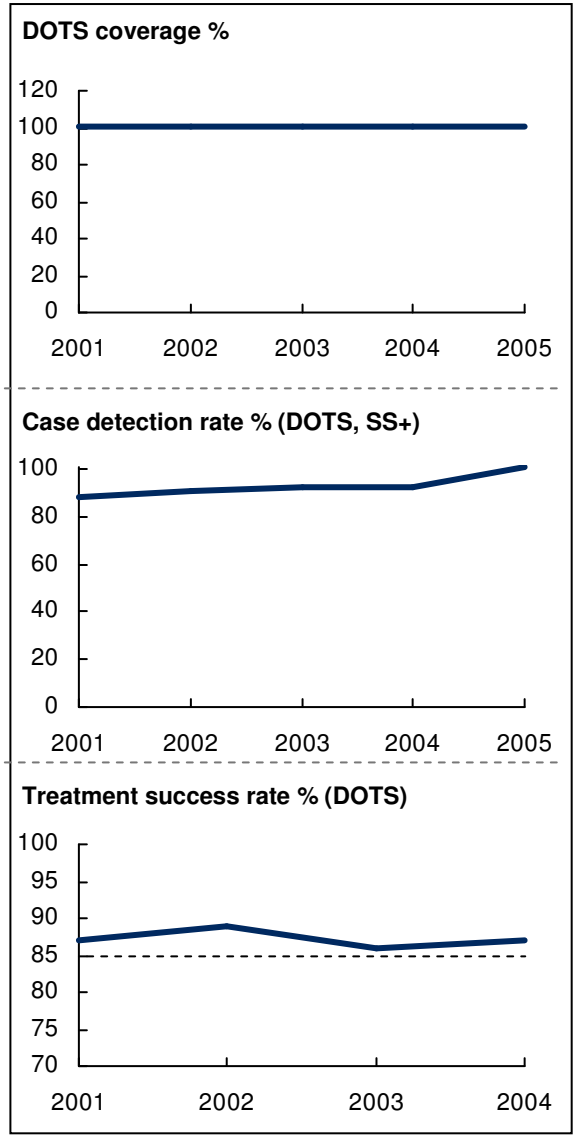
- NTP leads and coordinates TB efforts
- WHO
- 2 main national NGOs
  - SOS Tuberculose
  - Ligue Marocaine Contre la Tuberculose (LMCT)
- GLC
- Global Fund; grant for ACSM
- Italian Cooperation

Other points of interest

- Average age at presentation increasing: 28 y.o. in early '80s, to 34 y.o. more recently
- Higher prevalence in urban/populated parts of country, e.g., parts of Casablanca and Fes, with TB incidence rates up to 300/100,000 in some areas
- Some patients seek treatment in private sector. This is almost entirely delivered by specialists who have worked in NTP and follow NTP guidelines

OVERVIEW OF KEY TB METRICS IN MOROCCO (FROM WHO GLOBAL TB DATABASE)





MDR-TB

- MDR-TB burden is relatively low in Morocco – the country is not one of the 25 priority countries identified by the MDR/XDR-TB response plan
- Full study of anti-TB drug resistance is under way. Smaller study on 510 new SS+ pulmonary TB patients in Casablanca in 1998 showed 2.2% resistance to at least Rifampicin and Isoniazid

TB-HIV

- WHO estimated 2005 figures at
  - Incidence rate: 0.26/100,000
  - Prevalence rate: 0.17/100,000

Comments/concerns about data

- No major concerns about completeness and accuracy of data. Drug resistance study under way as mentioned above

Source: WHO Global TB database

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EVOLUTION OF KEY DRIVERS OF TB CONTROL IN MOROCCO AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
1 Sustained funding and resource mobilization for NTP (excluding MDR)	→	• $1.5 million government funding, vs. $2.7 million estimated need	• $1.5 million government funding, + Global Fund grant to cover rest of need	• Significant indirect Global Fund grant application in line with Global Plan, especially ACSM recommendations, seen by NTP as key to winning Global Fund grants
2 Access to quality care for drug-sensitive TB				
• Convenient access to TB centers	▲	• Good access for almost all population	• No change	• N/A
• Availability of high-quality first-line drugs in NTP centers	▲	• Local manufacture • No stock-out since 1991	• FDCs introduced • Prices dropped from $120 / course in 1995 to $40/course in 2000-05, mainly due to standardization of regimens and larger-volume tenders	• N/A
• Availability of high-quality SS+ diagnostics (e.g., microscopes, reagents) in NTP centers	▲	• Some older/less effective equipment in a minority of centers	• Stable/slightly better	• N/A
• Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers	▲	• No issues	• No issues	• N/A
• Access to trained staff	▲	• No issues	• No acute issues, but possible future problem, as 50% of microscopists currently aged 50-60	

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN MOROCCO AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
2 **Access to quality care for drug-sensitive TB (contd.)** • Involvement of the non-NTP sector in provision of TB care		• Private physicians engaged, along with some prisons	• Private physicians and armed forces engaged; prisons have NTP-trained GP and diagnostics	**Moderate direct** • Changes in line with Partnership strategy
3 **ACSM**		• TB control mainly an MoH effort, with support from SOS Tuberculose and LMCT	• Involvement of community NGOs, e.g., in Casablanca and Rabat areas	**Significant indirect** • ACSM strategy inspired by Stop TB Partnership strategies
4 **Coordination**		• NTP coordinates most activities	• NTP coordinates most activities	• N/A
5 **Performance management**		• National, regional, and local targets identified, monitored, and acted on	• No change	• N/A
6 **Contribution of TB to other disease programs**		• TB care already integrated into health system in most cases	• PAL rolled out across 9 regions, and being taught in medical school	**Significant indirect** • STB role in PAL adoption and spread
7 **Holistic patient approach**		• Patient rights charter fully respected	• Local NGOs increasingly involved in food, transport, and family support	**Moderate direct** • Driven by social mobilisation efforts following Partnership strategy
8 **TB-HIV** • Coordination and Collaboration between TB and HIV communities		• N/A	• N/A (very low TB-HIV burden)	• N/A
• Access to ARVs		• N/A	• N/A	• N/A

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN MOROCCO AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
9 **MDR-TB** • Sustained funding and resource mobilization for NTP (excluding regular TB)		• No issues	• No change	• N/A
• Convenient access to TB centers with MDR capability		• No issues	• No change	• N/A
• Access to high-quality second-line drugs in NTP centers		• No issues	• No change	• N/A
• Access to MDR-TB diagnosis (DST and culture)		• No issues	• No change	• N/A
• Access to trained MDR TB staff		• No issues	• No change	• N/A

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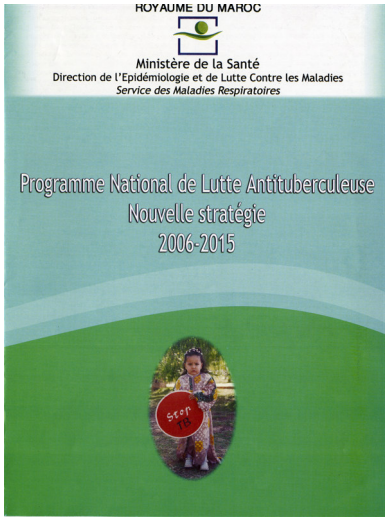
EXAMPLES OF GOOD PRACTICE FROM MOROCCO

- Good practice examples include
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

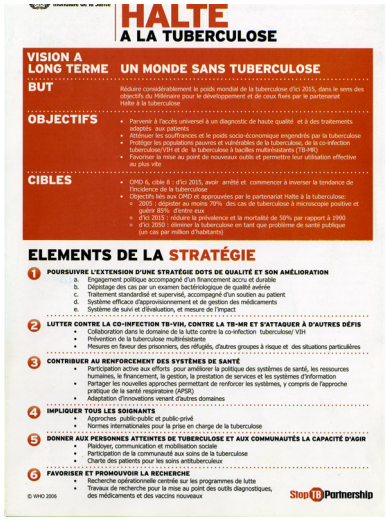
Drivers of TB control	Example
3 **ACSM and involvement of non-NTP sector**	• Use of Global Plan to Stop TB (case study)
5 **Performance management**	• Clear 2015 national goals: – 50/100,000 total incidence rate – 30/100,000 SS+ incidence rate – Generalized application of PALH across health networks • Clear hierarchy of national, regional, and local objectives to attain to deliver the goal, e.g., at national level – Create 80-100 new microscopy labs and 10-15 new labs for culture – Develop 16 regional warehouses for TB and respiratory disease medications – Build 10 regional reference centers for TB and respiratory diseases and 16 regional TB labs – Develop 10 regional NTP and respiratory disease coordination units – Clear description of staffing, facilities, and funding resources need to deliver these objectives

CASE STUDY – USE OF GLOBAL PLAN FOR ADVOCACY



- Morocco NTP used the 2006-15 Stop TB Strategy and the Global Plan as the basis for its national TB control strategy
  - National strategy was fully aligned with the Stop TB Strategy, and this was cascaded down to regional and local strategies
  - Resource requirements and costing were informed by the Global Plan

- The NTP used the Global Plan during a series of 'consensus conferences' used to launch the national TB control strategy
  - National consensus conference attended by WHO representative and Italian ambassador, and MoH, who opened conference
  - Regional consensus conferences increased stakeholder support at regional levels, and led to development of regional plans based on elements of Global Plan most appropriate to the region, with input from national and regional experts
  - Regional and local consensus conferences, helped educate NGOs (e.g., in Sale) about the TB problem in their area and how they could help



- The NTP also used Global Plan to advocate with other ministries and armed forces to increase their role in TB control

- Interviewees gave 3 major reasons why the Stop TB Strategy and the Global Plan were accepted and welcomed in Morocco
  - Following the 2001-05 plan led to improved results in Morocco, and was useful, e.g., to convince doctors to standardize treatment regimens. So the new plan also had credibility
  - With 70/85 achieved in 2004, Morocco did not have a vision for "what's next" and how to get there. 2006-15 plan provided both … and helped them get Global Fund grant for ACSM – "The Partnership has changed our vision for what we can achieve"
  - The new plan clearly built on 2001-05 plan, which helped with regional buy-in – "built on what we were already doing"

