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## **The role of private health sector engagement in TB control in India**

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## **CHAPTER 6\***

# **Global Fund Financing of Public–Private Mix Approaches for Delivery of Tuberculosis Care**

\*Lal, S. S., Uplekar, M., Katz, I., Lonnroth, K., Komatsu, R., Yesudian Dias, H. M. & Atun, R. Global Fund financing of public-private mix approaches for delivery of tuberculosis care. *Trop Med Int Health* 16, 685-692, (2011).



## 6.1 Introduction

According to the 2009 Global Tuberculosis Control Report of the World Health Organization (WHO), the acceleration in tuberculosis (TB) case detection rate achieved over the last decade now seems to be stagnating at a little over 60%. The global target of detecting 70% sputum smear-positive TB cases was not reached in 2005 and is unlikely to be achieved by the end of 2010<sup>102</sup>.

Globally, efforts to strengthen TB control have been concentrated largely within the public sector health services directly under the scope of National Tuberculosis Programmes (NTPs)<sup>7</sup>. In many countries, diverse care providers outside NTPs, which manage significant proportions of TB patients, are yet to be integrated into national TB control efforts. These comprise public sector care providers such as prison health services under ministries of interior, military health services under ministries of defence or social security organizations under the ministries of labour as well as for-profit and not-for profit private sector care providers that include private practitioners, private hospitals, corporate health services and voluntary organizations. In some countries, the private sector has outgrown the public sector in health care provision. TB management practices of many non-NTP care providers have been shown to be uneven and cases detected by them are rarely notified<sup>102</sup>. However, studies show that engaging all relevant care providers through public-private mix (PPM) approaches helps to effectively harnesses

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available capacity in the country by NTPs to expand coverage, improve access to quality care and programme outcomes and reduce cost of care to patients<sup>81,103</sup>.

PPM for TB care and control implies public–private collaboration for delivery of TB services. It is a comprehensive approach to systematically involve all relevant health care providers in TB control and achieve national and global TB control targets. International Standards for TB Care (ISTC) offers an excellent tool to help standardize TB management practices of diverse care providers. In practice, countries have used the label PPM to denote ‘public–public mix’ when the NTP collaborates with other public sector care providers who have not traditionally been part of their network, including certain public hospitals or special health services under ministries other than the ministry of health, such as prison health services; and ‘public–private mix’ when the collaboration is between the NTP and private, voluntary or corporate sector care.

The Global Fund to Fight AIDS, Tuberculosis and Malaria (The Global Fund) – a major source of funding for NTPs – is a public–private partnership (<http://www.theglobalfund.org>). It provides around 63% of all international financing for tuberculosis control globally; which between 2002 and 2009 amounted to US\$ 3.2 billion of approved funds<sup>102</sup>. The Global Fund requires applicant countries to set up national level partnerships in the form of country coordination mechanism representing diverse stakeholders including

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civil society and people living with diseases. It finances grant implementation by public and private sectors in countries through a dual-track financing facility. However, to date, no studies have explored the extent to which PPM activities are financed by the Global Fund. While a number of country case studies show that global mechanisms have helped national and local TB programmes to establish and scale up PPM initiatives, the global scale of these activities is not known<sup>102</sup>. Enormous untapped potential still remains in translating global and national level partnerships into large scale collaborations among providers for delivery of TB care at the grassroots. Realizing this potential is essential to meet and maintain TB control targets<sup>7,134</sup>.

The purpose of this paper is to map the extent and the scope of PPM interventions in TB grants financed by the Global Fund. It is hoped that this will provide useful lessons for NTPs, international technical agencies and financiers of TB programmes globally.

### **6.2 Methods**

Two levels of analyses were applied: reviewing the evolution of support to PPM for TB care and control in Global Fund-supported TB grants as reflected in its official documents and mapping the distribution and characteristics of PPM initiatives within the Global Fund-supported programs. We supplemented this analysis with relevant data from 14 countries reported to WHO for the Global TB control report of 2010.