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RECOMMENDATIONS TO THE PARTNERSHIP BASED ON MOROCCO VISIT FINDINGS

- Help further raise profile of TB – broader: 26,000 TB/year vs. 1,600 HIV/year, but King involved in HIV, Princess is patron of cancer NGO
  - Jorge Sampaio visiting would be helpful
  - Need advocacy to educate new government in Morocco

- Help build Stop TB Morocco Partnership
  - Help NTP be more effective in coordinating players, keeping people in line (e.g., not putting strange protocols online), how to manage key opinion leaders

- Teach ACSM. Little local expertise in Morocco, per DP Managers; need Partnership to train the trainers

- Teach NTP/regional/local managers at national and regional levels how to be resource mobilizers;
  - Training on fundraising;
  - "How to sell TB to your politicians"

- Put materials out in French/Arabic

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MOROCCO COUNTRY VISIT – INTERVIEW LIST

Organization	Role	Name
National TB Control Program	Director	Dr. Ben-Cheikh
MoH Division of Transmissible Diseases	Director	
Casablanca Region TB Control Program	Director	Dr. El Menzhi
Private Physician	Respirologist	Dr. Berrada
Academic Respirologist	Professor	Prof. Iraqi
Sale Local Government and Local NGOs	Local government and NGO Leaders	
Moroccan government TB NGO	Member of Parliament/ Head of SOS TB	Prof. Bouayad
Regional Experts	Respirologists	Dr. Amar, Dr. Boumedienne Prof. Benjelloune, Prof. Nejjari
Bilateral Donors	Italian Cooperation	
WHO	WHO Representative	

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EXECUTIVE SUMMARY

- TB incidence, prevalence and mortality rates have declined in Peru in 2001-05 – estimated number of new TB cases was 47,976 in 2005, or 172 cases per 100,000 population. MDR-TB burden is estimated at ~2,500 cases, over 2,000 of whom received treatment as part of the DOTS+ program. WHO estimated TB-HIV burden at 3.5 per 100,000 cases in 2005

- In the period 2001-06 Peru made substantial progress in securing sustained funding for regular and MDR-TB control, improving ACSM and performance management
  - Government funding for TB control increased from $3 million to $10 million, with an additional $5 million coming from international donors including the GFATM
  - In 2006, government paid 70% of total cost of second-line TB drugs, while the remaining 30% was paid by the GFATM
  - Broader community participation was accomplished with NGOs, armed forces, police, and patient organizations joining the ACSM efforts of the ESN (National Sanitary Strategy)
  - With the establishment of ESN in 2003, TB outcomes were tied to clear and actionable targets, and the progress is monitored and evaluated effectively by the ESN

- The contribution of Partnership has primarily been through high-level missions that increased government commitment, by inspiring the formation of the national Stop TB Partnership, and providing a reliable high-quality supply of second-line TB drugs which allowed scaling up of MDR-TB pilots

- There are several good practice examples of TB control in Peru that could be applicable in other countries
  - Developing and executing a successful MDR program in a developing country
  - Formation of national and regional Stop TB Partnerships
  - Using a private NGO (CARE) as the principal recipient of GFATM funds
  - Involvement of non-NTP sector in TB control

- Interviewees suggest that going forward, Partnership can further contribute to TB control in Peru by
  - Building government commitment around assessing the TB-HIV burden and providing technical assistance in the development of strategy to tackle the coinfection
  - Continuing supply of high-quality second-line TB drugs through the GLC/GDF mechanism (and minimizing the effects of potential supply shortages on the DOTS+ program)

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OVERVIEW OF TB CONTROL IN PERU

In 2006, there were an estimated 50,000 new TB cases in Peru which corresponds to an incidence rate of 180/100,000. Peru reached WHO targets for case detection and treatment success rate in 1993. The estimated MDR-TB burden in 2006 was 2,500 cases, 2002 of whom received treatment. The TB-HIV incidence rate was estimated to be 4 in 100,000 cases in 2005

Nature of TB care in Peruvian NTP

- DOTS
- 6-month standard regime
- Primarily family member/community-based DOTS with training for supervisors
- Diagnosis and treatment free for smear positive or X-ray positive cases
- MDR
- Pilot projects started by Partners in Health (PIH) in 1996
- 12/28 health regions (87.1% of population) have full DOTS+ coverage (2 more regions developing DOTS+ capability)
- Opportunities for surgical treatment also available
- Technical review system to assign patients to standardized or individualized treatment
- TB-HIV
- No regular cross-testing, treatment not free of charge to patient

Nature of the TB control program

- Central unit, the ESN (National Strategy for TB care) in charge of strategy and guidance through the technical committee – MoH people
- Consultative committee – Multi-sectoral representation
- Drug purchasing and procurement
- Program supervision (team of nurses)
- Low involvement by the private sector (very small share in TB care, ~0.5%)
- 90% of TB cases are covered by the MoH
- Delivery of care responsibility of the districts since decentralization of healthcare in 2001

Key partners involved

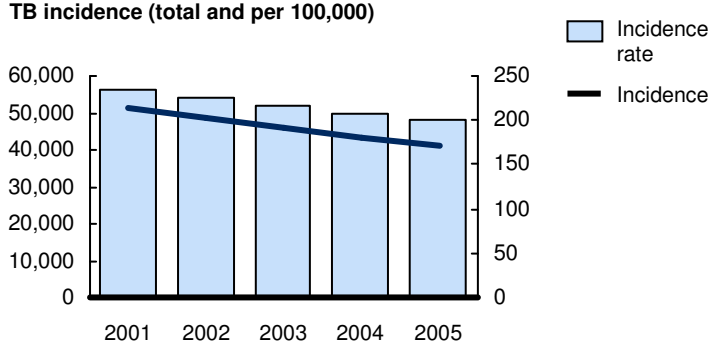
- ESN leads and coordinates TB efforts
- PIH major funder and coordinator of MDR-TB care since 1996
- GFATM funding administered through CARE (principal recipient)
- The national Stop TB Partnership (founded in December 2005) – evolving as an ESN effort, involve numerous actors from different sectors, e.g., NGOs, armed forces, private sector
- Numerous local NGOs and patient organizations, primarily in advocacy and awareness building

Other points of interest

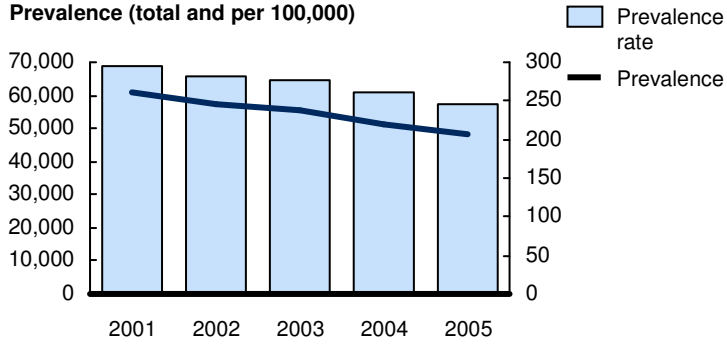
- Marcos Espinal recently visited Peru in March 2007 – very influential at the MoH level, as well as in the TB community (everyone was talking about the visit)
- Peru agreed to procure 100% of second-line drugs through the GLC/GDF mechanism starting 2008 (70% funded by the government, 30% through GFATM funds)
- TB care worsened in 2001-04 following the healthcare reform due to lack of supervision, drugs, and reagents – formation of ESN in 2004 started addressing problems

OVERVIEW OF KEY TB METRICS IN PERU (FROM WHO GLOBAL TB DATABASE)

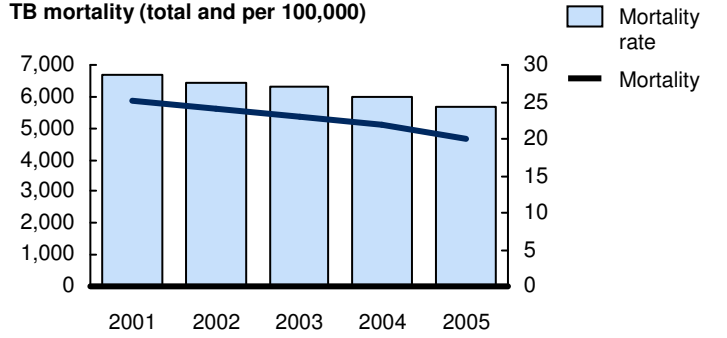
TB incidence (total and per 100,000)



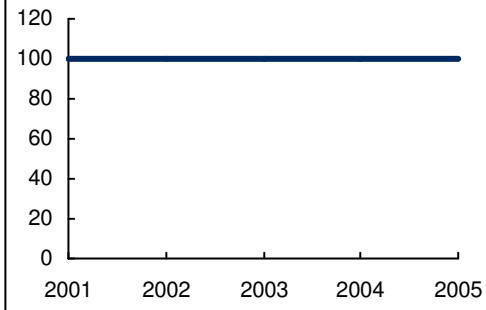
Prevalence (total and per 100,000)



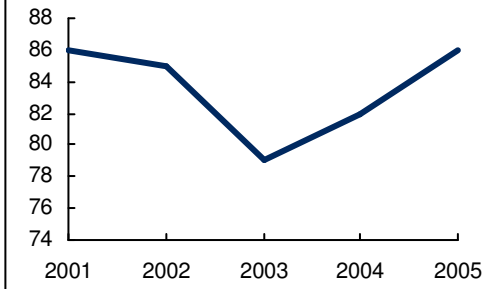
TB mortality (total and per 100,000)



DOTS coverage, %



Case detection rate, % (DOTS, SS+)



Treatment success rate, % (DOTS)

MDR

- 2,000 MDR cases were diagnosed by the ESN in 2004 (vs. 300 cases in the 1990s)
- PIH and ESN estimate the burden to be ~2,500 in 2006, of whom 2002 have received treatment
- DOTS+ coverage has increased from 3 pilots in Lima in 1996, to 12 regions in 2006, which in terms of population coverage corresponds to an increase from 19% to 87%
- There has been no increase in the number of notified MDR-TB (stable around 1,800) between 2001 and 05
- The treatment success rate of the new standard regimen is reported to be 80% – from ~40% of the previous regimen

TB-HIV

- WHO estimates the TB-HIV incidence to be 972 cases (2006), or 4 cases per 100,000
- No incidence of prevalence survey conducted to date – however, anecdotal evidence suggests an increase in coinfection

Comments/concerns about data

- Some concern about data collection between 2001 and 03 due to inadequate supervision (healthcare reform, political turmoil, etc.)

Source: WHO Global TB database

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EVOLUTION OF KEY DRIVERS OF TB CONTROL IN PERU AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**	→	• $3 million government funding for TB control	• $10 million government funding for TB control (includes MDR-TB component) • National partnership advocating for funding • $5 million international funding including GFATM	**Significant direct** • International events (Partners' Forum in Delhi) and high level missions increased political commitment • National Stop TB partnership inspired by the Partnership
2 **Access to quality care for drug-sensitive TB**				
• Convenient access to TB centers	▲	• Patients in remote locations (border areas, indigenous population) face barriers due to distance, cost, etc.	• ESN focus on vulnerable populations alleviated the major problems	**Moderate direct** • Partnership material raised the importance of attention to vulnerable populations
• Availability of high-quality first-line drugs in NTP centers	→	• Drugs available free of charge – some reliability and supply problems	• Improved access for vulnerable populations (indigenous, prisons, etc.) • Some penetration of FDCs • Fully reliable supply	**Moderate direct** • Partnership material raised the importance of attention to vulnerable populations
• Availability of high-quality SS+ diagnostics (e.g., microscopes, reagents) in NTP centers	▲	• SS+ diagnosis widely available and free of charge to all	• No change	• N/A
• Availability of high-quality SS- diagnostics (X-ray, culture) in NTP centers	▲	• X-rays not widely available	• No change	• N/A
• Access to trained staff	→	• Staff levels reported to be insufficient	• Training more TB staff to increase capacity and skill level	**No/minimal contribution**

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN PERU AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
2 **Access to quality care for drug-sensitive TB (continued)** Involvement of the non-NTP sector in provision of TB care	→	• Low involvement of healthcare sector outside the NTP	• Armed forces, police enrolled on DOTS • Private sector still not engaged, but small in size	**Significant indirect** • World TB day led to armed forces participation • PPM publications raised the importance of involving non-NTP players
3 **ACSM**	→	• Numerous NGOs and faith-based organizations engaged in ACSM	• Broader community involvement, e.g., armed forces, police • Other ministries, e.g., MoE, MoF involved • More patient groups, NGOs engaged	**Significant direct** • Partnership inspired the national partnership • Raised the importance of ACSM through publications and assigned a dedicated ACSM person • Partnership visits to Peru raised the profile of ACSM
4 **Coordination**	→	• PIH coordinating international partners around MDR-TB activities	• ESN active in coordination of various national players, leading to the formation of the national partnership in 2005	**Moderate direct** • National Stop TB Partnership inspired by the Partnership
5 **Performance management**	→	• National healthcare reform, political situation, etc., led to poor performance management	• ESN is operating towards clear targets with a good monitoring and evaluation mechanism	**Significant direct** • Global Plan targets used as key targets of the programs • Data collection standards set and regularly reviewed by the GLC
6 **Contribution of TB to other disease programs**	▲		• Training for health staff and expanding healthcare services to vulnerable populations have benefited the wider health system	**No/minimal contribution**

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN PERU AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
7 **Holistic patient approach**		• ?	• Nutritional supplements, peer and professional counseling provided to patients • "Back to job" schemes	**No/minimal contribution**
8 **TB-HIV**				
• Coordination and collaboration between TB and HIV communities		• No activity	• Pilot projects through GFATM, e.g., in the San Juan de Lurigancho prison and 9 other prisons • ESN incorporated into national strategy	**Moderate indirect** • Partnership raised the profile of coinfection through publications
• Access to ARVs		• No targeted effort from the TB community	• Global Fund grants will facilitate access to ARVs by HIV and TB patients	• N/A
9 **MDR-TB**				
• Sustained funding and resource mobilization for NTP (excluding regular TB)		• MDR activities financed and run by PIH in pilot projects	• Government pays 70% of second-line drugs (30% through GFATM funds)	**Significant direct** • MDR Working Group meetings (2001) and GLC efforts to increase government contribution to MDR-TB financing • Partnership raised the profile of MDR-TB in global publications
• Convenient access to TB centers with MDR capability		• DOTS+ centers in very limited locations	• Rolled out to 12 regions – ESN and PIH initiative • Still problems with access for vulnerable populations	**No/minimal contribution**

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN PERU AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
9 MDR-TB (continued)				
• Access to high-quality second-line drugs in NTP centers	→	• DOTS+ limited to pilot districts (PIH) • Cost of second-line drugs prohibitive (~$25,000 per patient)	• DOTS+ in 12 regions (2 more to come), which corresponds to 87% population coverage • Cost of drugs reduced to ~$3,500 per patient • Technical review process assigns to either standardized or individualized treatment	**Significant direct** • The GLC/GDF mechanism enabled the ESN to procure high-quality second-line drugs at reduced prices to roll out DOTS+ programs
• Access to MDR-TB diagnosis (DST and culture)	→	• One national laboratory capable of DST	• 7 national laboratories capable of DST • Trials with the rapid resistance test – expect use by 2008	**Moderate direct** • GLC provided technical assistance in establishing the standards for diagnosis of drug resistant TB
• Access to trained MDR-TB staff	→	• MDR-TB staff levels insufficient to rollout	• ESN and PIH trained MDR-TB staff to roll out DOTS + to 12 regions	**No/minimal contribution**

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EXAMPLES OF GOOD PRACTICE FROM PERU

- Good practice examples include
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

Drivers of TB control	Example
① **Sustained funding and resource mobilization for NTP (excluding MDR)**	• CARE, a private NGO, is the primary recipient of GFATM funds in Peru and has been very effective in disbursement of funds and following up on implementation
③ **ACSM**	• Involvement of non-NTP sectors in TB care*
④ **Coordination**	• Formation of national and regional partnerships**
⑦ **Holistic patient approach**	• Nutritional support, employment and counselling opportunities*
⑨ **MDR-TB**	• Dangers of leaving MDR untreated • Developing and executing a successful MDR program in a developing country*** • Utilization of NGO in pilot • Commitment of national government • Establishment of technical review system

* See case study on community involvement and holistic approach to TB care in Peru
** See case study on the Peruvian national Stop TB partnership
*** See case study on establishing a successful MDR-TB control program in Peru

MOBILIZING THE NON-HEALTH CARE SECTOR HAS SUBSTANTIALLY CONTRIBUTED TO TB CONTROL IN PERU

Partners

- Education
  - The Medical College
  - The Nursing College
  - EDUCA (NGO)
  - Pneumology Society
- Social aspects of TB and patient groups
  - ASET (Tuberculosis Patient Association)
  - ISDEN (civil society)
  - Rosa Blanca (faith based)
- Private sector
  - ESKE (local drug manufacturer)
- Ministry of Justice
- Armed forces and the police
- Local governments (regional and municipal)

Activities

- Inclusion of TB control in training curricula of healthcare professionals
- Creation of educational material for students and parents, and teaching
- Organization and running of patient support groups and counselling sessions
- Awareness building activities through publications and community events to fight the stigma of TB
- Administration of nutritional support programs (food/milk)
- Extending the reach of TB care to remote locations difficult to access for the ESN
- Monitoring the TB care, e.g., drug inventories, and reporting to ESN
- Improving financial and logistical support of local governments
- Improving TB care for vulnerable populations, e.g., in prisons

Achievements

- Improved the quality of life of TB patients, especially through improving the administration of nutritional support efforts, e.g., ensuring the intake of food/milk and avoiding trade
- Increased compliance through peer and professional counselling sessions
- Reduced the stigma of TB through advocacy efforts at the community level and publications
- Raised awareness of the disease through education in and outside the schools
- Increased funding available through local governments
- Monitored TB care on the ground, e.g., regularly checking drug and diagnostic supplies, staff levels, thereby contributing to the oversight of the ESN

PERU IS ESTABLISHING NATIONAL AND REGIONAL PARTNERSHIPS TO SUPPORT AND COORDINATE TB CONTROL

History

- The decline of the TB program in early 2000 signalled the need for a coordinating mechanism that would ensure a sustainable and strong TB program independent from political and managerial change
- Inspired by the Partnership, and with the initiative of ESN (National Sanitary Strategy), the national Stop TB Partnership was formed in 2005 with 3 primary goals:
  - Ensure sustainability of the national TB control strategy
  - Advocate for increased commitment and funding to TB control at the government level
  - Demonstrate the need for a multisectoral approach in TB control, and make the voice of the non-ESN actors heard in advocacy