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The official documents of the Global Fund include guidelines on submission of requests for funding as well as the monitoring and evaluation tool-kit, which provide grant recipients with an inventory of indicators to measure outputs of their activities<sup>135</sup>. Applicants are required to submit a performance framework with the indicators and targets against which grant's results are later measured<sup>136</sup>. We reviewed all performance frameworks of all TB grants, and considered a grant to include a PPM activity if an indicator was classified as such within the performance framework or if any of the indicators measured provision of any TB service with or through a non-NTP entity such as the private sector, prison, municipality, faith-based organization, and nongovernmental organizations (NGOs). The analysis of the distribution and characteristics of PPM initiatives within the Global Fund-supported programs, included measurement of (i) proportion of TB grants with PPM, in total, over time and their regional distribution; (ii) distribution of PPM implementers, categorized into prison health services, for-profit private sector, NGOs, others and unspecified, including changes in their composition over time and regional distribution; and (iii) the investment in PPM approaches as part of the overall funding in the TB grants studied and their regional distribution. Financing data were obtained from the Global Fund's Enhanced Financial Reporting System (EFR) which tracks utilization of Global Fund investments by grant recipients. The EFR includes a category 'PPMISTC'. Grants reporting financial data under this category were used to estimate the



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investment in PPM. The EFR data used in this study represented 80% of Global Fund TB investments disbursed by the end of 2008.

WHO publishes an annual report on global TB control. The purpose of the report is to provide an annual assessment of the global TB epidemic and the progress made in implementing the Stop TB Strategy. For the global TB report of 2010, countries were asked to provide the data on the number of cases reported by non-NTP providers in the public and private sectors in 2009. Data obtained from 14 countries – Angola, Cambodia, China, Ghana, India, Indonesia, Islamic Republic of Iran, Kazakhstan, Myanmar, Nepal, Nigeria, Pakistan, Philippines, and Tanzania – are presented here. All 14 countries had received Global Fund grants for scaling up PPM and 11 reported to be implementing PPM countrywide. It was not possible, however, to determine whether the outcomes of PPM interventions in terms of contributions of non-NTP care providers to TB case notification were attributable solely to the Global Fund grants.

### **6.3 Results**

#### **6.3.1 Scope for PPM in Global Fund official documents**

The Global Fund guidelines for submitting funding proposals promote collaborations among all relevant health care providers within countries to deliver health care services. The Global Fund supports existing and new innovative programmes both within and outside the health sector that promote public, private and non-

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governmental efforts. The Global Fund's Technical Review Panel also considers PPM as an important attribute when assessing the technical quality of a proposal. The Monitoring and Evaluation toolkit developed by the Global Fund together with various partners includes indicators specific to PPM (Box 1).

### **6.3.2 Distribution and characteristics of PPM initiatives**

The number of countries with PPM activities within the active TB grants supported by the Global Fund increased from 13 in 2003, the first year of Global Fund disbursement for TB, to 58 in 2008. Figure 1 shows the incremental numbers of proposals with PPM components. The proportion of Global Fund grants with PPM activities was highest in Southeast Asia (82%) and lowest in Sub-Saharan Africa (52%) (Figure 2).

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### **Box 1.**

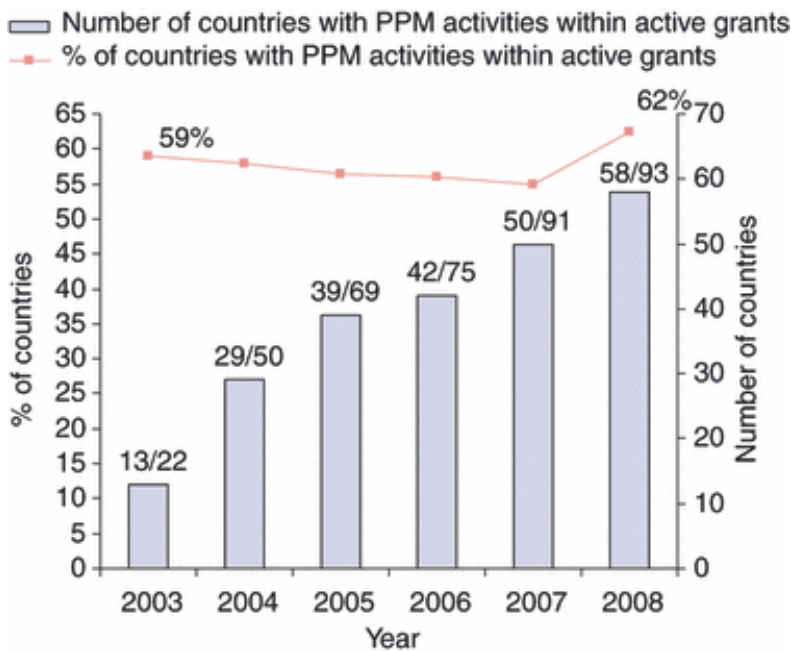
#### **Examples of indicators for ‘Engage all care providers’ component of Stop-TB strategy included in the Global Fund monitoring and evaluation framework**