Partners involved

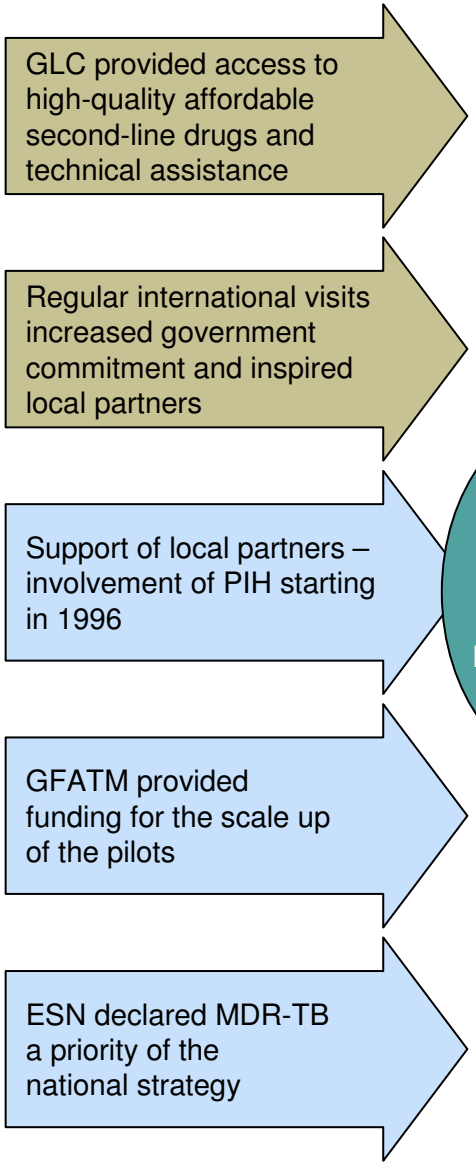
- Government
- Private sector
- Patient organizations and NGOs
- Academic institutions
- Technical and donor agencies (WHO, CDC, etc.)
- Regional and municipal governments

Activities/achievements

- The government budget for TB control increased from $3 million in 2004-05 to $10 million in 2006 due to the advocacy efforts of the national partnership
- The national partnership has recently elected a president and core members, and created its strategic plan
- A number of meetings were organized to update participants on the situation of TB control in Peru and provide a forum for experience exchange
- Regional – and recently municipal – Stop TB Partnerships have been established that fostered the TB advocacy network

THE PARTNERSHIP HAS SUPPORTED THE DEVELOPMENT OF A SUCCESSFUL MDR-TB PROGRAM IN PERU

Partnership impact



MDR-TB control in Peru (2001-2006)

- The reach of DOTS+ programs has expanded from 3 districts in Northern Lima in 1996 to 12 regions across the country, in 2007, which corresponds to an increase in population coverage from 19% to 87%
- ~50% of second-line drugs were procured through GLC/GDF mechanism; following Marcos Espinal's visit in March, Peru will procure 100% through GLC/GDF
- The new standard regimen achieved 94% conversion (smear negative) at 6 months, with 85% estimated treatment success rate
- Peru established 3 national laboratories with DST and culture capabilities; rapid diagnostic tools for drug resistance are currently in trial expected to be rolled out in 2008
- There is a technical review process to approve MDR patients on a case-by-case basis where the committee can assign the patient to a standardized or individualized treatment regimen – regular review and revisions to the standard regime are being conducted as required
- PIH contributed to training and supervision of health staff in MDR-TB treatment
- Surgical facilities have been established for severe cases – private partners involved in setting up these facilities with PIH and ESN support
- Strong and active patient advocacy groups (e.g., ASET), recently joined by former MDR-TB patients, provide support and counselling to active MDR-TB patients thereby fighting the stigma

Note: In 2006, government funding for MDR-TB control was 70%, and GFATM funding was 30% of total cost of the program

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RECOMMENDATIONS TO THE PARTNERSHIP BASED ON PERU VISIT FINDINGS

Drivers of TB control	Recommendations based on 2001-06 involvement	Recommendations based on future needs
2 **Access to quality care for drug-sensitive TB**		• Disseminate lessons from Peru's experience with DOTS implementation in prisons, and provide technical assistance to other countries
3 **ACSM**	• Translate publications into Spanish to facilitate use by non-English speakers	
4 **Coordination**		• Share lessons from Peru's experience with national and regional partnerships with the international community
8 **TB-HIV**		• Encourage government to take concrete steps in assessing the burden of TB-HIV and to develop a strategy to tackle the coinfection • Provide technical assistance for TB-HIV care
9 **MDR-TB**	• GLC should work together with the ESN to address concerns about shortages in second-line drugs supplied through the IDA, and, if necessary, offer alternative solutions to ensure continuity of DOTS+ programs	

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PERU COUNTRY VISIT – INTERVIEW LIST

Organization	Role	Name
National Sanitary Strategy for Prevention and Control of TB, MoH (ESN)	National Coordinator	Dr. Cesar Bonilla
ESN	Coordinator ACSM	Dr. Yvonne Cortez
Congressional Health Commission	President	Dr. Daniel Robles
Medical College	Dean	Dra. Carmen Fajardo
Mott	(Former) Vice Minister	Dr. José Calderón
Peru Pneumology Society	President	Dra. Katherine Gutarra
National Prison Institute	–	Dr. Jose Best
Rosa Blanca (NGO)	Representative	Rvdo. David Limo
ESKE (local drug manufacturer)	General Manager	Sr. Rohit Rao
Private Clinic	Health Director	Dr. Carlos Joo
Nursing College	Dean	Lic. Blanca Carruitero
PIH	Director	Dr. Jaime Bayona
EDUCA (NGO)	Representative	Lic. Elena Núñez

PERU COUNTRY VISIT – INTERVIEW LIST (CONTINUED)

Organization	Role	Name
Armed Forces	General Army TB Coordinator	Dr. Darwin Rengifo, Lic. Ninoska Valladares
ISDEN (NGO)	Director	Mg. Hermana María Van Der Linde
ASET Comas (NGO)	Director	Elena Cuba Zapata
CARE (NGO, PR of GFATM)	Representative	Sr. Milo Stanojevich y Dra. Virginia Baffigo
Various recipients of GFATM grants		

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EXECUTIVE SUMMARY

- Uzbekistan is a medium-burden country for TB, with ~30,000 estimated new TB cases per year in 2005, which corresponds to ~110 TB cases per 100,000 population. The country has a significant estimated MDR burden, comprising an estimated 18% of all TB cases or ~5,400 cases in 2007-08. WHO estimates TB-HIV burden at 1 per 100,000 in 2005

- In the period 2001-06 Uzbekistan made substantial progress in DOTS implementation
  - DOTS coverage increased from ~10% to full country coverage. Case detection rates have also increased, but not to the same extent and have currently reached 51%. Treatment success rates have remained around 80%
  - To achieve this, the Republican DOTS Center was established in 2002 at the urging of donors. The Republican DOTS center is responsible for implementing DOTS through the TB institutes. It has used Global Fund grants to underpin DOTS rollout through renovating facilities and training staff
  - Government funding for TB is opaque, but does not appear to have increased. Extra resources have come from the Global Fund and other donors, most notably KfW

- The contribution of Partnership has primarily been through securing high-quality drug supply through the GDF, and through GLC support for the establishment of DOTS-plus pilots

- There are examples of TB control in Uzbekistan that could be applicable in other countries
  - The use of an NGO (MSF) to establish pilots, before transferring pilots to the NTP

- The biggest challenge facing TB control in Uzbekistan in 2007 is ensuring the continued rollout of DOTS, given the legacy of Soviet treatment regimens, DOTS equal status with Soviet treatment regimens, and funding incentives

- Interviewees suggest that going forward, Partnership can contribute to TB control in Uzbekistan by
  - Continuing to facilitate technical support, in particular to build Uzbekistan's own capacity to structure and deliver programs
  - Engaging the government and NTP on how to set incentives in the TB program to favor DOTS

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TB CONTROL IN UZBEKISTAN IN A NUTSHELL

Uzbekistan is not a high-burden country for TB control, although it has a significant number of multi-drug resistant TB cases. Hospitalization plays a prominent role in TB care. The Republican DOTS center oversees the introduction of DOTS; at percent, DOTS has equal status as a TB regimen with Soviet-initiated care protocols

Nature of TB care in NTP

- DOTS
  - 6-month regimen for Cat I + III, 2HRZE 4RH; mandatory hospitalization for 2 months
  - Extensive X-ray diagnosis and fairly low CDR (53%, 2006)
  - Observation in local clinics (if available); family members, if not
- MDR
  - ~18% of TB cases are multi-drug resistant
  - One long-term GLC supported and MSF-run pilot in Nukus
  - One new government pilot in Tashkent supported by Global Fund
  - National program awaiting rollout
- TB-HIV
  - Aware of issue; little systematic addressing although Project CAPACITY is pushing

Nature of the TB control program

- Highly vertical program through National Tuberculosis Institute
  - Sanatoria at region and district level
  - Dedicated TB dispensaries with microscopy labs
  - Links into local polyclinics and rural health posts (which refer into dispensaries/sanatoria and offer DOTS)
- Approximately 1 TB specialist (~10 staff) for every 15 cases
- Republican DOTS center established in 2003 to oversee introduction of DOTS into the TB institute

Key partners involved

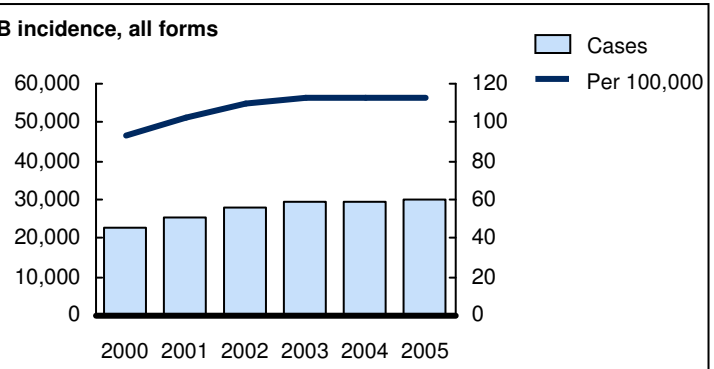
- WHO
  - Central Asian coordinator and National Professional TB officer; offer technical advice <__> project capacity
  - USAID funded program to fill gaps in HIV/AIDS care (e.g., TB HIV)
  - The Global Fund providing $13.8 million over 5 years in funding
- Project HOPE
  - Main provider of technical advice and training
- CDC
  - Strong support for lab strengthening (culture and QA)
- KfW
  - Main founded before GDF, still highly engaged
  - Funds infrastructure only
- MSF
  - Established first DOTS pilot, and DOTS-Plus pilot. DOTS now transferred to NTP, DOTS-Plus is in the process of transfer

Other points of interest

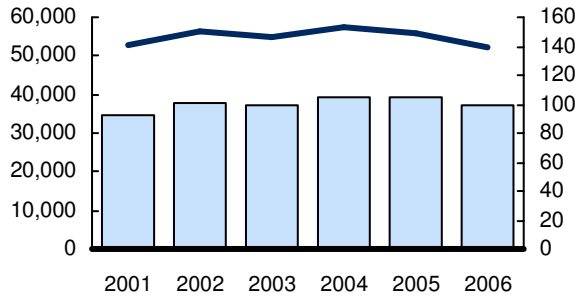
- Most TB specialists in Uzbekistan were trained in the Soviet model of TB care
- Reimbursement for providers is indirectly tied to utilization of infrastructure (e.g., number of bed days; number of X-rays)

KEY TUBERCULOSIS METRICS IN UZBEKISTAN (FROM WHO GLOBAL TB DATA)

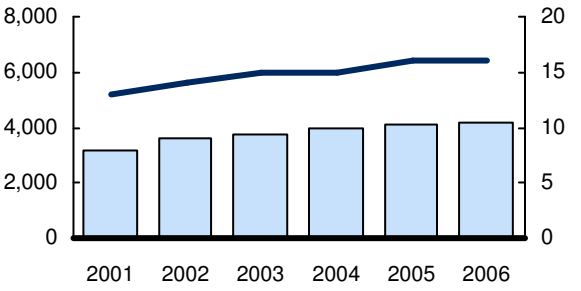
TB incidence, all forms



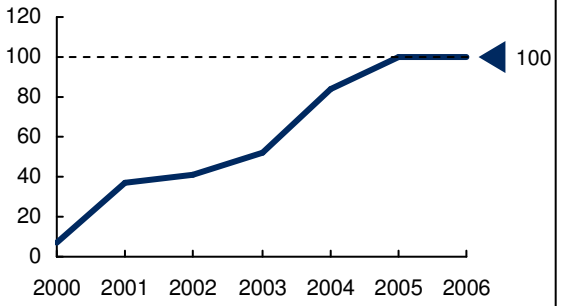
Prevalence, all forms



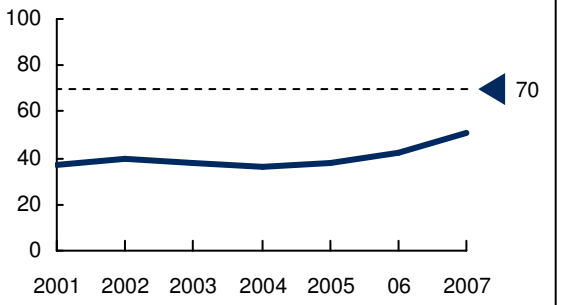
TB mortality (total and per 100,000)



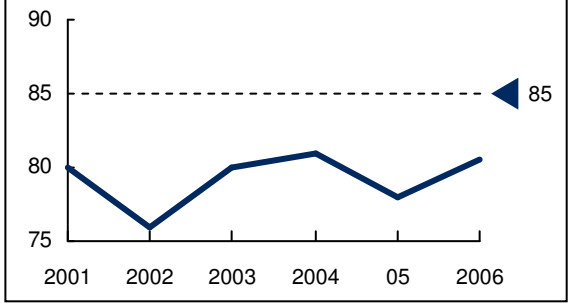
DOTS coverage, % of civil population



Case detection rate, %, DOTS, SS+



Treatment success rate, % under DOTS



MDR-TB

- Progress in MDR-TB control
  - Initial pilot in Nukus (Karakalpakstan) by MSF covering 100 patients
  - New governemnt pilot in Tashkent covering 60 patients
  - National lab awaiting accreditation as reference center; able to carry out cultures
- Intending to scale up using GFATM moneys

TB-HIV

- WHO estimates the TB-HIV incidence to be 267 cases in 2005; or 1 case per 100,000
- Little progress so far, although Project CAPACITY is pushing TB-HIV guidelines in curricula
- In theory, cross-testing carried out on all HIV patients

Comments/concerns about data

- Repeated concern that denominator in CDR is unreliable
- Anecdotal reports that target culture drives reporting (i.e., TSR overstated)
- Adverse governmental reaction to data (viewed increasing notifications as failure)

Source: WHO Global TB database

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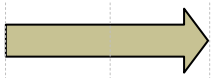
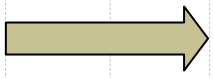
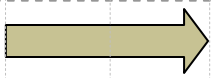
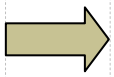
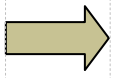
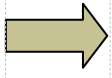
EVOLUTION OF KEY DRIVERS OF TB CONTROL IN UZBEKISTAN AND PARTNERSHIP CONTRIBUTION

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
1 **Sustained funding and resource mobilization for NTP (excluding MDR)**	1 → 2	• Extensive number of staff highly trained in Soviet manner of treatment	• $13.8 million of Global Fund money finance most of the system	**Moderate direct** • Global Fund is the prime source of additional funds, now accounting for most of TB budget • Application to GFATM followed outline of Global Plan, with support from WHO
2 **Access to quality care for drug-sensitive TB**				
• Convenient access to TB center	2 → 3	• Many informal payments to access care • Extensive infrastructure	• Free treatment reinforced • Network expanded by linking more effectively with rural health posts and polyclinics	**Moderate direct** • DOTS adopted as advocated by KfW, GFATM, and GDF • Model provided by WHO
• Availability of high-quality first-line drugs in NTP	1 → 3	• Fractioned, low-quality drug supply	• All first-time drugs procured through GDF using GFATM money • Still some single doses through KfW, but being phased out	**Moderate direct** • GDF clear as a supplier of high-quality drugs • Decision to go with GDF results from exposure/ previous experience and WHO
• Availability of high-quality SS+ diagnostics (e.g., micro-scopes, reagents) in NTP	0 → 3	• No belief in smear microscopy and hence limited provision	• Extensive network of microscopy laboratories backed up by QA process in most regions	**Moderate indirect** • DOTS adopted as advocated by KfW, GFATM and GDF • Infrastructure funded through Global Fund/KfW • Technical advice from CDC (QA, lab training) funded by USAID
• Availability of high-quality SS- diagnostics (X-ray, culture)	2 → 3	• Extensive network of X-rays, screening 60% of population	• Refurbished network of X-rays • Culture now in place in reference lab	**Moderate indirect** • Culture and training from CDC and Gauting, Germany facilitated by Partnership • X-ray funded by KfW

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN UZBEKISTAN AND PARTNERSHIP CONTRIBUTION (CONTINUED)

Drivers of TB control	State (0 1 2 3)	From	To	Partnership contribution
2 **Access to quality care for drug-sensitive TB (continued)**				
• Access to trained staff	→	• Extensive number of staff highly trained in Soviet manner of treatment	• Extensive number of staff, with many now also trained in DOTS but many holding to old treatment methods	**Moderate direct** • DOTS adopted as advocated by KfW, GFATM, and GDF • Training funded by GFATM • Training led by Republican DOTS center, supported by Project HOPE using materials partially generated by Partnership
• Involvement of the non-NTP sector		• No private sector/nongovernmental sector involved in TB case (illegal to treat outside government centers)		N/A
3 **ACSM**	→	• Minimal involvement by other actions	• District committees involved in case identification and DOTS • Red Crescent supplies sanitary parcels	**Moderate direct** • Model provided by WHO using Partnership guidelines
4 **Coordination**	→	• TB Institute the direction setting body, with direct control over almost all TB care	• Ministry of Health coordinated TB activities through regular interagency meetings • Republican DOTS center now preeminent direction setter, pulls in NGOs/TA as able • Republican DOTS center influence over TB Institute limited	**Moderate indirect** • Some technical support from Project HOPE and WHO on performance management
5 **Performance management**	→	• No targets	• Has adopted MDG/ WMA targets • Limited availability to oversee implementation or work plan • Awards for top TB doctors, nurses, and lab experts	**Moderate indirect** • Some technical support from Project HOPE and WHO on performance management
6 **Contribution of TB to other disease programs**	▲	• TB control vertical and self-contained	• Polyclinics and SVPs have DOTS corners and sputum collection points, trained personnel	N/A

EVOLUTION OF KEY DRIVERS OF TB CONTROL IN UZBEKISTAN (CONTINUED)

Drivers of TB control	State 0 1 2 3	From	To	Partnership contribution
7 **Holistic patient approach**		• No consideration of patients' broader needs • Free treatment undermined by informal payment	• Free treatment enforced • Some nutritional/sanitary packages as support	**Moderate indirect** • GFATM funded • Indirectly influenced by partnership emphasis on this approach
8 TB-HIV • Coordination and Collaboration between TB and HIV communities		• No coordination	• First pilot program being introduced in Tashkent • Project Capacity has supported formulation of guidelines	**Moderate indirect** • TB pilots supported by WHO and with some TA from Project Capacity, a USAID funded HIV NGO
• Access to ARVs		• No access	• TB/HIV patients has access to CD level examination and receiving ARV taking into account clinical signs and CD4 level	**?**
9 MDR-TB • Sustained funding and resource mobilization for NTP (excluding regular TB)		• No systematic approach for MDR; irregular funding	• Pilot programs now in place with GFATM funding probably still less than 50% of need	**Moderate indirect** • GFATM funded • GFATM application supported by WHO, and MSF experiences from Nukus pilot
• Convenient access to TB centers with MDR capability		• No centers dealing with MDR-TB	• Two centers for MDR, offering free treatment but distant from most of country	**Moderate indirect** • One center established by partner (MSF) • Other center established using funds from partners (Global Fund)
• Access to high-quality second-line drugs in NTP		• Local/Russian supply of 2nd line drugs with minimal quality control	• 2 GLC pilots, which cover 1,006 patients (still small, relative to need)	**Significant indirect** • MSF led pilot in Nukus adopted DOTS plus guidelines and used GLC support **Moderate direct** • GLC acted as technical consultant and approved drugs for pilot