1. Private and Public health providers (different types) collaborating with the NTP (number and percentage)
2. New smear positive TB patients referred by a specific type of health care provider among the new smear positive TB patients reported to the national health authority (started on treatment in NTP) (number and percentage)
3. New smear positive TB patients managed/supervised by a specific type of health care provider among all TB patients reported to the national health authority (number and percentage)
4. New smear positive TB patients successfully treated (cured plus completed treatment) among the new smear positive TB patients managed/ treated by a specific type of health care provider (number and percentage)
5. Private and Public health providers (different types) collaborating with the NTP (number and percentage)
6. New smear positive TB patients referred by a specific type of health care provider among the new smear positive TB patients reported to the national health authority (started on treatment in NTP) (number and percentage)
7. New smear positive TB patients managed/supervised by a specific type of health care provider among all TB patients reported to the national health authority (number and percentage)
8. New smear positive TB patients successfully treated (cured plus completed treatment) among the new smear positive TB patients managed/ treated by a specific type of health care provider (number and percentage)

Source: The Global Fund M&E Toolkit. Available at  
URL: [http://www.theglobalfund.org/en/me/guidelines\\_tools/?lang=en#toolkit](http://www.theglobalfund.org/en/me/guidelines_tools/?lang=en#toolkit).

**Figure 1.**

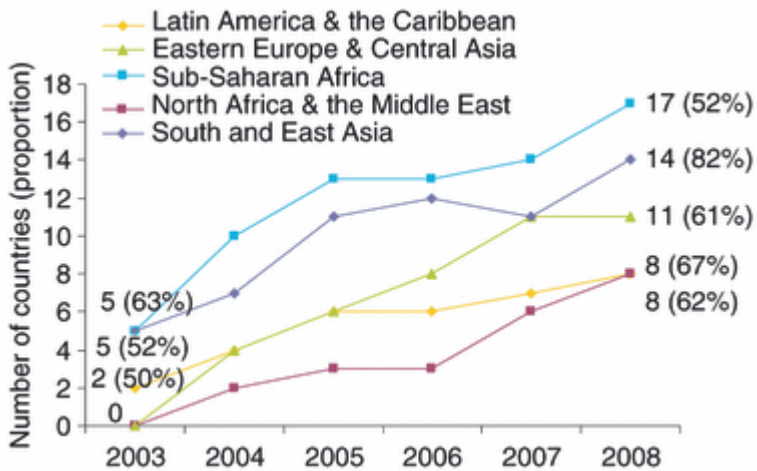
**Proportion and number of countries which received Global Fund support for PPM activities, by year**



*N*, Number of countries with active TB grants that include PPM component and *D*, Number of countries with active TB grants.