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EXAMPLES OF GOOD PRACTICE FROM UZBEKISTAN

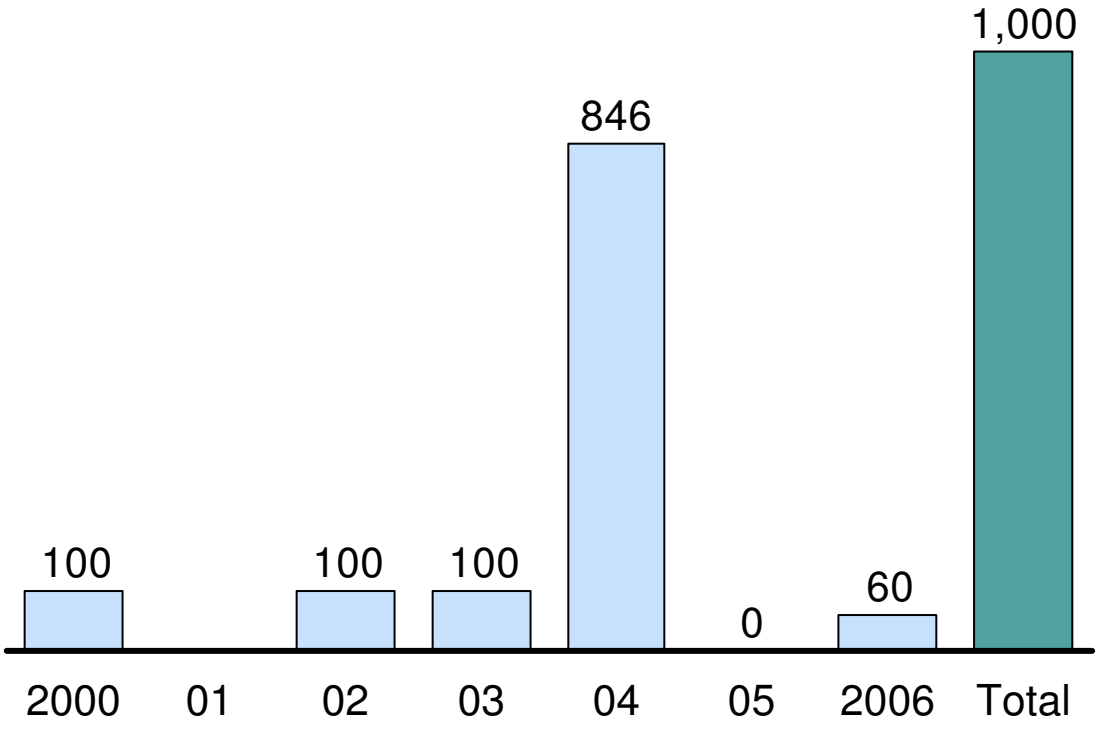
- **Good practice examples include**
  - Stop TB Partnership involvement with substantial contribution to TB control
  - Good practice NTP activities that represent lesson for other countries

Drivers of TB control	Example
(2) **Access to quality care for drug-sensitive TB** • Availability of high-quality first-line drugs in NTP	• GDF and KfW supplied drugs for whole program; now all direct procurement done through GDF. No separate budget for first-line drugs
(9) **MDR-TB** • Sustained funding and resource mobilization for NTP (excluding regular TB) • Access to high-quality second-line drugs in NTP centers • Access to MDR-TB diagnosis (DST and culture) • Access to trained NDR staff • Convenient access to TB centers with MDR capability	• All supported by GLC, MSF, CDC, Gauting

GLC APPROVED PROJECTS HAVE CONSTITUTED A SUBSTANTIAL SHARE OF SECOND-LINE TB DRUGS IN UZBEKISTAN SINCE 2000

GLC contribution to MDR-TB control in Uzbekistan

Number of patients approved for second-line drugs through GLC-approved projects in 2000-06



Comments

- Projects still in pilot phase after 2 years
- Need to support more rapid rollout in country with high level of MDR (and probably XDR)

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RECOMMENDATIONS TO THE PARTNERSHIP BASED ON UZBEKISTAN VISIT FINDINGS

Drivers of TB control	Recommendations based on 2001-06 involvement	Recommendations based on future needs
① **Sustained funding and resource mobilization**		• Engaging the government and NTP on how to set incentives in the TB program to favour DOTS • Secure more government commitment over and above Global Fund
② **Access to quality care**		• Offer/coordinate more technical assistance to train frontline staff and managers
③ **ACSM**		
④ **Coordination of activities**		
⑤ **Performance management**	• Translate into Russian • More technical advice	
⑥ **Health systems strengthening**		
⑦ **Holistic patient approach**		
⑧ **TB-HIV**		• Need more TA to train frontline staff and managers
⑨ **MDR-TB**		• Need more TA to train frontline staff and managers

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LIST OF INTERVIEWEES

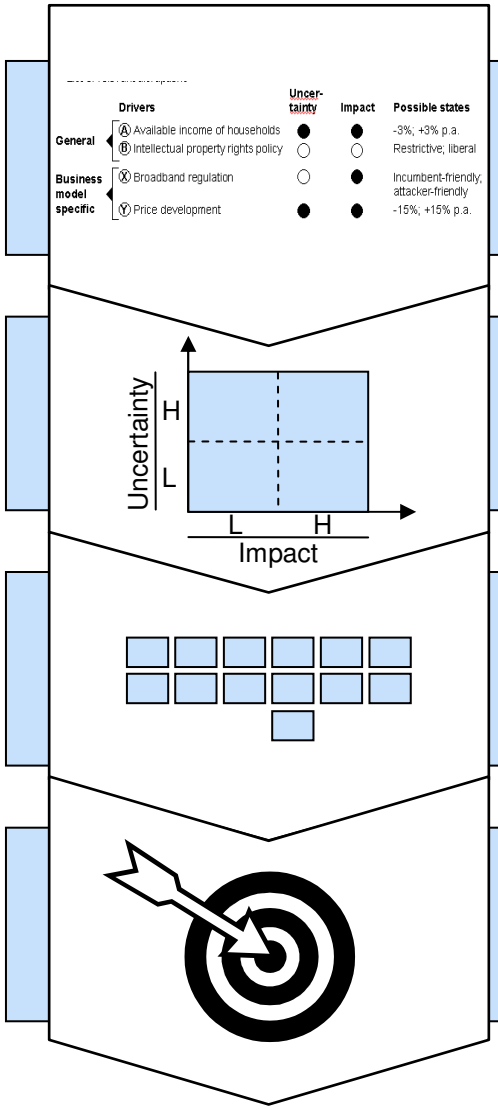
Interviewee	Position/institution
Dr. Michel Tailhades	• WHO Representative
Dr. Bakhtiyar Babamuradov	• NPO/TB
Prof. Ubaydullaev	• Director of National TB Institute
Dr. Uzakova	• PIU GFATM (TB component) Manager
Dr. Epco Hasker	• Head of Project HOPE
Prof. Khodjibekov	• Deputy Minister of Health
Dr. Ibragimova	• Head of Drug Policy Dept
Khoshimov B.A.	• Head of Financial Dept
Dr. Mutalova A.J	• Director of Institute of Health (Statistics Dept.)
Dr. Rakhima Nazarova	• Head of CAPACITY Project
Dr. Anna Maria Loof	• Head of MSF • Head of Pharmaceutical Committee • Makhalla (Community) Committee
Dr. Giyasova	• Director of Republican AIDS Center
Dr. Mavlyuda Akhralova	• KfW Representative
Dr. Benjamin Mills	• USAID Health Advisor
Dr. Atabekov	• Head of Tashkent Regional Health Dept
Dr. Sadykov A.S.	• Head of Regional TB Dispensary (TB Dept.)

Independent External Evaluation of Stop TB Partnership – Appendix D: Tuberculosis Landscape

April 21, 2008

Independent external evaluation of the Stop TB Partnership
conducted by McKinsey & Company

MAIN STEPS IN SCENARIO PLANNING



- Identification of key drivers and definition of their possible states
- Prioritization of key drivers
- Combination of prioritized drivers and description of scenarios
- Strategy development along most important scenarios

Source: McKinsey analysis

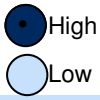
POTENTIAL DRIVERS OF CHANGE

	Changes in 2000-06	Potential drivers of change
Disease and treatment	• Geographic variations – India and China have improved; Tuberculosis (TB) control in Africa not meeting the challenges of the epidemic	A Variation in TB control by region
	• Rising HIV prevalence has led to a rise in TB cases	B Evolution of TB HIV
	• MDR-TB is increasing and is recognized as a major challenge in Eastern Europe and with HIV patients	C Evolution of MDR-TB
	• XDR-TB recognized as new TB threat	D Evolution of XDR-TB prevalence
	• New diagnostics being developed for health posts	E New diagnostics available
	• Potential new vaccines entering Phase II testing	F New vaccines available
	• Moxifloxacin, Gatifloxacin, OPC-67683, and TMC207 entered Phase II testing and could shorten regimens	G New drug(s) available requiring change in regimen
Funders for TB control	• Overall funding for TB control has more than doubled	H Future TB control funding growth
	• Donors have supported disease funding and created disease-specific funders (e.g., GFATM)	I Donor priorities
Drug supply	• Formation of GDF to supply high quality drugs and build procurement capacity	J Countries' ability to access drugs independent of GDF
	• Continued development of cheap, local alternatives to high quality and pre-qualified drugs	K Ability of GDF's procurement service to compete in tenders
Research	• New PDPs established, e.g., FIND, Global Alliance, Aeras to promote TB research	L PDP's ability to bring products to market
	• Research funding has increased with support from Gates Foundation	M Funding for research
Health systems	• Rich, big population, and high-burden countries' health systems strengthen rapidly	N Willingness of BRICI* countries with strong health system to adopt WHO strategy
	• Low-resource countries lack capacity to absorb development funding and sustain strong programs	O Focus on health systems strengthening
	• National TB partnerships begin to be established to drive TB control in some countries	P Evolution of national partnerships
	• Health systems increasingly moving to purchaser/provider split and engaging private sector	Q Role of private providers in TB control

* Brazil, Russia, India, China and Indonesia

Source: Team analysis

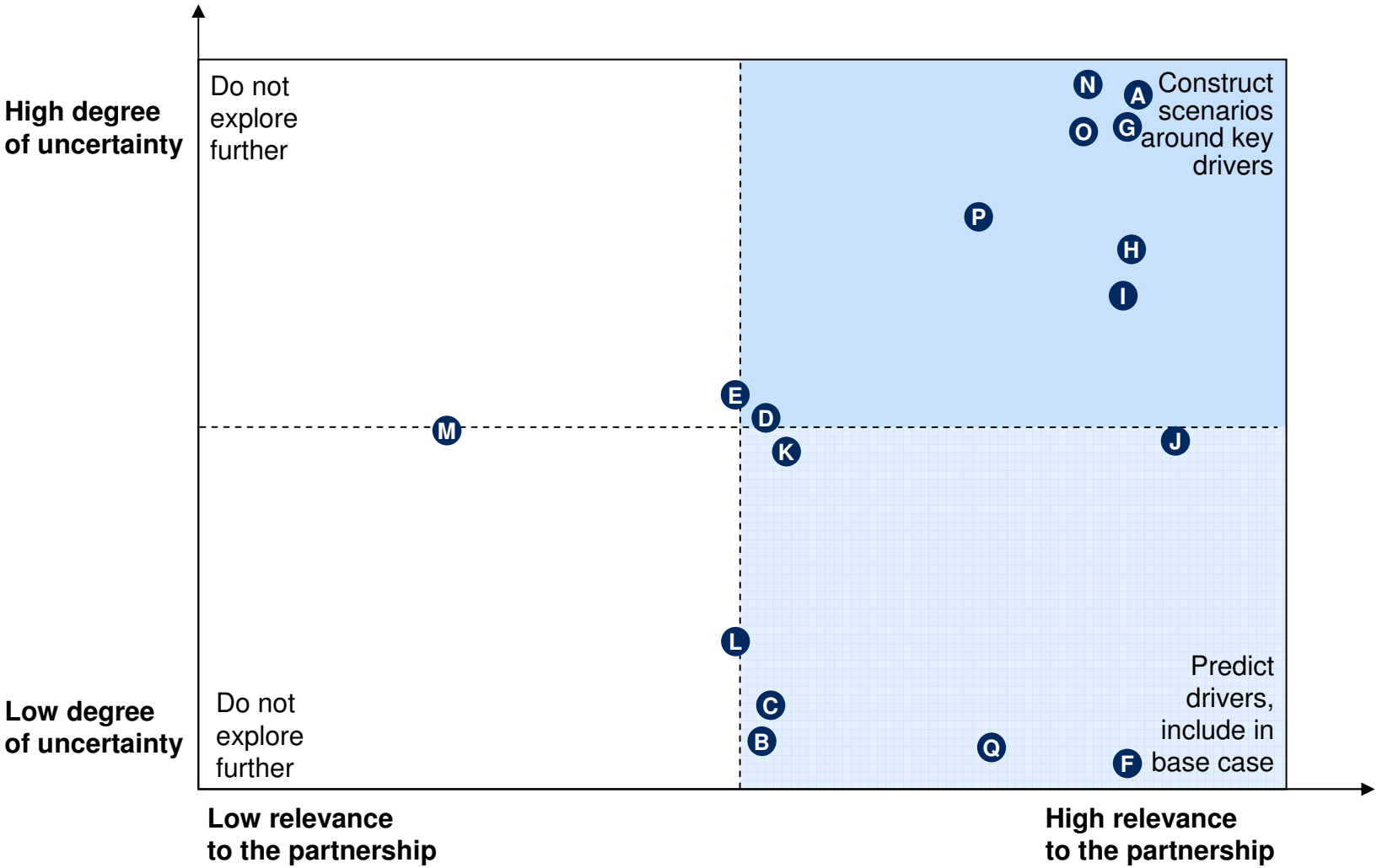
UNCERTAINTY AND RELEVANCE OF DRIVERS



	Potential drivers of change	Uncertainty*	Relevance**	Rationale
Disease and treatment	A Variation in TB control by region			• Unclear how sustainable is progress in India and China and whether TB control will really progress in Africa, central to Stop TB Partnership (STBP)
	B Evolution of TB HIV			• As HIV epidemic reaches peak, TB HIV unlikely to accelerate further; TB HIV is one of the working groups
	C Evolution of MDR-TB			• MDR-TB does not appear to be accelerating; MDR-TB is one of the working groups
	D Evolution of XDR-TB prevalence			• XDR-TB is too new for any trends to be apparent and would be a major set back for TB control if it begins to spread rapidly
	E New diagnostics available			• New diagnostics (e.g., liquid culture) will be available; others less certain, unlikely to require revision to smear microscopy
	F New vaccines available			• No widely applicable vaccine available before 2015, although one would revolutionize TB care
	G New drug(s) available requiring change in regimen			• Moxifloxacin may or may not pass clinical trials; depending on efficacy, may require change to DOTS and to training
Funders for TB control	H Future TB control funding growth			• Funding from HBC and donor governments is politically dependent and critical to all aspects of TB control
	I Donor priorities			• Donors are showing increasing move towards funding capacity, not disease (e.g., International Health Partnership)
Drug supply	J Countries' ability to procure drugs independent of GDF			• Unclear how many countries will migrate to non-GDF funding sources (e.g., global fund); critical to future of GDF
	K Ability of GDF's procurement service to compete in tenders			• Many countries already use cheaper local suppliers; will affect GDF procurement service line
Research	L PDP's ability to bring products to market			• PDPs currently lack ability to bring drugs to market independently; possibility STBP could fill this role
	M Funding for research			• Research funding fairly well supported by Gates Foundation and governments; partnership has not so far shown much interest here
Health systems	N Willingness of BRICI*** countries with strong health system to adopt WHO strategy			• Big countries show willingness to work independently; STBP will need to interact with them to achieve MDGs
	O Focus on health systems strengthening			• Unclear how interplay between programs and health systems will work, and is critical to TB delivery
	P Evolution of national partnerships			• Unclear how far successful national partnerships will spread: interaction with many partnerships will require a different way of working
	Q Role of private providers in TB control			• Private providers will clearly be critical to success of TB control in many countries

* Uncertainty means that there is a range of possible outcomes
** Relevance means relevance to the STBP (e.g., how far a change in this driver would require STBP to react)
*** Brazil, Russia, India, China, Indonesia
Source: Team analysis