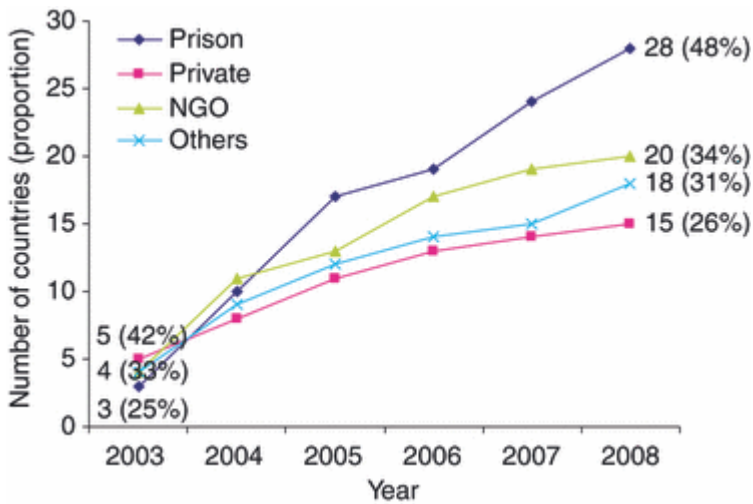
**Figure 2.**

**Number of countries with Global Fund support for PPM activities (proportion of the total number of active TB grants), by region and by year**



**Figure 3.**

**Number of countries with Global Fund support for PPM activities (proportion of the total number of countries with Global Fund support for PPM activities), by implementer type and year**



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Figure 3 shows the types of care providers engaged in PPM. Between 2003 and 2008, while collaborations with NGOs and the for-profit private sector also increased, there was a sharp rise in NTPs engaging prison health services, predominantly in countries of Eastern Europe.

Care providers involved in PPM varied by region (Table 1). Collaboration with the for-profit private sector was greater in South Asia and East Africa while collaboration with NGOs was common in North Africa, the Middle East and South Asia. Links with prison health services were present in other regions including Eastern Europe and Central Asia, Latin America and the Caribbean as well as West and Central Africa.

### **6.3.3 Finances allocated to PPM activities in TB Grants supported by the Global Fund**

Analysis of budget and expenditure data showed that by 2008, US\$ 38.3 million (4.4%) of TB funding in the budgets of Global Fund-supported grants was allocated to PPM. The expenditure for PPM activities as a proportion of total expenditure in TB grants amounted to 5.4%, higher than that initially budgeted; 99% of the funding budgeted for PPM activities was utilized, compared to 80% for the TB budget for all activities.

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**Table 1.**

**Distribution of PPM implementers within countries with Global Fund support for PPM as of end 2008, by region**

Region (N)	Percentage of countries with Global Fund-supported PPM				
	NGOs	Prisons	Private sector	Other	Not specified
East Asia and the Pacific (8)	38	38	25	38	0
Eastern Europe and Central Asia (11)	36	91	18	27	9
Latin America and the Caribbean (8)	25	63	0	50	0
North Africa and the Middle East (8)	63	25	38	25	13
South Asia (6)	50	17	67	17	50
East Africa (5)	0	40	40	0	20
Southern Africa (4)	25	0	0	50	50
West and Central Africa (8)	25	63	25	38	13
All regions (58)	34	48	26	31	16

N, Number of countries with Global Fund support for PPM activities, per region; Green cells – the regions with the highest proportion of countries with the specific PPM implementer.

The median amount budgeted in Global Fund grants for PPM activities was 5% of total. However, this amount ranged from 0.03%



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to 69% of total, with Kyrgyzstan and Swaziland allocating over 50% of their funding to PPM. In most proposals this does not include cost of drugs and other consumables for the diagnosis and treatment of TB in the targeted health facilities, which falls under other budget headings.

**Table 2.**

### Budgets and expenditures on PPM and ISTC by region

Region (N)	Budget (US\$, 000s)	Percentage of Regional TB budget allocated to PPM activities	Expenditure (US\$, 000s)	Percentage of Regional TB expenditure budget allocated to PPM activities
East Africa	388	0.4	366	0.4
East Africa and the Pacific	25 684	10.4	26 200	12.8
Eastern Europe and Central Asia	3 295	1.9	3 737	2.7
Latin America and the Caribbean	332	0.4	443	0.6
Northern Africa and the Middle East	336	0.4	165	0.3
South and West Asia	2 343	4.0	1 683	3.7
Southern Africa	1 338	2.0	1 194	2.8
West and Central Africa	4 598	6.9	3 988	6.8
Entire Portfolio	38 314	4.4	37 776	5.4

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For PPM activities, the investments in China, Indonesia and Ghana were \$US 18.8 million, \$US6.1 million and \$US3.5 million, respectively. The top two regions with highest share of their budget allocated to PPM were East Asia and the Pacific and, West & Central Africa (10.4% [US\$ 25.7 million] and 6.9% [US\$ 4.6 million] respectively). While the share of the TB budget allocated to PPM in Eastern Europe & Central Asia, and Latin America & the Caribbean is lower than in other regions, both regions have many grants for collaboration with prison health services, which are not always reported as a part of PPM. The expenditure data are based on a budget-line that relates to PPM and ISTC yet excludes some grants which did not report on their expenditure.

### **6.3.4 Country data**

The mix of health care providers and health seeking behaviour of TB patients varies by setting. In China, hospitals are often the first point of care<sup>137</sup>. In rural areas of Bangladesh<sup>138</sup> and Cambodia<sup>139</sup>, semi-formal ‘village doctors’ are the first level care providers. In India and Kenya, private practitioners are the first port of call for many patients with symptoms of TB<sup>101</sup>.

Data compiled from 14 countries (including nine high burden countries) and published in the Global TB Report of 2010<sup>140</sup> demonstrated the important contribution of PPM to case notifications, between a quarter and a third of all cases in five countries (Table 3). Expectedly, there has been considerable variation in PPM approaches

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and the provider groups targeted. This includes collaboration with pharmacies in Cambodia, private hospitals in Nigeria, public hospitals in China and Indonesia, and prison services in Kazakhstan.

### **6.4 Discussion**

Evidence points to growth globally in the number and size of non-public sector health care providers in TB control, with a significant proportion of TB patients managed by them, albeit often with poor quality of care. But proactive engagement of them can yield substantial benefits for TB control. There is also a growing body of evidence, over the past decade, which indicates that in some countries PPM has helped improve programme performance by increasing case detection by 10% to 60% while maintaining the treatment success rates above 85%<sup>141</sup>. Importantly, in some settings, for-profit private providers engaged through PPM have been able to improve their treatment success rates from levels that are often below 50% to above the global target of 85<sup>103</sup>.

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**Table 3** Contribution of PPM to TB case notification in selected countries (Reference WHO, 2010)

Country	Types of non-NTP care providers engaged	Coverage	Number of cases notified per year <sup>1</sup>	Contribution to total notifications (%)
Angola	Diverse public and private providers	Countrywide	4 591	12
Cambodia	Pharmacies, private clinics and hospitals	Countrywide	6 550	17
China	General public hospitals	Countrywide	337 286	37
Ghana	Diverse public and private providers	Countrywide	2 124	15%
India	Diverse public, private and NGO providers	14 large cities (50 million population)	12 450	36 of new smear-positive cases
Indonesia	Public and private hospitals	Countrywide	38 362	13
Islamic Republic of Iran	Diverse public and private providers	Countrywide	2 514	25
Kazakhstan	Prison health services	Countrywide	1 515	8
Myanmar	Private practitioners through the professional medical association	26 townships (6.4 million population)	8 526 (2008)	21
Nepal	Diverse public and private providers	Countrywide	2 519	8
Nigeria	Private clinics and hospitals	Countrywide	29 418	34
Pakistan	Private practitioners, NGOs and hospitals	Countrywide	43 162	14
Philippines	Private clinics and hospitals	30 million population	3 994	28% of new smear-positive cases
Tanzania	Private and NGO hospitals	Countrywide	11 492	19%

<sup>1</sup>Data for 2009 except where specified.

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The importance and the scope of PPM are not often reflected at a level commensurate with the evidence, in the TB proposals and budgets submitted by countries. More than a third of the countries with active TB grants do not have PPM as a component. While the number of countries with active TB grants has increased from 22 in 2003, to 93 in 2008, the proportion of countries with PPM has not increased in this period despite additional Global Fund support for PPM. Of particular concern is the relatively low proportion of countries in sub-Saharan Africa with PPM supported by the Global Fund. We further observed a relatively low engagement of both NGO and private health sectors, which are key for PPM expansion.