PRIORITIZATION OF KEY DRIVERS



Source: Team analysis

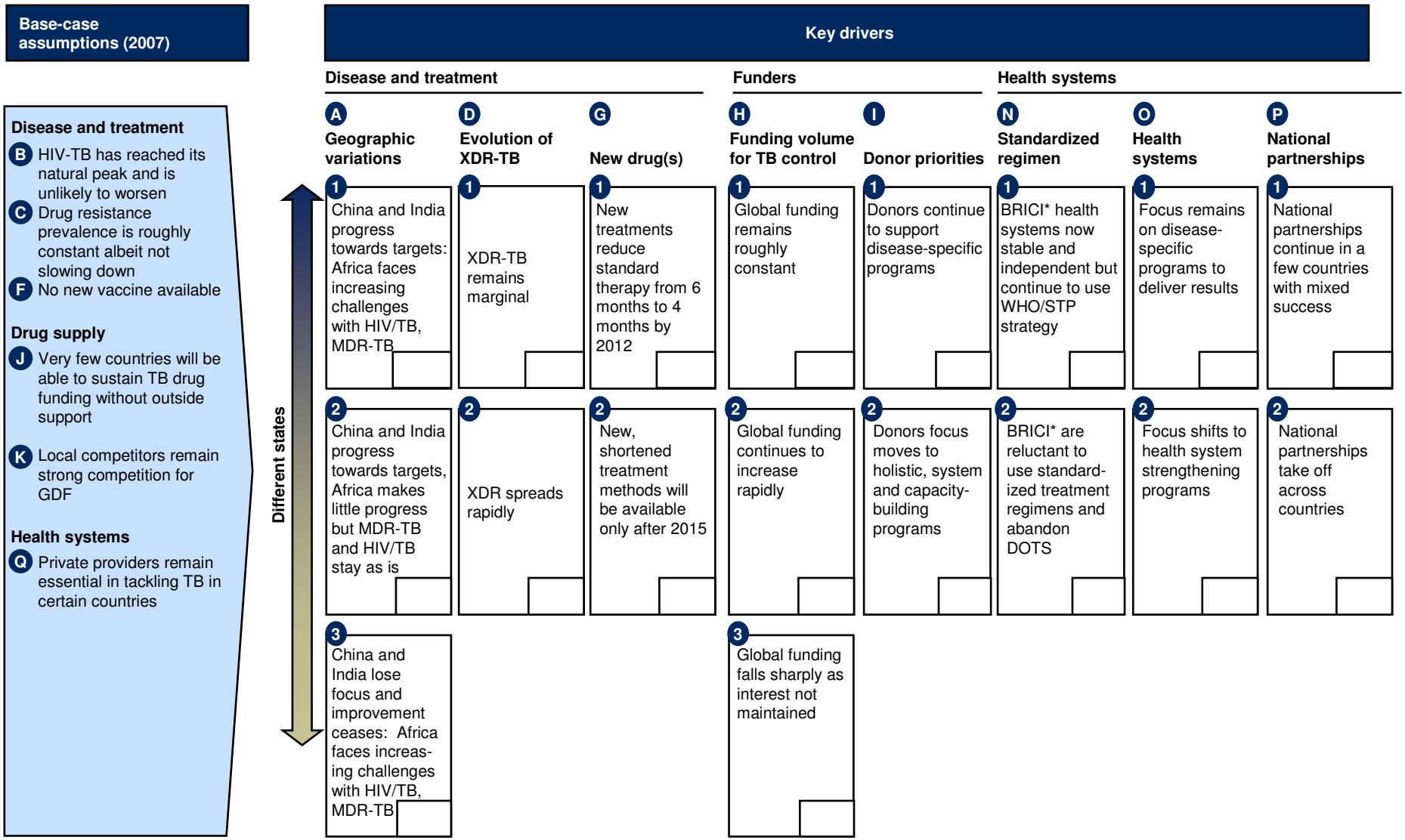
POSSIBLE STATES

	Drivers	Possible states
Construct scenarios around key drivers	A Variations in TB control by region	1 Large countries become self-sustaining in TB control; Africa faces increasing challenges (HIV/TB, MDR-TB) 2 Large countries, e.g., India, China do not sustain improvement, Africa stabilizes 3 Improvement in India and China ceases: Africa faces increasing challenges (HIV/TB, MDR-TB)
	D Evolution of XDR-TB prevalence	1 XDR-TB remains marginal 2 XDR-TB spreads rapidly
	G New drug(s) available requiring change in regimen	1 New treatments reduce standard therapy from 6 months to 4 months and ready to be introduced by 2012 2 New treatment with shorter duration will be ready only after 2015
	H Future TB control funding growth	1 Global funding remains roughly constant 2 Funding for TB will increase significantly 3 Global funding falls sharply as interest not maintained
	I Donor priorities	1 Donors continue to support disease-specific programs 2 Donors focus moves to holistic, system and capacity-building programs
	N Willingness of BRICI* countries with strong health system to adopt WHO strategy	1 BRICI* health systems now stable and independent but continue to use WHO/STP strategy 2 BRICI* are reluctant to use standardized treatment regimens and abandon DOTS
	O Focus on health systems strengthening	1 Focus remains on disease-specific programs to deliver results 2 Focus shifts to health system strengthening programs
	P Evolution of national partnerships	1 National partnerships remain in a few countries with mixed success 2 National partnerships take off across countries
Predict drivers, include in base case	B Evolution of TB HIV	• HIV development will track the HIV epidemic
	C Evolution of MDR-TB	• Drug resistance prevalence is roughly constant albeit not slowing down
	F New vaccines available	• No new vaccine will be available before 2015
	J Countries' ability to procure drugs independent of GDF	• Most countries will be unable or unwilling to procure high-quality supplies of TB drugs without GDF or other outside support
	K Ability of GDF's procurement service to compete in tenders	• Local tenders will remain extremely competitive, with local prices (if not quality) being significantly below GDF prices
	Q Role of private providers in TB control	• Private providers remain essential in tackling TB
Do not explore further	E New diagnostics available	• N/A
	M Funding for research	• N/A
	L PDP's ability to bring products to market	• N/A

* Brazil, Russia, India, China, Indonesia

Source: Team analysis

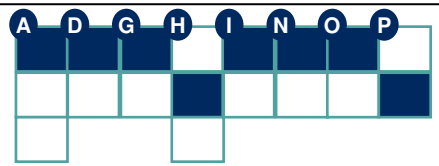
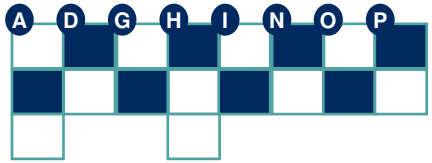
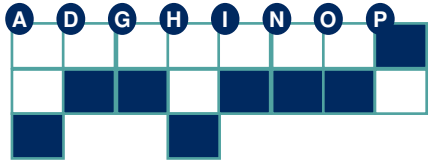
STATES OF KEY DRIVERS IN 2015



* Brazil, Russia, India, China, Indonesia

Source: Team analysis

DEFINITION OF MAIN SCENARIOS

Name		Description of driver development
1 **Full speed ahead**		• TB control accelerates ahead, although some challenges remain – Momentum in TB advocacy maintained, with continuing increase in funds – New drugs come online to combat roughly same epidemiological challenges as today – Most countries making good improvements with national TB partnerships coordinating and pushing forward efforts in countries – Africa though continues to struggle, increasingly with TB/HIV co-infection and drug resistance
2 **Systems to the fore**		• Donors and burden countries shift focus from diseases to systems – Epidemiological challenges remain the same with little worsening in situation – No great changes in treatment patterns or funding – However, donor and recipient focus moves to system-building initiatives and cross-disease partnerships – WHO/Partnership strategy still accepted and used
3 **TB control in reverse**		• TB control goes into reverse – Funding for TB control declines – Progress in countries falters due to lose of focus on TB strategy – WHO/Partnership strategy questioned – Situation in Africa worsens, mainly because of HIV coinfection and drug resistance – Drug resistant strains spread more rapidly without new treatment available

Sources: Team analysis

SCENARIO 1 – FULL SPEED AHEAD

Description

- The effort dedicated to advocacy so far continues to deliver results. TB continues to climb on the international agenda, while the establishment of national partnerships and increasing social mobilization prove to be effective mechanisms of maintaining pressure on HBC governments and increasing high quality DOTS implementation. As a result, funding continues to increase as HBC governments continue to dedicate resources and donor countries continue to support TB-specific programs

- The research effort also delivers, with Moxifloxacin approved for TB control at a reasonable price, shortening the treatment regimen to 4 months

- As a result, China, India, and the other large countries remain committed to DOTS and become effectively self-sustaining, requiring only light support from technical agencies and donors. Africa remains a difficulty, although there is sufficient progress that while TB HIV and XDR-TB remain significant problems, they do not escalate

Implications for STBP

- The Partnership needs to be alert to the issues raised by success and needs to be able to capitalize on increased funding and commitment

  – The Partnership will need to have plans that allow for the rapid scaling up of programs supporting DOTS implementation, e.g., laboratory strengthening and public private mix

  – The Partnership will need to ensure that the retooling task force produces a swift and widely accepted plan to adopt Moxifloxacin. This plan may need the Partnership to play a coordination role in its implementation

  – The Partnership may need to restructure to support national partnerships. If national partnerships become the primary vehicle for advocacy and holding governments to account, then the global partnership will need to rethink its role – does it become primarily a support mechanism for national partnerships? If so, how should it be structured and resourced?

  – The Partnership will need to consider where to focus. If the large countries become truly self-sustaining, the focus of efforts may need to sharpen on those countries showing the slowest progress, which may need separate targets and new delivery mechanisms to progress

Source: McKinsey analysis

SCENARIO 2 – SYSTEMS TO THE FORE

Description

- The effort delivered to advocacy continues, but focus on the Millennium Development Goals and increasing evidence that the most challenged countries lack the absorptive capacity to translate aid into results across health strengthens donor governments' conviction that the strengthening of health systems must be the priority. Funding shifts from disease-specific programs to health systems programs such as the International Health Partnership, or the Global Health Workforce Alliance
- While the large countries, e.g., China and India, remain committed to DOTS and are able to make it sustainable within their health systems, the focus on TB in most challenged countries is lost as TB programs lose dedicated funds. Examples of successful national partnerships and social mobilization for TB remain few
- The Partnership comes under increasing pressure, particularly from donors, to merge into a larger, trans-disease partnership that can support the wider agenda and reduces transaction costs for recipient governments

Implications for STBP

- The Partnership will need to keep a very close watch on movements in the health systems, and indeed on the Paris agenda, and decide how to react
  - The Partnership will need to decide whether to be proactive and help shape the debate on health systems' strengthening
  - The Partnership could use TB control as an exemplar of how health systems' strengthening can be done; for example
    - Use laboratory strengthening to build overall diagnostic capabilities
    - Drive TB reporting as a model and support for health metrics generally
- Or the Partnership could chose to focus on delivering irreversible momentum on TB control before the health systems' strengthening agenda gains enough traction to undermine funding streams
  - The Partnership will need to to take a clear stance on its approach to engagement with other actors and partnerships
- There is already pressure from some donors to declare the Partnership a success, and move on. The Partnership will either need to make the case for its continued existence, or the individual partners will need to decide how to engage with broader health systems' efforts individually or collectively
- Some elements of the Partnership, such as the GDF, could be declared a success and their primary functions (e.g., grant making, pooled procurement) passed to other bodies (e.g., Global Fund, UNITAID)

Source: McKinsey analysis

SCENARIO 3 – TB CONTROL IN REVERSE

Description

- Global Health falls from favor as a funding priority as attention shifts to other causes (e.g., perception of increased natural catastrophes shifts focus to disaster relief, managing climate change and helping those affected to adapt). What funding continues to flow to health focuses on adapting health systems to meet the specific catastrophes predicted. As a result, STBP and the TB community prove unable to sustain the prominence of TB and funding begins to fall. Without strong advocacy for DOTS, major countries begin to divert funding and question the efficacy of DOTS; China and India in particular lose their focus and improvement goes into reverse. Without support, Africa faces increasing challenges with TB-HIV, MDR-TB and XDR-TB begins to spread without effective monitoring, or effective checks. Less funding and focus also means that the research effort falters, and national partnerships in country lack effectiveness

Implications for STBP

- The Partnership will need to decide how to respond to a markedly less favourable environment
  - The Partnership will need to be keenly aware of trends in priorities and funding in order to anticipate future funding constraints
  - The Partnership will need to be prepared to make hard choices about where to focus the effort of TB control, e.g., to focus on maintaining second-line drug efficacy such that when funding resumes, there is still effective treatment
  - The Partnership will need to work hard to ensure that as many efforts as possible become self-sustaining without outside support

Source: McKinsey analysis