There are also concerns regarding the nature of PPM and the way in which countries plan for PPM. Judging upon the PPM-related indicators used by countries on which Global Fund-supported programs report, many focus merely on training of providers, without a clear strategy on how to establish effective and sustainable collaboration. Proposals submitted to the Global Fund often lack explicit mention of what enablers and incentives (financial or non-financial) will be used for private sector engagement, such as supply of anti-TB drugs free of charge to private practitioners on the condition that they follow DOTS principles for diagnosis and case management<sup>141</sup>. Larger health care institutions taking on more complex roles in TB control will normally require financial compensation mechanisms, such as contracting on a capitation or fee-for-service basis. These aspects are rarely highlighted in proposals.

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Similarly, the support structures for PPM, such as continuous supervision, monitoring and evaluation, are often inadequately described. Finally, in the reports submitted to the Global Fund there is often little information on the proportion of non-public health care providers involved and the percentage contribution by different providers<sup>136,142</sup>. All this will require more ambitious and better designed PPM plans to expand the engagement of non-public sector institutions in TB control to scale up services and improve outcomes.

There is useful guidance available to countries on PPM, including a tool to undertake a national situation assessment to decide on the need and scope of PPM in a country<sup>143</sup> (used successfully by at least a dozen countries), a PPM guidance document and a PPM toolkit that advises on different steps of implementing PPM in phases, and also steps to engage different types of providers<sup>101</sup>. These documents also include a planning framework for PPM in Global Fund applications; this framework is further elaborated in the Stop TB Planning Matrix and Framework for Global Fund TB proposal preparation<sup>144</sup>. The Global Fund currently does not have specific guidance on PPM, however, clearer guidance in the future would enable greater uptake of PPM.

The current median budget allocation for PPM activities of 5% is probably sufficient for limited engagement however the scaling up of PPM initiatives, especially those involving financial incentives requires more investment. In addition, a significant portion of the

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budget has been allocated to training activities. The Global Fund recommends that countries follow the Stop TB Strategy and the larger tranches of funding for TB approved in R8 and R9 should further contribute to PPM activities.

The study could have underestimated the PPM within TB grants supported by the Global Fund, as there are limited data on sub-recipients of Global Fund grants including activities implemented by NGOs and the private or corporate sector, many of which are of PPM nature. Further limitation is the categorization of PPM types. Global Fund data highlights the recent expansion of PPM to prisons, and has ample examples for PPM in NGOs and the private sector, but none in public health facilities that are not part of the NTP, due to the difficulty in identifying such facilities within grant indicators. A further problem is the categorization of an activity under PPM. For example, in many grants, DOTS implementation in prisons was not classified as PPM. This partially explains the relatively low share of the TB budget allocated to PPM in Eastern Europe & Central Asia and Latin America & the Caribbean. Finally, the Global Fund is not the only financier of PPM activities and there is a lack of sufficient information to estimate the contribution from other funding agencies. All these limitations require further in-depth case studies.

Wide implementation of PPM requires good collaboration between the public and other health sectors. Innovative mechanisms appropriate to the nature of the settings such as certification of

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provider and financial incentives should be put in place to ensure such cooperation. There are good examples from countries like India, where NTP tries to encourage and formalize PPM through initiatives that develop guidance documents to facilitate PPM partners to formally engage in PPM activities. We need robust case studies to illustrate further examples of good practice that has resulted in improved outcomes. Mechanisms aimed at providing appropriate incentives and providing online reporting tools to establish and sustain such collaborations are to be considered based on the relevance in specific settings.

PPM is cost-effective in diverse country settings<sup>79,81,145,146</sup>. A deeper analysis of PPM components of Global Fund country proposals and of the performance related to PPM could be of immense benefit not only to countries themselves but also to the technical and financial agencies supporting them. South-South learning opportunities should be encouraged, and lessons learned from country cases more carefully harnessed and disseminated. Clearly, significant untapped potential still exists in scaling up PPM across countries, particularly in light of the increase in TB funding in recent years.